

**Depressive Symptoms and Social Support Associated with Childbirth.  
A Short-Term Longitudinal Study of Scottish and Pakistani Mothers.**

by

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in the Faculty of Social Science, University of Glasgow.

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## **Abstract**

It was the purpose of this thesis to contribute to a growing area of research on cultural aspects of childbirth. A short-term longitudinal study was carried out to investigate depressive symptoms and social support in Scottish and Pakistani mothers. Depressive symptoms were assessed using the Beck Depression Inventory (BDI) and the Edinburgh Postnatal Depression Scale (EPDS). Perceived social support was assessed using the Social Provisions Scale (SPS), while received support was measured using an inventory designed specifically for this study. Mothers took part in three main data collection assessments, specifically: the prenatal stage, three weeks postnatal, and eight weeks postnatal.

Of particular interest was the anthropological assertion (e.g. Stern and Kruckman, 1983) that non Western childbirth is protected from postnatal depression by virtue of the support available through childbirth rituals. To assess this claim, Scottish mothers were compared to Pakistani mothers, who have a forty day ritual postnatal period. Mothers were compared on a multidimensional model of six social support components, defined by Cutrona and Russell (1987).

Results of social support revealed that there was evidence to support the anthropological view that non Western cultures received more support after childbirth, as compared to Western mothers. Despite the different patterns of support provision in these cultures, there were no cultural differences in support satisfaction. Results of the BDI and EPDS revealed that the postnatal period was not characterised by increased depressive symptoms, for either group. There was also no evidence to suggest that the ritualised childbirth of Pakistani mothers was associated with less depressive symptoms, compared to Scottish mothers. However, there were cultural differences in the strength of relationship between less social support and increased depressive symptoms, with Scottish mothers' results demonstrating the stronger relationship. These results are discussed and directions for future research are considered.



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Finally, I would like to thank my late Uncle Asghar for his genuine interest in my work- I finally finished!

## **Thesis Declaration**

I, Roseanna Mohammed, declare that this is an original thesis conducted under the normal terms of supervision.

## Dedication

This thesis is dedicated with love to the memory of my maternal grandfather,  
Baba Wazir Ali Shah Soharwardi.

*"One who dies for the love of the material world, dies a hypocrite.  
One who dies for the love of the hereafter, dies an ascetic.  
But one who dies for the love of the truth, dies a Sufi." - Shebli*

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## Chapter One

### An Introduction to the Cultural Context of Childbirth

The main focus of this thesis is an examination of childbirth in two different cultural settings: a comparison of social support and depressive symptoms in Scotland and Pakistan. Before going on to discuss depression and social support (chapters 2, 3 and 4), this chapter will present an introduction, in the form of issues relevant to birth in Western and non Western cultures.

#### 1.1 Culture: Definition and Relevance to Thesis

Not surprisingly, there are many different and varied definitions of what culture is. Kroeber and Kluckhohn (1952) found over 100 published definitions of the term culture. More recently, authors have described culture as "systems of shared ideas, systems of concepts and rules and meanings that underlie and are expressed in the way that human beings live" (Keesing, 1981, p.68), or as a cognitive map which interprets the world and instructs behaviour (WHO, 1994). Given the overwhelming plethora of definitions which abound in the literature, a definition which applies to the area of inquiry in this thesis would seem the most suitable. One such definition, by Lewis (1976), has been quoted by Cox (1996): "culture is simply a convenient term to describe the sum of *learned* knowledge and skills-including religion and language-that distinguishes one community from another and which, subject to the vagaries of innovation and change, passes on in a recognisable form from generation to generation. Culture thus transcends the lives of its living exponents in any one generation: if it did not it could not survive. Its component elements are absorbed in the first few years of life largely unconsciously, and later more deliberately by informal and formal learning processes. Socialisation inevitably takes place within and through the medium of a particular cultural tradition. When people do not know how to bring up or what to teach their children, their cultural heritage is indeed in jeopardy" (Cox, 1996: p.9-10).

This definition is useful in the context of research presented in this thesis. This thesis investigates two groups of mothers from Scottish and Pakistani cultures, which differ in terms of language and religion. However, the life events of pregnancy and childbirth are experienced in the same physiological way by all women, regardless of culture, race, colour, or creed. According to Kumar (1994), a cross-cultural comparison of psychological symptoms in childbirth is less problematic compared to other life events. For instance, in terms of sample selection one can have a criteria of 'pregnancy leading to live birth', and can define the types of subjects to be included. In the case of this thesis, additional criteria included low risk pregnancy status, single birth, and married or co-habiting status. Although the physiology of birth is the same for all cultures, the social construction of birth differs. Of particular interest to this study, is the birth culture of Pakistani mothers, which centres on old traditions that define behaviours and beliefs in pregnancy and the postnatal period. The primary role of culture which is examined in this thesis concerns the social structuring and cultural patterning of childbirth and its relationship with social support and depressive symptoms.

## **1.2 The Experience of Childbirth in Different Cultures**

Between cultures, differences exist in the perceptions of childbirth related issues, such as conception, pregnancy and postnatal care. Hahn and Muecke (1987) describe these inherited beliefs as the birth culture of a society. To describe these differences, the following section will be divided into Western and non Western birth culture. (These differences are also evident from the accounts given by mothers in the present study, see Appendices 1A and 1B.)

### **1.2.1 Western Birth Culture**

Raphael-Leff (1991) notes that the Western context of childbirth has changed dramatically in the space of the last few generations. Improved health care has resulted in decreased infant mortality rates, while advances in contraception have helped limit the numbers of children born into each household. Motherhood in the West is viewed in a

different context now, as compared to previous generations. Ideas regarding the role of children and perceptions of childhood have changed over the centuries, from a neglectful and ambivalent approach, to the present 'socialisation mode' which defines childhood as a distinct period requiring intensive care and attention. The family structure has also changed from a system of shared child care responsibilities in an extended family system, to the self dependant modern nuclear family unit. In contrast to previous generations who relied on traditional knowledge of childbirth from other women, the modern Western environment informs mothers through expert advice and the latest innovations in birthing and parenting.

In terms of the actual management of childbirth, there has been a dramatic change from the time of traditional female midwives and homebirths to a modern era of medical obstetrics. Predominantly male professionals and an emphasis on hospital births and technological interventions, have now become routine. In the United Kingdom childbirth was attended exclusively by females until the seventeenth century, when the first 'men-midwives' became involved (Stacey, 1988). In the late nineteenth century, in the face of opposition from doctors, female midwives began to be included in the medical system. The Midwives Act of 1902 established midwives as practitioners in their own right, with obstetricians at the top of the hierarchy of birth attenders. At the same time, this century has witnessed a change in the environment of birth. In 1959, one third of all births in the UK were either at home or in a nursing home, as compared to the 99 per cent of births in National Health Service hospitals during the early 1980's (Fry et al., 1984).

The almost universal scenario of giving birth in hospital has been associated with the medicalisation of birth. Scott and Niven (1996) comment that, "medicalisation has occurred as medical understanding of the biological process of pregnancy has increased along with its ability to intervene in the process" (p.43). Davis-Lloyd (1987) has argued that the predominantly male field of obstetric medicine has defined childbirth as a physiological dysfunction which requires medical intervention. The technological



intervention approach to childbirth is illustrated by the use of external and internal monitors, intravenous drips and charts. While medical intervention, at its most basic, is commonly experienced in the form of administered intravenous fluids, analgesia, and episiotomies - thus adding a surgical dimension to a natural event. Trevathen (1993) has commented that instead of using internal or external foetal monitoring, the older method of auscultation (using a stethoscope) of foetal heart sounds may be more comforting and less distressing for women. Women have expressed some disquiet over the seemingly passive role required of them in the modern obstetric environment. Raphael-Leff (1991) observes that this issue has been addressed by two consumer groups in the UK, the National Childbirth Trust (NCT) and the Association for Improvements in Maternity Services (AIMS), which have called for a more active involvement in the decision making process associated with childbirth.

### 1.2.2 Antenatal Period

According to Stocking (1993) the typical pattern of birth management in the UK usually begins with an initial contact with the General Practitioner (GP) to confirm pregnancy, although in some cases contact is made with midwives directly. In most cases, the pregnant woman is then referred to a hospital, where the mother-to-be attends a first booking visit. Subsequent visits to the hospital deal with childbirth plans and the provision of antenatal care, which in low risk cases, may also be shared with the GP. Llewelyn-Jones (1982) states that "antenatal care is largely an exercise in preventive medicine, and during the antenatal period, in addition to detecting any abnormalities which may arise, instruction should be given in general hygiene and the care of the baby" (p.58).

Sherr (1995) states that antenatal care invariably involves a battery of screening tests and procedures. The routine screening involves blood tests, blood pressure measures, urine sample analyses, and weighing. More specialised screening involves the use of amniocentesis to identify problems in at risk populations : women over 35 years of age,

family history of Down's Syndrome, chromosomal abnormalities in family, and those with a history of sex-linked disease, such as thalassaemia, haemophilia, and Duchenne muscular dystrophy (Llewelyn-Jones, 1982). The use of ultrasound examinations is also part of antenatal care, in both low and high risk pregnancies. Llewelyn-Jones (1982) states that adequate antenatal care depends on regular contact during pregnancy, which becomes more frequent as the birth approaches. He recommends that patients be seen at antenatal clinics every 4 weeks until the 28th week of pregnancy, then every fortnight until 36 weeks, and thereafter at weekly intervals until the birth.

### 1.2.3 Labour and Delivery

In the West, particularly the UK, births take place in a hospital setting. Expectations regarding the role of the father's involvement in birth have also changed in recent times. Whereas fathers previously took a detached and uninvolved role in the birth, the present day expectation is that they should be present at the birth to provide the labouring mother with support, and take part in the birth experience (Raphael-Leff, 1991).

Pharmacological methods of pain relief include the use of inhaled analgesics (nitrous oxide and oxygen); pethidine by intramuscular injection or intravenous drip; morphine; and epidural analgesia, which is delivered into the base of the spine (Llewelyn-Jones, 1982). Raphael-Leff (1991) notes that psychoprophylactic methods have been taught through childbirth classes in preparation of labour pain management. For example, the LaMaze technique which aims to distract attention from labour pain via a learned pattern of breathing during contractions. Trevathan (1993) also notes that various forms of emotional support and massage may help to ease labour pain. The experience of pain and support during labour have been the focus of much research. For example, a study by Niven (1985) reported that the presence of the husband during birth did not affect pain intensity perceptions. However, differences did emerge when *helpfulness* of husband, and not mere presence, was used to categorise subjects' pain perceptions.

As in any hospital birth there is the possibility of intervention to assist delivery. These can include inductions to precipitate labour for various medical, social or practical reasons, episiotomies, and Caesarean sections (see Sherr, 1995: for a review of psychological impact). Deliveries can also be assisted by other methods, such as vacuum extraction, or forceps delivery. According to Stocking (1993), most routine deliveries in the UK are conducted by midwives, although junior doctors and consultant obstetricians are also on call in obstetric wards.

#### 1.2.4 Postnatal Care

Current stays in UK hospitals after delivery are typically short-term (Sherr, 1995), and can range from a few hours to a few days after the birth. Raphael Leff (1991) notes that during this time mothers will require information regarding post operative care (in the case of Caesarean sections), reassurance regarding feeding and physical matters and also general guidance for her new role as a mother. After the discharge from hospital, women are visited in their homes by a midwife for ten days, or until the midwife is satisfied with the health of mother and baby. At 6 weeks postnatal, there is a check-up at the hospital or at the GP clinic. By this point in the postnatal period, a health visitor has normally become involved too. The health visitor may deal with physical aspects of postnatal care, such as an examination of stitches after surgical intervention and inquire about the mother and baby's well-being. Raphael-Leff (1991) comments that although many mothers may welcome this interest, others may view it as patronising and as an invasion of privacy. She concludes by stating that "while early interventions can utilise the malleability of a system still in a state of flux following the birth, at times these same interventions may also hinder the family from finding their own equilibrium by using their internal resources.....If she [health visitor] can use her visits to activate the family into functioning healthily in her absence without her help, she will have achieved her goal" (p.348).

### 1.2.5 Non Western Birth Culture

In contrast to the technologically focused Western birth culture, birth in many non Western societies is in the hands of female birth attendants. The traditional birth attendant (TBA) is responsible for delivering about 60-80% of the world's babies (WHO, 1992b). The traditional birth attendant is known by a variety of names in different cultures, such as the Jamaican *nana*, the Mexican *partera*, the Egyptian *daya* and the *dai* of Pakistan and India. According to MacCormack (1982), traditional birth attendants from India, Pakistan, Bangladesh, Nigeria, Brazil, Tanzania, Mexico, Guatemala and Jamaica are usually mature woman who have children of their own and who have earned their status as birth attenders.

Unlike the Western model of care based in hospitals, the non Western mother often relies on TBAs for antenatal and postnatal care, in addition to expecting her to attend the birth. In addition to these care duties, the TBA is expected to assist in rituals relating to pregnancy and the postpartum period (Helman, 1994). MacCormack (1982) notes that the TBA provides a service which is much more demanding than that required of Western trained professionals. The author comments that the TBA may confirm pregnancy through abdominal palpitation, breast changes, or by observing the woman's gait. Dates of delivery are also estimated, although unlike the Western system, these are often based on lunar cycles. In certain areas, such as Asia, the TBA may also massage the mother in pregnancy, labour, and beyond delivery as a means of preparing and healing the body. The role of the traditional birth attendant is often an advisory one, with advice given on childcare, physical health, and diet.

The importance of the services provided by TBAs are illustrated by Gupta (1978). Gupta's study examined the reasons for mothers' (N=60) choices of untrained *dais*, versus qualified personnel in rural India. The study investigated this question in two villages served by a health centre offering the services of three trained health workers: one auxiliary nurse midwife and two trained *dais*. Each village also had two untrained

*dais* offering midwifery services. The majority of mothers (95%) opted for a home delivery, with 63% enlisting the services of untrained *dais*. The women's expectations of health personnel covered a variety of duties, including: visiting during the postnatal period, giving a bath to the baby, washing the baby's clothing, and massaging with oil after delivery. The majority of women (67%) also stated that untrained personnel were more likely to meet their expectations. Where there was a preference for trained personnel, mothers cited reasons of skill, and the importance of trained personnel in cases of delivery complications. The author concludes that the preference for paid untrained assistance, rather than free trained help, may be due to the desire for non nursing expectations to be fulfilled by the birth attender. For example, massage during delivery, clothes washing, and disposal of soiled clothing would all be carried out by untrained *dais*, and may have influenced mothers' choices. This study illustrates the importance of birthing customs to mothers, to the extent that they would prefer to pay for assistance which conforms to their traditional expectations, rather than engage the free services of a Western trained professional.

Fleming (1994) notes that many of the births which result in maternal death are dealt with by the TBA. The World Health Organisation has been involved in addressing the issue of training birth attendants (WHO, 1992b). Training programmes for TBAs and midwives are seen as a possible solution to improve the untrained work of these birth attenders, and consequently to improve maternal health outcomes in developing countries. Helman (1994) notes that in the last 30 years several nations, including: Ghana, Indonesia, Malaysia, Pakistan, Philippines, Sudan and Thailand, have all recognised the importance of TBAs and have provided a system of training in order to improve the safety of childbirth. This approach has become more successful, as indicated by the increasing number of nations that have participated in these projects. Leedam (1985) has pointed out that in 1972 there were only 20 nations participating in training of TBAs, while in 1982 this increased to 45 nations.

Fleming (1994) comments that the status of TBAs is not consistent in different countries, with TBAs in some countries having dubious legal status to practice. The few countries which do endorse a comprehensive legal right for TBAs to practice, include: Jordan, Liberia, the Maldives, Mexico and Pakistan (Fleming, 1994). Although training TBAs is a desirable goal, the Gupta study (1978) alludes to the possibility that even trained birth attendants would be less preferred than untrained TBAs. Helman (1994) notes that the World Health Organisation aims to provide safer childbirth within the context of cultural traditions, the Gupta (1978) study would seem to support this approach. Clearly, improved health outcomes in childbirth must be achieved in an environment which is sensitive to the particular traditions and customs of birth.

#### 1.2.6 Birth Rituals in Non Western Cultures

Stern and Kruckman (1983) have identified six common elements in the postpartum rituals of non Western cultures: cultural patterning of a distinct postpartum period, vulnerability of the new mother, mandated rest, seclusion, functional assistance from midwife and relatives, and social recognition of the new mother's status. These aspects of postpartum ritual are best illustrated by some accounts of postpartum ritual in other cultures, for example: Chinese, Jamaican, and Punjabi traditions.

Pillsbury (1978) provided an anthropological account of the Chinese traditions of postpartum care, 'doing the month'. This account states that the Chinese pay little attention to pregnancy, but have an elaborate system of ritual following the delivery. The Chinese postpartum is defined by a month long period of rituals and behavioural restrictions. The mother is expected to avoid washing, to stay indoors for the whole month, to abstain from eating raw or cold foods, to eat chicken, to avoid being blown by winds and not to move about, to abstain from visiting anyone's home, not to have sexual intercourse, and not to read or cry. Aspects of birth rituals are apparent in the concerns of Chinese women living in the UK. Neile's (1995) report on the maternity needs of the Chinese community in the UK noted that mothers objected to the practice of keeping

windows open in the labour room, as they did not want to be exposed to draughts. It was also noted that Chinese women did not want to eat cold or uncooked foods after delivery, and that they also expressed a preference for warm drinking water. Neile (1995) also points out that the use of ginger and vinegar in the postnatal period is quite common, with mothers traditionally receiving a tonic cooked with wine and spirit. Ginger is also used in hot water baths taken during the postpartum month. The author comments that if extended family or community support are not available, the Chinese mother may face difficulties in observing the month of ritual after delivery. Neile (1995) recommends that occasional visits by a community midwife should span the course of the first postpartum month, as problems may occur due to the potential isolation of mother and baby after delivery.

Kitzinger (1982) presents a comparative account of childbirth in Jamaica and Britain. The Jamaican case study notes that the mother-to-be often returns to the maternal home at the end of pregnancy, or after the birth. The role of maternal relatives is prominent during pregnancy and the postnatal period, as most first time mothers are unmarried adolescent girls. The maternal grandmother is the primary source of emotional and practical support.

Kitzinger states that the traditional birth attendant (*nana*) attends up to 25 percent of rural births. The role of the *nana* involves guiding the mother through the taboos and rituals associated with pregnancy, childbirth and the postpartum period. Dietary rules in pregnancy include: not drinking too much water as this can drown the baby, eating lots of callalu (spinach like vegetable) to enrich the blood, eating okra as this makes the insides more supple and aids birth, and drinking bush teas which 'cool' the blood. Aside from providing advice during pregnancy, the *nana* will also use oil to massage the mother's abdomen and 'shape the baby'.

During birth, the *nana* will suggest that the labouring mother walk about, while female relatives help with birth preparations, such as lining the bed with newspaper, tearing up rags for wrapping the baby, boiling water, and making a cornmeal porridge for the mother to eat in the postpartum. During labour, the abdomen and perineum may be massaged with oil. In cases of prolonged labour, the *nana* will give drinks of herbal teas made with thyme and spice. The *nana* will also perform external manipulation of the foetus in cases of breech or posterior presentation, by using massage to alter the baby's position. After delivery, the baby is placed on the mother's abdomen, and the umbilical cord is only cut when it has stopped pulsating. The remaining umbilical cord is covered with a mixture of grated nutmeg and powder, which help it to heal quickly. The baby is massaged with oil, and given a first taste of tea, and then given castor oil to aid the expulsion of mucus.

The postpartum ritual is defined by a forty day period, of which the first nine days are the most intense. The initial period involves a strict time of seclusion with the baby, while accompanied by the maternal grandmother and the *nana*. During this time, the mother is expected to wear a head turban to protect against colds, and to avoid all housework until the bones of the lower spine 'knit up'. The baby is kept safe from bad spirits called 'duppies' by having a bible, scissors and tape measure at the bedside. After the nine nights have passed, the mother and baby leave their seclusion and the mother can continue to go about her household duties. The new mother is expected to avoid eating rice as this is thought to aid fertility, while certain foodstuffs are only allowed at midday as they would otherwise affect the mother's milk and the infant's digestion. The end of the forty day period is marked by the removal of the turban and the washing of the mother's hair, thus symbolising the end of this protective phase.

The birth rituals of the Indian Punjab are described by Helen Gideon (1962). Gideon notes that the birth rituals are particularly observed in the case of a first child. Expectant mothers leave their in-laws' home to travel back to the maternal home in the last stages of pregnancy. The traditional birth attendant (*dai*) visits the mother-to-be whenever she is



needed, for example to give oil massage during pregnancy to help adjust the baby's position. The *dai* attends the birth, and begins preparations by applying warm oil to the birth canal and massaging the abdomen with melted butter. As in other non Western cultures, the birth is attended by females only and in the Punjabi case this often involves the maternal grandmother. During delivery, the mother is given a drink of warm milk with butter to give her strength and energy. Screaming and crying during labour are considered 'shameful' and mothers often bite down on a knotted piece of cloth to stifle noisy reactions to pain. The *dai* has her own remedies for accelerating a prolonged labour, which involves giving the mother 'hot' food stuffs (see section 1.3.1) such as raisins, ginger, and *gur* (crude sugar). Once the baby has been delivered, the cord is only cut after the placenta is expelled, which is then wrapped up in a cloth. The placenta is then usually buried within the boundaries of the house.

The baby is washed and has a black mark placed on the forehead, to protect it from evil spirits. Measures to protect the mother take the form of fire, water, grain, and iron-which are placed close to her bed for 40 days after delivery. Green mango leaves are placed above the door of the house to signify a happy event. This also acts to protect new mothers from coming into contact with the polluting influence of menstruating women, or those who have had an abortion, stillbirth, recent childbirth, or a death in the family. The baby is initially fed with goat's milk which is dripped into the mouth using a piece of cotton cloth. On the third day postpartum, the nipples are ceremoniously washed with strands of green grass dipped in water, mixed with milk, sugar and rice, after this the mother can begin breastfeeding the baby.

The *dai* continues to provide care for the new mother in the postpartum period. This involves massaging the abdomen with heated oil for 9 days postpartum, to help expel air and dirt. The *dai* also applies her heel against the birth canal to help push the womb back and coax the muscles back into place. After 5 days of strict seclusion there is a 'stepping out' ceremony where mother and child are purified with holy water, and news of the birth

is sent to the in-laws. On the ninth day there is another purification ceremony at which the mother is bathed and her hair is washed by the midwife. She is also served a ceremonial meal prepared by a Brahmin priest. After the birth, the mother eats a small amount of *punjeeri* everyday, a rich sweet concoction of flour, butter, almonds, sugar, raisins, and *gur*, which is said to give the mother strength. In the Punjab, mothers often stay at their parents' home for a few months, after which time the in-laws arrive to take home the new baby and mother. Traditionally, the maternal family give presents (*shushak*) to the new mother to take with her to her in-laws' home. The presents often include jewellery and clothes for the new mother and baby, and clothes for the in-laws.

The three accounts of childbirth presented here, illustrate Stern and Kruckman's (1983) categorisations of non Western birth customs. The cultural patterning of a distinct postpartum period is typically marked by a forty day period, while the use of protective rituals or behavioural taboos serve to define the new mother's vulnerability and keep her safe from harm. The distinct postpartum period also provides a period of rest and seclusion which allows the new mother a chance to recuperate, and also helps to establish successful breast feeding (Mead and Newton, 1967). Functional assistance is often provided by female relatives at the parental home. The various rituals which are described, illustrate the social recognition of the mother and mark her changed status.

### **1.3 Pakistan: The Social, Cultural and Religious Context of Childbirth**

Pakistan is a relatively young Islamic country, having achieved independence from Britain and partition from India in 1947. Islam is the religion of the majority in Pakistan and Islamic law affects all aspects of society, economics, politics, and daily life (Woods, 1991). Pakistan is one of the world's most populous countries, and has a reported population growth rate of 3.0% (Zaki and Johnson, 1993). Woods (1991) comments that Pakistan is similar to many other developing countries, with high levels of communicable disease, malnutrition, inadequate sewage systems and illiteracy. Table 1.1 compares

demographic indicators for Pakistan and the United Kingdom. These are presented with a view to illustrating comparisons relevant to the nationality of mothers studied in this thesis.

**Table 1.1 Demographic indicators for Pakistan and the UK: quinquennial average, (WHO, 1993).**

Demographic indicator	Pakistan	UK
population (thousands)	134,974	58,093
sex ratio (per 100 women)	108.3	96.1
crude birth rate (per 1000)	36.8	13.5
crude death rate (per 1000)	8.9	11.0
gross reproduction rate (per woman)	2.7	1.0
total fertility rate (per woman)	5.6	2.0
median age (years)	18.2	36.2
life expectancy at birth, male (in years)	61.4	74.5
life expectancy at birth, female (in years)	61.5	79.5
life expectancy at birth, total (in years)	61.4	77.0
infant mortality rate (per 1000 live births)	88.3	6.4
sex ratio at birth (per female birth)	1.1	1.1

Compared to the UK, Pakistan has a higher rate of infant mortality, women give birth to more children, and the life expectancies of males and females are shorter.

### 1.3.1 Health Beliefs

The health beliefs of Pakistan are rooted in religious and cultural systems, and are illustrated by the use of a humoural theory of illness and the consultation of *hakims* (traditional healers). Hakims practice healing based on the *Unani* system of medicine used throughout the Islamic world (Rack, 1982). This system of medicine is similar to that used by the traditional healers (*Vaids*) of Indian Ayurvedic medicine, both systems are based on a humoural theory of the body. The humoural theory of Unani medicine maintains that there are four humours in the body: blood, phlegm, yellow bile, and black

bile. The central concept to these humoural theories is the body's need to maintain a balance between these humours in order to ensure good health. The properties of these humours are defined as either 'hot ' or 'cold' and 'wet' or 'dry'. Rack (1982) notes that in India and Pakistan, the practitioners of Ayurvedic and Unani medicine provide approximately two-thirds of the health care services. Sbiah (1993) has commented that these systems and the beliefs surrounding them are important to considerations of health in Pakistani culture.

In terms of this thesis, these theories are of interest as the beliefs regarding humoural balance dictate the food preferences and choices of women in pregnancy and the postnatal period. These theories dictate the properties of food as being 'hot' or 'cold'. Thus, one can treat conditions through the consumption of 'hot' and 'cold' foods, as well as through medication (Helman, 1994). A study by Homans (1982) comparing childbirth in Asian and indigenous British women found that Asian mothers stated that pregnancy was a hot condition. Therefore, in accordance with humoural theories, cold foods should be eaten in pregnancy. Table 1.2 shows examples of hot and cold foods based on the Unani system of medicine.

**Table 1.2 Examples of 'hot' and 'cold' foods (from Rack, 1982)**

'Hot' foods	'Cold' foods
All meat and fish	Cabbage, cauliflower, cucumbers, okra,
Carrots, aubergines, lettuce, tomatoes	potatoes, pumpkins, spinach
Apples, bananas, grapes, mangoes, melons	Citrus fruits, peaches, pears, pineapples,
Most nuts, currants, raisins, dates, figs	plums, lychees, watermelon
Millet, sago, most pulses	Barley, maize, rice
Butter, oil	Cheese, yoghurt
Sugar, honey	Vinegar
Tea and most spices, except coriander	Egg white

In terms of the antenatal health of mothers, Rack (1982) notes that protein deficiencies in Asian mothers during pregnancy may be due to the avoidance of 'hot' (protein enriched) foods, which are viewed as undesirable during this period. These beliefs also have implications for infant health, as illustrated by Mull and Mull (1988). This study examined the use of oral rehydration therapy in Pakistani infants. Packets of Oral Rehydration Solution (ORS) are made up into drinks and given to infants with diarrhoea. The authors note that mothers were reluctant to use ORS even though it was widely available and free of charge in government health centres. This reluctance was based, in part, on the mothers' view that diarrhoea is a 'hot' condition which requires 'cold' treatment. This treatment is thought to be achievable through changes in maternal diet and the use of certain foods and herbs for the infant. Western medicines are classified as 'hot', and are therefore viewed as unsuitable treatments for infant diarrhoea. This study indicates the wide reaching consequences of these beliefs in terms of health outcomes in Pakistan.

### 1.3.2 Family

Pakistani families typically live in an extended system, often with three generations living under one roof (Rack, 1982). The extended family has been described as an aspect of Islamic society (Mesbah, 1985) which defines the family unit as parents, children, grandparents, uncles, aunts, and their children. Mesbah (1985) points out that the extended family is favoured by many of the Qur'an's references to the rights of kin, inheritance, and the importance of treating the family with kindness. Rack (1982) notes that in Pakistani culture a patriarchal system is adhered to, with the eldest male regarded as the authority figure in all decision making. The extended family assume a communal ownership of property, while household chores are shared among the women. Women leave their extended family after their marriage (usually arranged) to join their husband and become part of his extended family. Woods (1991) observes that the patrilineal system of inheritance places great value on the birth of sons and contributes to a mother's status, while the birth of a female child may be greeted with less enthusiasm. The

families often arrange marriages to consolidate existing relationships and bonds between families, and consequently many marriages are arranged between first cousins. In medical circles, this type of consanguineous marriage has been implicated as an important factor in perinatal mortality and congenital defects (Woods, 1991), although Ahmad (1994) has criticised this as an overtly simplistic explanation (based on his examination of the issue in Pakistani populations living in the UK).

### 1.3.3 Islam and Motherhood

The importance of motherhood is acknowledged in Islam, and is commonly expressed in the saying of the prophet Mohammed, "Paradise lies at the feet of your mothers" (Sarwar, 1984). Badawi (1994) comments that the classical authorities of Islam treat childbirth as an honoured event, with mothers who die during childbirth given the status of martyrs who have given their life in the fulfilment of religion.

The Islamic religion and Muslim teachings have referred to various aspects of childbirth. In the period after childbirth, a woman is considered to be in a polluted state, during which time she cannot have sexual intercourse (Mesbah, 1985), read prayers or touch the Qur'an (the Islamic religious text). The Qur'an has referred to the polluted state of women by stating, "They ask thee concerning women's courses. Say: They are hurt and a pollution: So keep away from women in their courses, and do not approach them until they are clean. But when they have purified themselves, ye may approach them in any manner, time, or place ordained for you by God. For God loves those who turn to Him constantly and He loves those who keep themselves clean" (The Holy Qur'an: Al-Baqarah: Surah 002: Ayah 222). In childbirth, the polluted period is defined as forty days after delivery, at the end of which the mother is required to take a ritual bath (*ghusl*) (Klein, 1985).

Rafiq (1991) has advised mothers on the Islamic ways in which to conduct pregnancy and duties relevant to childbirth. The author emphasises the role of religious prayer and

reading during pregnancy as important in ensuring that the child is born spiritually good and healthy. After the birth, the child is given a ritual bath (*ghusl*) and the call to prayer (*azaan*) is given close to the child's right ear by a Muslim male, normally from the child's family. The child should also have a softened piece of date or honey placed on the palate by a Muslim male, to emulate a practice conducted by the prophet Mohammed (*tahneek*). The afterbirth and navel cord are required to be buried carefully as they are considered to be parts of the human body, and should therefore be accorded similar respect.

As regards infant feeding, Rafiq (1991) comments that "...it is common knowledge that the mother's milk is the most suitable source of nourishment for the baby. Therefore, the mother should most obligingly fulfil her duty of breast-feeding the child. By so doing bonds of love, affection, and intimacy are strengthened between mother and child, and in the process, good habits and character are transmitted to the child. All these and countless other benefits are contained in breast-feeding. Artificial methods are devoid of all these advantages. Other methods of feeding should only be resorted to if ill health or other circumstances do not permit her to breast-feed the child..." (p.6). He also notes that the maximum period for breastfeeding is two years, beyond which time it is considered unnecessary and the child must be weaned. The relevant Qur'anic verse is found in the chapter of Al-Baqarah, and states that "the mothers shall give such to their offspring for two whole years, if the father desires to complete the term. But he shall bear the cost of their food and clothing on equitable terms. No soul shall have a burden laid on it greater than it can bear. No mother shall be treated unfairly on account of her child. Nor father on account of his child, an heir shall be chargeable in the same way. If they both decide on weaning by mutual consent, and after due consultation, there is no blame on them. If ye decide on a foster-mother for your offspring, there is no blame on you, provided ye pay (the mother) what ye offered, on equitable terms. But fear God and know that God sees well what ye do" (The Holy Qur'an: Al-Baqarah: Surah 002: Ayah 233).

The baby's first hair must also be removed and buried and the hair's weight in gold or silver may be given to charity. The author also emphasises the importance of naming the child on the seventh day postnatal, and stresses the importance of keeping a good Qur'anic name. The *aqeequah* ceremony should also be performed to safeguard the child from misfortune, and takes the form of offering the meat of two sheep or two goats for a boy, and one goat or one sheep for a girl. In the case of a baby boy, the parents are required to have the child circumcised. This can be done whenever the child is healthy, and is preferred before the age of seven, but can be delayed until the age of twelve.

#### 1.3.4 Pakistani Mothers and Childbirth

According to Woods (1991), the choice of birth attendant in Pakistan is dictated by locality, financial considerations, and urban or rural location. The *dai* (traditional birth attendant) was the most popular choice in rural settings, with between 90 and 99% of births conducted under the *dai*'s supervision. The situation in urban areas is somewhat different, with 20% of upper and middle income households retaining the services of a *dai* compared to 80% of urban poor families. While some *dais* were untrained, others had been formally instructed in midwifery skills.

Woods (1991) reported her experiences of working as a nurse-midwife at a Christian mission hospital, which offered maternity care services to the Pakistani city of Sahiwal, in the Punjab, and to surrounding villages up to 100 miles away. The author comments that mothers were usually found to have no experience of prenatal care, with the first hospital contact made at the time of delivery. Difficulties with accurate dating of pregnancy were common due to the lack of antenatal care and the mother's inability to recall the date of her last period. Another health concern was the high proportion of anaemic mothers. As noted previously, the avoidance of protein enriched 'hot' foods during pregnancy may be a contributing factor to this problem.



Common to Woods' experience at the mission hospital was the admission of labouring women whose delivery had not been managed successfully under the care of a *dai*. Maternal and infant health was often compromised by the common procedure of inserting cotton wads soaked in cooking grease into the vagina, in an attempt to facilitate labour. It was also reported that childbirth complications were frequent and that these were more prominent in mothers with five or more children. The use of breast feeding was reported to be widespread, with over 90% of mothers feeding in this way. Woods (1991) comments that the low level of birth control usage in Pakistan means that breastfeeding is especially important as a means of contraceptive birth spacing, as bottlefeeding encourages a quicker return to fertility levels required for conception. In terms of medical care, Woods (1991) also notes that Pakistani mothers are unwilling to accept males in the role of health providers or in the obstetric environment. In addition, the birth is considered off limits to husbands and reflects the general segregation of males and females which is common to all realms of Pakistani society.

#### 1.3.5 An Account of Childbirth in Pakistan

An account of childbirth rituals in Pakistan is presented here, based on several informal interviews with mothers of grown up children regarding their birth experiences.

*Nazira stayed with her parents-in-law during the first few months of her pregnancy. She returned to her parents' home when she was seven months pregnant. During the initial months of pregnancy she ate most foods and did not actively avoid any particular foods, although her mother-in-law said she should not eat 'hot' foods, like mangoes, nuts and dates, as this could cause her to lose the baby. Her mother-in-law was pleased that she had cravings for sweet foods, as these were said to predict the birth of a boy. The craving of salty, spicy, or 'sharp' tasting foods (like pickles) were thought to be a sign of a baby girl. When asked if there were any 'dangerous' times for a pregnant woman, she mentioned eclipses of the moon. It was stressed that this is a very dangerous period for the baby, and that the mother must pray for her baby's safe health during this time. The*

*eclipse was considered dangerous as deformities to the child were thought to occur during this time. As an example, she said that if either parent was cutting material or food etc., this could induce scarring or some other physical deformity in the child.*

*Other dangers to the pregnant mother were believed to be caused by coming into contact with barren women, or women who had lost their children through miscarriage. Such women were thought to have a malign influence on the pregnancy, and had to be avoided. Other dangers were thought to be present in visiting the home of a woman during the 'chilla' (ritual postpartum period). The impure and polluted state of women at this time was thought to encourage the presence of 'bad spirits' which could harm the pregnant woman. In a similar vein, pregnant women could not look at a corpse and had to wait for forty days after a death, before visiting to pay condolences. The negative influence of 'bad spirits' at such events was believed to harm the baby in the womb.*

*The mother was encouraged to remain in a happy mood as negative emotions are believed to affect the baby's well being. Nazira's mother-in-law encouraged her to wear nice clothes and to go out and see friends and family, so that she would be happy. In the last few weeks of the pregnancy she was encouraged to drink a mixture of warmed milk and butter. Nazira stated that this was done to encourage an easier birth. The benefits of drinking this mixture were described as the relaxing and loosening of muscles before the birth, thereby making the labour easier. The milk and butter mixture is only drunk in the final weeks of pregnancy as the fattening quality of the drink is believed to help the baby grow bigger. It is therefore discouraged in the earlier months as a larger baby would lead to a more difficult delivery. The relaxing effect of this drink on the muscles was compared to sitting in a bath of warm water. In the final few weeks Nazira was encouraged to walk about a lot more than before, and to do as much work as she felt she could. These activities were thought to aid the birth and labour process. When the birth was very near, the mother was encouraged to eat the 'hot' foods that were previously prohibited. This was done, so as to quicken the onset of labour and delivery.*

*Antenatal care was the responsibility of a traditional birth attendant or 'dai'. Once the dai was informed of the pregnancy, she would assume the responsibility of looking after the needs of the pregnant mother. This involved massage of the mother's abdomen and legs with oil, so that she could relax and feel better. It was in the dai's interests to provide a good service, so that she would be well reimbursed after the postnatal period. Nazira stated that the dai in her case had been trained at a nursing college and was well respected and trusted amongst the women of her village. She commented that at that time, it was quite rare to have a trained birth attendant. Nazira described the dai as very experienced in assessing the development of the foetus through massage. She recounted another pregnancy case, where the same dai correctly predicted twins very early on the pregnancy, merely by massaging and feeling the stomach. The dai is aware of all the predicted delivery dates of the women in her care, so that she can ensure that she is in the village and can be contacted at the time of birth.*

*In Nazira's case, the dai was sent for when her labour pains began. The dai arrived and stayed with Nazira until the baby was born. Also, present in the room were her sister-in-law and her mother. The birth took place at her parents' home and the dai assumed her role as a midwife in assisting the birth. The dai used no drugs or painkillers whatsoever. Her main techniques of pain relief involved having the mother walk about, or sit in a squatting position, so that the pain could ease. The dai also used warm mustard oil, or butter to massage the abdomen and legs to try and ease the pain. Oil was also applied to the birth canal to aid delivery. Nazira was given drinks of warm milk and butter to give her energy and to make her insides more supple. Other drinks were also given to help quicken a prolonged labour. These were made with 'gur' (crude sugar) and fennel mixed in boiled water. In extreme cases of difficult labour, the dai would send someone to the nearest Muslim cleric (molvi) with a piece of 'gur'. The molvi would read prayers for the mother's well being and safety over the 'gur'. The 'gur' would then be rushed back to the labouring mother, who would taste a little portion to help assist the delivery. If the mother was having difficulties pushing the baby, the dai would make the mother chew on*

*her own hair so that the vomiting reflex forced the baby further down the birth canal. Other techniques involved external massage to manipulate the foetus and try and quicken the birth. If, despite all the dai's efforts and know-how, there was no successful birth, or if the case became more complicated-only then was the mother taken to hospital.*

*In Nazira's case, the dai managed to deliver the baby successfully. The dai waited until the afterbirth had been expelled, before cutting the umbilical cord. The afterbirth was considered important in cases where the baby did not breathe straight away. It was believed that applying heat to the afterbirth helped the baby to take its first breath. The afterbirth and the umbilical cord were then wrapped up in a cloth and buried within the confines of the house. This was done so that animals could not get hold of the remains, as this is considered 'disrespectful'.*

*The dai then washed and cleaned the baby, so that other rituals could be carried out. The baby must hear the call to prayer, the 'azaan', in the right ear as soon as possible after the birth. Nazira stated that this is done for religious reasons, so that the child is immediately influenced by the word of God and is accepted as a Muslim. The 'azaan' can be carried out by a Muslim cleric ('molvi'), or a male member of the family. The baby is then given something sweet (e.g. honey, or 'gur'), normally by a member of the family. This ritual is known as giving the 'ghurti', and it is believed that the child will grow up to be like the person who gives this first taste of food. [As a point of interest, it is notable that when questioning somebody's actions, people often say "I wonder who gave him/her the 'ghurti' " - implying that the giver has an effect on the personality of the child].*

*Often, leaves of a tree are place above the front door to signify the new birth to others. This is done for several reasons, other than celebration. The leaves signify that a 'chilla' (postnatal ritual period) is taking place, so that women who are barren, or who have recently lost a child, or those who have had a recent death in the family, know that they should not enter. Nazira believed that those women whose children had died, could*

*cause the death of her own child. Indeed, she recounted endless tales of other unfortunate women, who had lost their children to such terrible circumstances. Other people who avoided the house when there was a 'chilla', were those who wore talismans for protection, good health, or luck. Many of these people were advised by clerics to avoid wearing their talismans when visiting a house where there has been a new birth. This was supposed to protect their talisman from 'bad spirits' which were attracted to the new mother in her impure and polluted state.*

*Aside from those who are prohibited from having contact with the new mother, others can come and visit her soon after the birth. The mother and baby are normally given presents of money or clothes by friends, neighbours, and family. The mother is taken care of by the dai, who has now assumed a role of postnatal carer. Heat is considered essential for the new mother. The mother is viewed as being in a vulnerable condition in the immediate postnatal period. Heat is important as cold chills are considered unhealthy and damaging to the new mother. In Nazira's case, a fire was lit close to her bed to keep her warm and stones were heated up and placed on her stomach. The stones provided a good heat source which was believed to help the mother cleanse her body. The heat was important to encourage the flow of blood, thereby helping the cleansing process. Cold chills were also avoided by tying a piece of cloth around the mother's head. Usually this cloth was black, as this colour helped to protect the mother from the 'evil eye' ('nazar') of others' envy. Black thread was tied around the baby's wrists to protect it from the 'evil eye', as well as to gauge how quickly the baby was putting on weight. Other protective measures took the form of placing an iron object at the mother's bedside to ward off evil spirits ('jinn') and influences.*

*The dai came to the house to massage Nazira twice a day in the first week after the birth. The specific area massaged was the pelvic bone area and this was done to encourage the bones 'to knit together' after the stressful experience of birth. In the other five weeks after the birth, massage was done once a day. The dai took care of the new mother and most*

*of the baby's needs when she came to the house. The baby was initially fed using cotton dipped in goat's milk, which was then slowly dripped into the baby's mouth. This was done for the first three days until the mother was ready to breastfeed the baby herself. On the third day after the birth, the baby's maternal aunt (or other female relative) washed the new mother's nipples with leaves dipped in a mixture of oil and warm water. The nipple area was then dried and squeezed to cleanse out the 'bad' milk before the baby could feed. The new mother then gives her sister a traditional present of money for performing this rite. The baby can then be breastfed on demand, with the mother always feeding from the right breast first.*

*The first three days were very important for complete rest. During this time, the mother was not allowed to move from the bed. She was also told to lie in the same position, flat on her back, as this was believed to help the body cleanse via bleeding. The mother was not allowed to get up and go to the toilet, so bedpans were used during this time. This rest period was also encouraged to avoid 'cold chills' which are believed to be detrimental to the health of a new mother. On the fifth day after the birth, the dai helped Nazira to bathe herself. After this, the mother was encouraged to begin moving about the room slowly and start to get into a routine of caring for her baby. The mother was given 'hot' foods to eat, as this promoted cleansing by helping the blood flow to continue. A chicken stock flavoured with salt, onions, spices and herbs, called 'yukhni', was also given to new mothers as it was 'hot' and provided energy. In the first few days after the birth of the baby, the mother was forbidden from eating solid foods, such as chapatties (unleavened bread). Solid foods were initially forbidden as this produced breast milk of a doubtful quality, and because the baby's delicate stomach was unaccustomed to food. Other hard foods are also avoided, such as: mustard greens, corn, lentils, and anything cooked with gramflour (e.g. pakora). The mother is also advised against eating food which is too hot or cold (in temperature). It is thought that if the mother follows these rules and avoids such foods, her milk will be easily digestible for the baby.*

*During the six week period ('chilla') the mother is helped by her family and is encouraged to begin walking around after the fifth day. Special foods are made with 'hot' ingredients, e.g. nuts, to help the mother regain her strength and also to cleanse her body. The most common postnatal food is 'punjeeri' (described by Gideon, 1962). 'Punjeeri' is often a favourite treat for postnatal mothers as it is rich in butter, sugar, raisins, nuts, and flour. 'Punjeeri' is thought to be a good source of energy, which helps all the bones to 'knit back together'. During this time, the dai is available to massage the mother's head and body with mustard or almond oils. The dai also disposes of soiled clothing and bathes the baby. The mother avoids all 'cold' foods, such as yoghurt, and rice. The use of cold water is also forbidden, so the mother has to abstain from all household duties. Other female relatives help with the cooking and household tasks, so that the new mother is able to rest without worry. As the mother is also considered to be in an impure and polluted state, she is not allowed to cook during this time. All these restrictions help to ensure that the mother has ample rest to recover from childbirth.*

*Nazira stated that in her case she left her room on the eighth day after the birth of her son, as her in-laws had arrived at her parents' home to see the baby. Her husband's sister had also arrived with presents for the baby. The paternal aunt is very important as she brings clothes, money and jewellery for the new mother and baby. The baby (boy or girl) is normally given silver bracelets and anklets by the aunt. If a boy is born, the mother's family give the aunt presents of money, jewellery and clothes. The types of presents are defined by the financial means of the family. In some cases, agricultural families provide the baby's aunt with livestock (for example, a cow, or buffalo). The other in-laws also arrive with presents of clothes and money for the new mother and her family. Often, the mother in-law also brings butter, sugar, nuts, and raisins to help make more 'punjeeri' for the new mother to eat in the postnatal period.*

*Nazira also stated that when the forty days after delivery are over, the mother is required to have a cleansing bath ('ghusl') to signify the end of the postnatal period. This is*

*because in Islam, a woman is considered 'impure' ('paleet') when she is bleeding, and is not allowed to pray or read the Qur'an when in this condition. The ritual bath is therefore a way of returning to a 'pure' ('paak') state again, similar to the requirements of cleansing after a menstrual period. On the last day of the 'chilla' it is very important to clean the whole house thoroughly. All the female relatives help to clean the house, the bedclothes, and all the dishes. A celebratory dessert dish is cooked, such as sweet rice. The dai usually stays in the house all day to help with the preparations. The dai prepares the ritual bath water for the cleansing ritual. The bath water is taken from seven different sources. This often involves the dai collecting small pails of water from neighbouring homes, so that it can be mixed with other water. The bath water is also salted, and has the leaves of seven different trees added to it. Holy water, which has been blessed by the local cleric is kept for the final rinse. The mother is bathed with the water and she performs her ritual ablutions and prayers to cleanse herself. The baby is then put in the mother's lap and the holy water is poured over both mother and child. In the case of mothers who have lost their child, fruit is placed in their lap as an omen of good luck in future pregnancies. The mother and baby are dressed up in new clothes and the mother prays to give thanks that she and the infant have come through the birth safely. Fruit or sweets are then distributed to local children as a celebratory ritual.*

*After this time, the mother can resume her normal duties. She can now help with the household chores and cooking. The mother is also allowed to resume conjugal relations with her husband after the 'chilla' has ended. In the case of the birth of a baby boy, traditional sweets ('laddoos') are usually distributed to family and friends to celebrate the birth. This is not usually done in the case of a female child. Often in the case of a baby boy, musicians and dancers will travel to the family home to play music and celebrate the birth. In return, they are given money by family and friends. Sometimes, the poor also come to give their congratulations to the fortunate family. In return for their congratulations and prayers, they are given money. Depending on the financial*



*circumstances of the family, the dai is given money, clothes, and grain as payment for her services.*

*The first hair is considered impure and has to be removed. Male and female children have their hair shaved by the local barber, preferably within the first seven days after birth. The barber is also given a present of money from the family. Many families prefer to circumcise male children during the 'chilla', as it is thought that the wound heals more quickly. This duty is also performed by the local barber. Nazira stayed with her parents for a few months, during which time they performed the 'aqeequah' ceremony. This involves slaughtering one sheep or goat for a female child, or two sheep or goats for a male child. This ceremony is performed to safeguard newborn children, in line with Islamic tradition. The meat can then be distributed to friends, family, and neighbours. Alternatively, the meat can be used to cook a large meal, and guests can be invited to celebrate the new birth.*

*After the celebrations have passed, the husband comes to take his wife and child back to their home. This happens after the ritual 'chilla' has ended. Sometimes mothers stay for longer periods, particularly in the case of a first birth. In Nazira's case, she returned home after four months. Her parents gave her presents to take back to her in-laws. These included clothes for the new mother and baby, as well as jewellery. The in-laws were also given presents of clothes, and in some cases jewellery.*

This account of the postnatal rituals of Pakistani mothers illustrates the six aspects of ritual specified by Stern and Kruckman (1983). The described ritual has some parallels with Gideon's (1962) description of Indian Punjabi postnatal customs. This is unsurprising as Muslims, Hindus, and Sikhs lived within the same communities in India, prior to 1947. The Islamic influences are evident in the customs of having a defined postpartum period of forty days, the giving of 'ghurti', shaving the infants hair, saying the call to prayer in the infant's right ear, and the importance of purifying oneself with a ritual

bath to mark the end of a polluted and vulnerable period. The importance of the humoral theory, based on Islamic Unani medicine, is also evident in the avoidance of 'hot' foods during pregnancy. Food rules change in the postnatal period, with the consumption of previously prohibited foods being positively encouraged.

#### **1.4 The Impact of Non Western Childbirth Beliefs in a Western Setting**

Several studies of Asian women in the UK have illustrated the importance of childbirth customs in the context of birth in a Western country. An article by Bowler (1993) examined the stereotypes of British midwives regarding women of Asian descent. The author found that midwives reported that Asian women were often difficult, and that they preferred staying in bed after the birth rather than getting up and being physically active. Clearly, childbirth customs which encourage a mother to rest and recuperate will influence the behaviour of Asian mothers after the birth, although this seems from Bowler's work to be perceived as indicative of Asian women's 'demanding' nature. At the birth, the author found that Asian mothers did not like having the baby delivered onto their stomach. This is probably not surprising as postnatal customs are often concerned with pollution, Pakistani mothers in particular would expect the baby to be ritually bathed before receiving it. It was also observed that mothers did not want to breastfeed immediately, which is consistent with the tradition of waiting for the milk to come in rather than feeding the colostrum (Homans and Satow, 1981). This often meant that although mothers wanted to breastfeed, they adopted bottlefeeding due to the lack of support from midwives and the separation from female family who would normally support efforts to breastfeed (Bowler, 1993). It is likely that these stereotypical views stem, in part, from midwives' ignorance of childbirth customs, needs and expectations of Asian mothers.

Woollett and Dosanjh-Matwala (1990) interviewed Asian women regarding their experiences of childbirth in the UK. The authors comment that Asian mothers' beliefs,

which are grounded in traditions relating to childbirth and postnatal customs, may be at odds with the expectations of maternity hospital practice. Many women in the study expressed the importance of rest after the birth, and felt that the hospital's lack of support did not allow this rest to be taken. Mothers also mentioned the importance of the family in encouraging rest after childbirth and providing support. Asian mothers' beliefs regarding the type of support that should be available after childbirth, were often in conflict with the views of staff, and contributed to tension between mothers and nurses. The authors point out that the different views held by Asian mothers and staff in hospitals question the legitimacy of a purely Western medical view of normal maternal behaviour, and illustrate the importance of cultural and ethnic factors in defining motherhood.

In a later study, Woollett et al. (1995) compared the experience of pregnancy and childbirth in Asian and non-Asian women in London, presenting a more detailed picture of Asian women and childbirth. The authors found that although the accounts were very similar in the two groups studied, some differences of emphasis were apparent. Women who considered themselves as more traditionally Asian and who had resided in the UK for a shorter period, placed more emphasis on the need to rest after delivery. In terms of postnatal restrictions, Asian mothers mentioned more restrictions on social and household activities, with these usually being ascribed to religious or cultural beliefs. Rituals and celebrations of the birth were also mentioned more by Asian women and reflected the importance of the birth as a family event. Interestingly, this study found that Asian mothers were just as likely to have their husband with them at delivery compared to non-Asian mothers. The study illustrates the importance of childbirth customs, especially among traditional Asian mothers. In addition, the authors identify 'parallel sets of beliefs and practices' in Asian mothers, shown by a dual commitment to Western maternity care and some aspects of traditional beliefs and customs. It would seem then, that less acculturated women may have different needs and expectations of childbirth compared to Asian women who have been born in the UK, or have lived in the UK for longer periods. The authors conclude that maternity care cannot be based on ethnic and religious

stereotypes as cases will differ based on individual circumstances, particularly the level of acculturation.

These studies illustrate the need for maternity services to be aware of cultural and ethnic approaches to childbirth. This would seem to be most pertinent in the case of Asian mothers who are defined as traditional. Traditional mothers are likely to hold views regarding childbirth which are contrary to the Western approach and at the same time they may also find communicating with nurses more difficult, thus making the experience of birth more difficult and alien.

### **1.5 Overview of Thesis**

This thesis is organised in three main sections:

The first section (chapters 1-4) deals with the literature review. This first chapter has provided a background to the cultural approaches regarding childbirth in Western and non Western environments. Further chapters will review literature on general depression issues pertinent to this thesis (chapter 2), depression as it relates to childbirth (chapter 3), and social support issues (chapter 4).

The second section (chapters 5-9) addresses the research conducted for this thesis. Chapter five deals with the aims, objectives and methodology of the current study. The remaining chapters (6-9) describe the results of analyses conducted.

The third section discusses the findings of the present study, in the context of previously outlined aims and objectives (chapter 10). Finally, chapter eleven outlines the main conclusions and suggests some possible directions for future research.

## Chapter Two

### Depression

Depression is one of the oldest known psychiatric disorders, with references to depressive experience being found in the Old Testament and various classical Hindu medical texts. By the nineteenth century, depression had become a prominent concern in Western psychiatry, with theorists such as Esquirol, Haslam, Kraepelin, and Freud all contributing to the understanding of depression (Marsella et al., 1985).

In the twentieth century, depression is one of the most common psychological problems to be recognised and treated in general practice and outpatient clinics (Beck, 1972). Major depression, also known as unipolar depression, is one of the most widespread disorders, with a lifetime prevalence rate of between four and five per cent (Weissman et al., 1988). Survey results in the United States suggest that, in any given year, between 5 to 10 per cent of adults will suffer from a severe unipolar depression, with another 3 to 5 per cent suffering from mild forms of depression (Kessler et al., 1994). In terms of the world wide picture, research suggests that unipolar depression is increasing. Weissman (1992) reported the findings of a cross national study of 39 000 people in the USA, Canada, Italy, Germany, France, Taiwan, Lebanon, and New Zealand. The study reported that the risk of experiencing a severe depression at some point in life has steadily increased with each successive generation. The average age of onset was also found to be decreasing with each generation.

This chapter discusses various aspects of depression, many of which relate to depression as defined by psychiatry. Although it is not the purpose or intention of this thesis to diagnose clinical depression, the literature reviewed here provides a general understanding of depression. The focus of this thesis is the examination of depressive symptoms in a non clinical sample of childbearing women. This chapter is divided into sections addressing: defining and measuring depression; theories of depression;

depression in a cross-cultural context; depressive symptom assessment; a consideration of some self report depression inventories; and, adopting a depression measure.

## **2.1 Defining and Measuring Depression**

Three major systems are used in the classification of psychiatric morbidity:

- 1) The fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM IV; American Psychiatric Association, 1994).
- 2) The International Classification of Diseases, tenth revision (ICD-10; World Health Organization, 1992a).
- 3) The Research Diagnostic Criteria (RDC; Spitzer et al, 1978).

According to DSM-IV criteria, the diagnosis of major depression requires the occurrence of one or more major depressive episodes. A major depressive episode is defined by the presence of at least five symptoms over two weeks. These symptoms are defined as :

- a) depressed mood;
- b) markedly diminished interest and pleasure in activities;
- c) significant weight loss or gain;
- d) insomnia or hypersomnia;
- e) psychomotor agitation or retardation;
- f) fatigue or loss of energy;
- g) feelings of worthlessness or guilt;
- h) diminished ability to think or concentrate or indecisiveness;
- i) recurrent thoughts of death or suicide.

One of two symptoms, depressed mood or markedly diminished interest and pleasure in activities, must be included in the five symptoms to merit a diagnosis of a major depressive episode. Symptoms due to a physical condition (e.g. rheumatoid arthritis symptoms of loss of energy) cannot be considered as a symptom which would define a major depressive episode, as it is attributable to another factor, i.e. illness.

Measurement of depressive disorders often involves the use of structured and semi-structured diagnostic interviews based on one of the three major classifications of psychiatric morbidity. Clinicians administer four kinds of depression interviews: the Standardised Psychiatric Interview (SPI; Goldberg et al, 1970); the Present State Examination (PSE; Wing et al, 1974); the Schedule of Affective Disorders and Schizophrenia (SADS; Endicott and Spitzer, 1978); and the Structured Clinical Interview (SCID; Spitzer et al, 1992).

In terms of the current study, the use of psychiatric interviews to measure depression is inappropriate. These psychiatric interviews are designed for the diagnosis of depression in clinical populations, whereas this thesis is concerned with a comparison of depressive symptoms in a non clinical population (i.e. childbearing women).

## **2.2 Understanding Depression**

Many theories have been advocated to explain depression. The following section briefly summarises several of these approaches: biological, psychodynamic and cognitive.

### **2.2.1 Biological Approach**

The role of biological factors in depression has been supported by research in genetics, neurochemistry and studies investigating the neuroendocrine system. Genetic studies are based on data from family pedigree studies, twin studies, and adoption studies. Using this approach, researchers have found evidence of a biological predisposition in the development of depression. A recent study concluded that as many as 20 percent of relatives of depressed persons were similarly diagnosed, as compared with 5 to 10 percent of the general population (Harrington et al., 1993).

Biochemical explanations for these types of findings concentrate on the activities of two neurotransmitters: norepinephrine and serotonin. The theories which implicate these neurotransmitters in the development of depression posit that low levels of

norepinephrine and serotonin lead to depression. Low levels of serotonin interfere with the activity of other neurotransmitters, thereby causing depression.

The biochemical explanations were based on observations of the effects of tricyclic drugs and also monoamine oxidase inhibitors, both of which inhibited depression. The ingestion of these drugs increased levels of both serotonin and norepinephrine, suggesting that these neurotransmitters played some role in depression.

Recent decades have produced numerous studies investigating the role of neurotransmitters. However, this theory has since been challenged by findings which suggest that increased levels of serotonin and norepinephrine only occur during initial phases of drug therapy (Heninger et al., 1983). Although the biochemical line of research has generated possible explanations of why depression occurs, Comer (1996) suggests that there are also limitations to this work. He points out that much of the research conducted is based on depression like symptoms in laboratory animals, and as such, conclusions about human depression must be viewed with caution. Comer also states that only recently have technological innovations been developed which allow more direct measurement of biochemical events, i.e. PET scans and MRI techniques. As older studies used indirect measures of biochemical events, these limited investigative techniques may have masked the role of other biological factors involved in depression.

### 2.2.2 Psychodynamic Approach

The psychodynamic theories represent one of the oldest approaches to the study of depression. The psychodynamic approach is based largely on the work of Sigmund Freud and his student Karl Abraham (Freud, 1917; Abraham, 1911). For these theorists, there was a remarkable similarity between the manifest symptoms of depression and grief reactions to the loss of a loved one, through death, separation, rejection or symbolic loss of an ideal.



Freud and Abraham posited that unconscious processes are involved when a loss is experienced. The loss causes mourners to regress to the oral stage of development, at which point there is a fusion of the mourner's identity with the identity of the lost person. This process (introjection) causes the mourner to experience feelings associated with the loss as feelings about themselves. Continued grief reactions are thought to cause problems in terms of forming social relationships, and lead to self-hate, negative mood and withdrawal. The theory explains that people become depressed due to continued preoccupation with their loss.

Freud and Abraham believed that certain individuals were more predisposed to experiencing depression than others. The oral stage is again the focus of identifying individuals at risk of developing depression. These theorists suggested that those individuals whose parents failed to gratify their nurturance needs in infancy, or those whose needs were excessively met would be at risk. These people would exhibit behaviours such as excessive approval seeking and also a tendency to devote themselves to others, resulting in stronger grief reactions when a loss was experienced.

The theory does not require that an actual loss be experienced, as symbolic loss may also be a factor in depression. Although the original theory has largely been altered or rejected, it still exerts a considerable influence on current psychodynamic models. Object relations theorists emphasise the role of relationships in the development of depression. They suggest that relationships which create a feeling of insecurity can leave a person vulnerable to depression when faced with complications or loss in their lives. In a similar vein to Freud and Abraham, these theorists posit that parents who encourage excessively dependent or self-reliant individuals may have helped to create personalities which are predisposed to depression later in their lives. (Horner, 1991).

### 2.2.3 Cognitive Approach

The cognitive approach views depression as a cognitive disorder which causes individuals to perceive and interpret the world in ways which become counterproductive and lead to depression. The focus of this approach is on thinking processes and encompasses the role of beliefs, self-statements, attitudes, images and memories. Maladaptive cognitions are considered to be the primary cause of depression, while other symptoms, for example, negative affect, lack of motivation and appetite disturbances are classed as secondary manifestations.

There are three areas that require to be addressed when considering cognitive approaches:

- 1 Beck's cognitive theory of depression (1967, 1976);
- 2 Seligman's learned helplessness model of depression (Abramson, Seligman, and Teasdale, 1978); and
- 3 Hopelessness theory of depression (a revision of the learned helplessness model: Abramson, Metalsky, and Alloy, 1989).

#### Beck's Cognitive Theory

Beck emphasised the role of cognitive functioning in the aetiology and maintenance of depression. The central thesis of Beck's theory posits interactions among three levels of cognitive activity in depressed individuals. The three levels are:

- 1 The cognitive triad;
- 2 Cognitive distortions, i.e. faulty information processing; and
- 3 Negative self-schemas.

The cognitive triad refers to a depressive pattern of thinking about the self, current situations and also the future. According to Beck, the depressed person will view situations negatively even when there are more positive and plausible scenarios regarding situations. The type of thinking that is engaged in by the depressed person encourages a

defeatist approach to life and a resultant lack of motivation, affect and physiological functioning.

Beck maintains that depressed persons demonstrate cognitive distortions through engaging in faulty information processing. In this theory, depression can be characterised by a number of cognitive biases, including: arbitrary influence, selective abstraction, overgeneralisation, magnification and minimisation, personalisation, and all-or-none thinking. Each of these cognitive biases leads to misperceptions of the environment in depressed persons. For example, in the case of selective abstraction, a depressed person draws a negative conclusion based on only one of many aspects of a situation. Beck also noted that depressed individuals made responses based on insufficient reasoning and were uncritical of their depressive thought processes. These reasoning inadequacies consequently led to other manifestations of depression, such as self-loathing, suicidal ideation and low self-regard.

The final section of the triad is the negative self-schema, this was posited by Beck to explain why depressed persons continue to function in a maladaptive manner even in the face of contradictory evidence. The schema is considered to be a stored body of knowledge that affects encoding, comprehension and retrieval of new information. According to Beck, schemas are biased toward consistency and may therefore lead to errors in interpreting and selecting information in depressed persons, as this is consistent with pre-existing beliefs and cognitions. The schemas remain with an individual throughout life and can be considered a vulnerability factor, a diathesis, for depression. Beck identifies two schematic subtypes who are vulnerable to depression following stressors. The autonomous subtype is typified by high achievement needs, independence and high standards. The second subtype is characterised by the dependent individual, who relies more on close interpersonal relationships and security. Interestingly, this subtyping is very similar to the psychodynamic identification of individuals vulnerable to depression.

### Learned Helplessness Model

This cognitive model was developed from the work of Seligman (1975) on learned helplessness. Learned helplessness theory maintains that an individual's passivity and sense of being unable to control aspects of life, are acquired through unpleasant experiences which the person has tried unsuccessfully to control. The inability to prevent trauma leads to learned helplessness and subsequent depression.

Seligman's learned helplessness model was originally based on findings from experiments with animals, and has since been reformulated a number of times to produce a model applicable to depression in humans. The reformulation by Abramson et al. (1978) has generated the most empirical and theoretical attention. The previous assertion that mere exposure to uncontrollable stimuli could lead to depression was considered insufficient. Instead, these theorists postulated that individuals must *expect* that future outcomes will also be uncontrollable, this would then induce helplessness.

The focus of the revised theory lies in the concept of attribution: the explanation a person has for his/her behaviour. According to Abramson et al. the causal attributions that an individual makes will determine the extent of helplessness experienced. The theorists proposed that attributions for uncontrollable events varied along three dimensions: internal versus external locus of control, stable versus unstable, and global versus specific aspects of attributions.

Abramson et al. posit that different aetiological conditions produce specific depressive symptoms. For example, the tendency to attribute uncontrollable negative events to internal factors contributes to low self-esteem. The helplessness theory maintains that depressed individuals are most likely to attribute negative uncontrollable events to internal, stable and global factors. This attributional style is viewed as a stable trait, thereby explaining the consistency of depressive attributions across different situations and different times. The 'depressogenic' attributional style which leads depressed

individuals to believe that previous life events were uncontrollable, also generalises to future expectations. The helplessness theory, as in Beck's model, maintains that attributions play a causal role in the development of depression.

### Hopelessness Theory of Depression

Abramson, Metalsky and Alloy (1989) have revised the reformulated learned helplessness model of depression (Abramson, et al., 1978). This theory advocates the existence of a subtype of depression called 'hopelessness depression'. The theory maintains that some forms of depression are caused by a state of hopelessness. The hopelessness state results in the belief that highly desired outcomes will not occur, while undesirable outcomes will transpire. This form of depression is also characterised by the afflicted person's belief that no response from them can change these negative outcomes.

As in Helplessness theory, the person attributes negative events to stable and global factors. However, this theory also considers other predisposing factors: the tendency to infer that negative events will have severe negative consequences, and the tendency to make negative inferences regarding the self. This diathesis-stress theory requires that a negative event interacts with the hypothesised attributional style to produce hopelessness depression.

Abramson, Metalsky and Alloy (1989) also maintain that there can be a domain-specific vulnerability to depression. It may be, that an individual is predisposed to making stable and global attributions regarding interpersonal life events as opposed to work achievement related events. In this case, hopelessness depression symptoms will follow from a negative interpersonal event (e.g. the end of a relationship) but not after a negative work related event (e.g. failing to get a promotion).

## 2.3 Depression in a Cross-Cultural Context

### 2.3.1 Conceptions of Depression Across Cultures

The concept of depression, as understood in medicine today, is couched in terms of a psychiatric syndrome, defined by specific affective, cognitive and behavioural symptoms (Marsella, 1985). This concept of depression is specific to Western views of the depressive experience and is rooted in a philosophical dualism of body and mind. According to Mukherji (1995), the last two decades have produced considerable interest in the relationship of culture to aspects of psychopathology.

Several researchers have examined the conceptualisation of depression in different cultures. Leff's (1973) study of Chinese and Nigerian subjects revealed a strong correlation between different emotional states of depression and anxiety as measured by the Present State Examination. Leff concluded that non Western ethnocultural groups may not differentiate emotional states in the same manner as Western populations.

A study conducted by Tanaka-Matsumi and Marsella (1976) examined the subjective experience of depression in three groups: Japanese nationals, Japanese Americans and Caucasian Americans. The study examined word associations to the terms 'depression' and 'yuutsu' (the Japanese term most equivalent to depression). Findings indicated that the word associations to the two terms differed for Japanese nationals as compared to the American groups. The Japanese nationals associated mostly external referent words such as 'rain', 'cloudy' and 'dark', while the American groups associated internal referents, such as 'sadness', 'despair' and 'loneliness'. The groups were also asked to evaluate the terms 'depression' and 'yuutsu' on a semantic differential questionnaire. A factor analysis revealed a different factorial structure for each group. The authors concluded that depression has a different connotative meaning for each group.

According to Marsella et al. (1985), Indo European languages have many words that refer to the depressive experience, which may be restricted to European and North American concepts of depression. The Marsella and Tanaka-Matsumi (1976) study provides evidence for this particular viewpoint. Other studies have also found similar results with populations from other non Western groups, for example: Nigerians (Leighton et al., 1963), Chinese (Tseng and Hsu, 1969), and Malaysians (Resner and Hartog, 1970).

Marsella et al. (1985) point out that although many non-Western cultures have no conceptually equivalent terms for depression, this does not mean that depressive disorders do not exist. It is fair to assume that different cultures will have alternative conceptualisations of depression which will influence the experience, interpretation and behavioural expression of depressive experiences.

### 2.3.2 The Manifestation of Depression Across Cultures

There have been many studies conducted to investigate cultural variations in the manifestation of depressive experiences. Marsella (1980, 1982) notes that these studies are difficult to evaluate as a group, given the differing research strategies employed in investigations of this issue.

A variety of older publications summarised the early literature on manifestations of depression across cultures (Pfeifer, 1968; Prince, 1968; Racy, 1970; German, 1972). Prince's paper compared psychiatric studies of indigenous Africans conducted in colonial and postcolonial times. Prince concluded that in colonial Africa, very few cases of depression were diagnosed. Other colonial reports stated that psychotic depression was rare, and when it was present, it assumed a different manifestation from the Western type. In the postcolonial period, after 1957, Prince found that the reported rates of depression were claimed to be more frequent, but still different from the Western form.

In explaining the difference in diagnoses across time, Prince advocates a 'prestige hypothesis'. He notes that depression was viewed as a relatively 'prestigious' disease which afflicted only those who are "especially sensitive and intellectually aware" (p.185). Weiss and Kleinman (1988) claim that the prestige hypothesis is "relevant to our consideration of the relationship between the prevailing conceptualisation of depression and the cultural and historical context into which it is embedded" (p.184). They go on to explain that this cultural construction of the concept of depression affected the clinical judgements of colonial psychiatrists. To recognise depression in the indigenous African population would imply that Africans and Asians had more in common with the English, than colonial conceptions would allow. Similarly, a change in perceptions after independence may have allowed a greater reporting of depression in Africa.

Racy's (1970) work on psychiatric problems in the Arab populations provided evidence that depression is defined by several somatic complaints: gastrointestinal problems, decreased appetite and weight loss. He also reported that feelings of guilt and self deprecation were rare, as was suicide. Interestingly, Racy reported that depressive symptoms among the affluent Arabs assumed a more Westernised form.

Pfeiffer (1968) summarised depression accounts from twenty-two non European countries. Pfeiffer identified a core of depressive symptoms which he claimed were common across cultures. These symptoms included sleep, libido, and appetite changes, as well as abnormal body sensations. Pfeiffer concluded that somatic dysfunction alone could warrant a diagnosis of depression. As Marsella (1980) notes, this is a questionable conclusion. What may be required instead, are diagnostic categories relevant to specific cultures.

Clinical observation studies of depressive symptoms in non Western cultures have also been conducted. Clinical reports have been published regarding populations from: Afghanistan (Waziri, 1973), Iraq (Bazzoui, 1970), India (Rao, 1973), Indonesia (Pfeiffer,



1967), Japan (Shinfuku et al. (1973), Nigeria (Ebigbo, 1982), the Philippines (Sechrest, 1963), Taiwan (Kleinman, 1979) and the People's Republic of China (Kleinman, 1982). All of the studies referred to findings indicating the absence or infrequent incidence of psychological components of depression, particularly: guilt, existential despair, self denigration and suicidal ideation. Instead, findings indicated that somatic symptoms were the dominant mode of depressive expression. However, clinical studies have been criticised for their a priori assumptions regarding the presence of certain symptoms, the observer disagreements caused by low reliability, and the use of subjective judgements based on categories of dubious validity (Marsella, 1980; Marsella et al., 1985).

A matched samples approach to studying the manifestation of depressive symptoms has also been used. This approach compares symptoms of individuals from different cultural groups who are matched for demographic characteristics, such as: age, gender, education, and social class. Using this method, Stoker et al., (1968) compared symptom profiles of Mexican-American and Anglo-American female out-patients. The findings indicated that different patterns of depressive symptoms characterised each group. The Mexican-American group were characterised by increased affective symptoms, such as hyperactivity, crying, sleeplessness, suicide attempts and somatic complaints. In contrast to this, the Anglo-American group were found to have depressive states typified by psychological and physical retardation and guilt. Stoker et al. linked the symptom differences to aspects of the Mexican-American culture which relied on affective modes of functioning. Other studies using this research strategy have also reported cultural differences in depressive symptoms in comparisons of: Japanese and Americans (Draguns et al., 1971), and North Americans and Argentinians (Fundia et al., 1971). According to Marsella et al. (1985), the matched samples technique could provide accurate comparisons of symptom profiles in different cultures via community based epidemiological surveys. In line with the matched samples method, samples from different cultures would have to be stratified along demographic variables to allow symptom comparisons.

Another method used to examine depressive symptoms in different cultures, is the international survey technique. In early studies using this approach, Murphy et al., (1964, 1967) surveyed depressive symptomatology in thirty countries. They asked psychiatrists to rate the presence of depressive symptoms on a four point scale, ranging from 'usually found' to 'rarely found'. In twenty-one Western countries there were commonalities in depressive symptoms across cultures for: depressed mood, diurnal variation, insomnia and loss of interest. The remaining nine countries, which were largely non Western, were rarely found to have this type of depressive expression. For these countries, depressive symptoms were characterised primarily by somatic disturbances: fatigue, anorexia, loss of libido, and weight loss. Marsella et al. (1985) have pointed out that this method's accuracy is limited if the assessment of depressive symptoms is not standardised across cultures.

To address this issue, the World Health Organisation (WHO) collaborative study on depression used a standardised method of assessing depressive symptoms (WHO, 1983). The WHO study examined depressive symptomatology in patients from five countries: Canada, Japan, India, Iran, and Switzerland. Subjects were interviewed by trained clinicians using the WHO Schedule for Standardised Assessment of Depressive Disorders (SADD). The results revealed that there were similar patterns of depressive symptoms across the cultures examined. In addition to this, there were cultural differences in the frequency of symptoms expressed across groups. For example, feelings of guilt were present in 68 per cent of the Swiss sample, compared to 32 per cent of the Iranian sample; suicidal ideation was identified in 70 per cent of the Canadian sample compared to 40 per cent of the Japanese. Somatisation was found in 57 percent of the Iranian subjects and only 27 per cent of the Canadian patients. The WHO approach to studies of depressive symptoms has been criticised by Fernando (1991), who states: "the resources of the WHO are allocated to researching mental illness based on an understanding derived from Western philosophy and culture alone" (p.65). While this is an accurate observation of the limitations inherent in the WHO approach, the study's standardised techniques did

uncover differences in symptom presentation, albeit based on Western oriented definitions.

Overall these studies present a picture which indicates that the expression of depression does not conform to a certain universal ideal. In fact, it is apparent from the few studies examined, that cultures differ in their depressive symptomatology. The most crude distinction being that non Western cultures manifest depressive symptoms primarily in a somatic form, whereas Western cultures 'psychologise' depression.

### 2.3.3 The Issue of Somatisation

From the studies reviewed in the previous section, it can be seen that a distinction has been made between somatisation and psychologisation of depression. Kawanishi (1992) defines somatisation as, "presenting bodily complaints as explanations for one's psychosocial problems" (p.5). The expression of somatic symptoms is a particular feature of the clinical presentation of depression, and one that seems to be attributed more to non Western populations. Many studies have advocated that non Westerners 'somatise' depression while Westerners 'psychologise' depression (Tseng, 1975; Kleinman, 1982; Srinivasan et al., 1986; Saxena et al., 1988). Depressed patients who present somatic symptoms, typically complain about a range of changing symptoms, for example: feeling tired all the time, headaches, palpitations, weight loss, and dizziness. Those who present somatic symptoms of depression are also characterised by a frequent denial of feeling depressed and a refusal to acknowledge that any personal problems exist (Helman, 1994).

Many studies have been reported to support this view. For example, Hussain and Gomersall (1978) reported findings that Asian immigrants in the UK manifest depression primarily as somatic symptoms. Symptoms included generalised weakness, 'bowel consciousness', exaggerated fear of a heart attack, and a concern about the health of genital organs. Other researchers have also supported the assertion that patients from India and Pakistan express depression in a somatic context (Rack, 1982; Bavington and

Majid, 1986). Rack (1982) describes the expression of depression in British born women and Pakistani women as having a different focus. He states that the British born woman is likely to describe depressive symptoms primarily in terms of mood, with somatic problems being offered as an afterthought, or only after questioning. The Pakistani woman, on the other hand, is likely to describe somatic symptoms first, and may not even mention depressed mood. Sham et al.'s study (1996) found that primary care patients from the Asian subcontinent (India and Pakistan) could be differentiated from indigenous Caucasian patients in the UK on the basis of Asian patients' tendency to endorse somatic presentations of distress.

Various explanations for the finding that non Westerners tend to somatise have been advocated (see Mukherji, 1995). One of the explanations offered, concerns the linguistic or idiomatic differences in expression of symptoms. The idea behind this explanation is that emotional states and depression are couched in neutral or somatic terms as opposed to psychological terms. For example, the Tanaka-Matsumi and Marsella study (1976), discussed previously, found that the word *Yuutsu* (depression) was associated with external and somatic referents for Japanese nationals, whereas Caucasian Americans associated depression with internal mood states.

The use of somatic terms to explain distress is also common to the population studied in this thesis. The importance of the heart (*dil*) in expressing emotion is apparent in the Urdu language (national language of Pakistan). Bal (1987) notes that in the Asian subcontinent, the metaphor of 'my heart hurts' (*mera dil dukh da he*) is used to express the phrase, 'I am depressed'. An extract from Aslam's (1979) research (quoted in Rack, 1982) on the work of traditional healers (*hakims*) illustrates the prominence of the heart (*dil*) in patients' accounts of illness:

" The symptoms were described...as "My heart is sinking" or "fluttering" (*Dil thadaktah he*); "My heart feels lonely, squeezed, bored" (*Dil pareshan hey*). The patients

illustrated these by first pounding on the chest, or hand squeezing to illustrate a "pressed heart" .....*Frequent expressions included* "My heart gives me news" (*mera dil kahita hey*) - said of a premonition; "My heart burns" (*mera sil saddhta hey*), said when describing a tragic event." (Aslam, 1979: quoted in Rack, 1982, p.103.)

Another explanation offered to explain the somatisation findings concerns indigenous cultural concepts of illness. Mukherji (1995) states that non Western cultures do not reflect the mind-body dualism of Western philosophical and medical traditions. The health beliefs of the Asian sub continent are based on Unani-Islamic and Ayurvedic systems of traditional medicine. These systems are based on a humoural concept of illness, which advocates that emotions originate in organic systems, such as the heart and liver. On the basis of these health beliefs, emotions and distress therefore occur in somatic terms. Similar explanations have been offered for Chinese somatisation by Chen (1995). Traditional Chinese medicine (TCM) regards disease as the result of an imbalance of the two polar principles, Yin and Yang. TCM also regards internal organs, such as the heart, lungs, and liver as centres of physiological and psychological functioning. According to Chen, somatic presentation of depressive symptoms in the Chinese is not due to an inability to psychologise, but instead reflects a tendency to associate emotional states with internal organs.

Helman (1994) notes that the distinction between 'somatisation' and 'psychologisation' is more theoretical than real. Krause (1989) found that although Punjabi immigrants in the UK tended to somatise their depression, they were able to articulate their depression in psychological terms as well. In addition to this, Krause found that even where somatic symptoms were present, the Asian patients in the study considered this to reflect psychological as well as physical distress. According to Kirmayer (1992), somatic symptoms are probably the most common expression of psychiatric distress around the world. Several studies report conflicting data which does not support ubiquitous somatisation by non Westerners, with evidence suggesting that somatisation is not an

exclusively non Western phenomenon. A study by Lipowski (1988) examining primary care patients in the USA found that over half of the patients who were diagnosed as having depression, presented somatic symptoms rather than psychological ones.

Mumford and his colleagues have examined somatic symptoms in Britain and Pakistan (Mumford, 1989; Mumford et al. 1991a, 1991b, 1991c). They found that when idiomatic expressions for depression, such as '*dil ghatna*' (literally, heart sinking/falling) are taken into account, there are no differences between somatic symptom rates of Pakistani and British samples.

## 2.4 Depressive Symptom Assessment

Depressive symptoms can be assessed in several ways: self-administered questionnaires; clinician administered rating scales; and diagnostic interviews. Depressive symptom self-report scales consist of multiple items representing common symptoms of depression.

Respondents indicate the extent to which symptoms are experienced over a specified time period (e.g. 'the last few days'). The total depressive symptom score is then calculated by adding the item sub scores. The advantages of self report measures include ease of administration, in that they are relatively quick and inexpensive, as compared to diagnostic interviews, which are relatively costly and time consuming. In technical terms it is much easier to use self report measures of depressive symptomatology as this does not require the participation of a psychiatrist or other trained person.

There are, of course, disadvantages in using self-report measures. One such criticism of the self-report inventories is that they only reflect symptoms which are expressed and therefore are only suitable to those with sufficient insight and adequate vocabulary (Pichot, 1986). Another criticism of self-report measures concerns the use of graded severity items (e.g. mild, moderate, severe) or the use of frequency grading (e.g. rarely, often, never etc.). The grading of items has been criticised on the grounds that it may make judgement decisions impossible for some people. People of an indecisive and dependent manner may complete these types of inventories in a random manner

(Hamilton, 1982). These points are valid and pertinent in the case of clinical populations, i.e. psychiatric patients. However, in the case of a study dealing with subjects from normal populations, as in this thesis, participants are equipped with the ability to make and define a certain level of judgement, thereby minimising such disadvantages. By using self report measures it would also be possible to avoid the confounding effects of raters with different life experiences to the subject, which could be a potential problem in diagnostic interviews and clinician rated scales.

In terms of cross cultural studies, O'Hara (1994) has outlined advantages of the self report method of depressive symptom assessment. He states that the measurement of symptoms is preferable to the diagnosis of depression in other cultural contexts, as there are often problems with determining clinical significance in different settings. On the basis of these arguments it can be concluded that the most suitable way of assessing depressive symptoms, in this thesis, is by using self report inventories.

## **2.5 A Consideration of Some Self Report Depression Inventories**

Several of the most commonly used measures of depression were reviewed, in order to determine which measure would be the most suitable for a cross-cultural examination of depressive symptoms in a childbearing sample.

### **2.5.1 The Zung Self-Rating Depression Scale (SDS)**

Zung (1965) lists his 20 point categorisation for depressive disorders as:

#### **1) PSYCHIC-AFFECTIVE DISTURBANCE**

depressed mood

crying spells

#### **2) PHYSIOLOGICAL DISTURBANCE**

diurnal variation

sleep disturbance

decreased appetite

decreased libido

decreased weight

constipation

tachycardia

increased fatigue

### 3) PSYCHOMOTOR DISTURBANCE

psychomotor retardation

psychomotor agitation

### 4) PSYCHOLOGICAL DISTURBANCE

confusion

hopelessness

irritability

indecisiveness

personal devaluation

emptiness

suicidal rumination

dissatisfaction

The Zung Self-Rating Depression Scale (SDS) was designed with several criteria in mind, Zung (1986) defines these as:

- 1) the scale should be short and simple;
- 2) the scale should quantify items;
- 3) the scale should be self rated;
- 4) the SDS should indicate the patients' responses at the time that the scale was used.

The scale consists of 20 items and requires self ratings by the respondent on the applicability of the items over the past week. For example: Item 1 states "I feel downhearted, blue, and sad". This would be quantified as either: 'none or a little of the time'; 'some of the time'; 'good part of the time'; or 'most of the time'.



The SDS was administered to groups of normal subjects in order to establish normal baseline values and to show the differences between depressed patient scores and normal subject scores on the SDS. Zung (1972) administered the SDS to groups of normal subjects. These subjects were given the scale to complete at their school or workplace while carrying out their normal, routine tasks. The results of Zung's study found that control group subjects aged between 20 and 64 years had a mean SD index of 39, while younger and older subjects had higher scores. Similar research has been carried out in countries, other than the United States, to establish baseline values with the normal population. Research with these groups has been conducted in: Australia (Byrne, 1980); Czechoslovakia, England, Germany, Spain, and Sweden (Zung, 1969); India (Master and Zung, 1977); Japan (Fukuda and Kobayashi, 1973); Korea (Rhee and Shin, 1978); and The Netherlands (Zung et al., 1975). The SDS has been used as a measure of depression in non-psychiatric clinical settings, i.e. medical and surgical interventions (Shaw et al., 1975; Couch et al., 1976; Friedman and Bennet, 1977; Mendelson et al., 1977; Raft et al., 1977; Zung et al., 1983). The SDS has also been used as a depression measure in cross-cultural work with patients suffering from depressive disorders. The SDS has been translated into 30 languages and has been used as a rating measure in over 300 depression publications (Zung, 1986).

In terms of the requirements of the present study, the Zung Self-Rating Depression Scale was discounted as a possible measure for depression on several counts. Firstly, the driving force behind developing the scale was so that researchers could correlate both the presence and the severity of a depressive disorder with other parameters, such as arousal response during sleep and changes in depression disorder over the course of treatment (Zung, 1965). The scale is therefore aimed at identifying changes in depression levels in a clinical population and has subsequently been designed to measure depression in patients who have already been diagnosed as depressed. So, although the SDS has established baseline values with normal populations, even at a cross-cultural level, its primary objective is the identification of depression in clinical populations. With regards

to use of the Zung SDS with postnatal mothers, Cox et al (1987) caution against its use due to the emphasis on somatic symptoms of psychiatric disorder which could be confused with normal physiological changes associated with childbirth. An example of one of these somatic items is "I notice that I am losing weight", this hardly seems an appropriate question to use with mothers, in addition to which this item has been criticised as appearing irrelevant (Snaith, 1986).

### 2.5.2 Centre for Epidemiological Studies Depression Scale (CES-D)

The CES-D scale is a short 20 item self report measure of depressive symptomatology in the general population. The emphasis on assessment in the general population makes this scale more acceptable as an assessment tool for the present research undertaking. The CES-D scale is preferable to the Zung (SDS), which was primarily designed for diagnostic purposes with clinical subject groups or for treatment evaluations. In contrast, the CES-D was developed to measure current levels of depressive symptomatology in normal subject groups. The scale emphasises the affective component of depressed mood and was constructed for the purpose of assessing depressive symptoms by general population surveys. The CES-D items were derived from previously validated depression measures (e.g. Raskin et al., 1960; Beck et al., 1961; Zung, 1965; Gardner, 1968). The major components of depressive symptomatology were identified in previous clinical and factor analytic studies (Markush and Favero, 1973; Radloff, 1977).

These components consisted of:

- 1) depressed mood;
- 2) feelings of guilt and worthlessness;
- 3) psychomotor retardation;
- 4) loss of appetite;
- 5) sleep disturbance.

The advantage of the CES-D over other measures of depression used in clinical practice, is its emphasis on current symptoms (Kohout et al., 1993). The scale assesses respondent symptoms over the past week. For example, the subject would be asked to indicate how often in the past week "were you bothered by things that didn't usually bother you". The scale is scored from 0-3 points depending on the level of symptom frequency occurrence indicated. The range of categories includes 'rarely or none of the time', 'some of the time', 'much of the time', and 'most or all the time'. The higher scores on the scale are indicative of more symptoms, having been weighted by their frequency of occurrence over the previous seven days.

The CES-D has been found to correlate well with other clinical rating measures. Several studies have documented the CES-D as distinguishing clearly between diagnosed depressed subjects and normal control subjects on scores of the CES-D (Radloff, 1977; Weissman et al., 1977; Myers and Weissman, 1980; Himmelfarb and Murrell, 1983). Other studies have also documented the CES-D scale's utility as a screening tool (Weissman et al., 1977; Myers and Weissman, 1980; Murrell et al., 1983). The cut off point commonly adopted with CES-D scores is above 16 on the 0 to 60 scale as an indicator of clinical depression (Comstock and Helsing, 1976; Goldberg et al., 1979; Frerichs et al., 1981; Hankin and Locke, 1982). Other researchers have argued that a cut off point of 20 and above is preferable in terms of the resulting sensitivities and specificities that this confers (Huisani et al., 1980; Myers and Weissman, 1980; Roberts, 1980).

Factor analytic studies have identified four factors of the CES-D scale (Radloff, 1977; Roberts, 1980; Berkman et al, 1986):

- a) depressed affect;
- b) positive affect;
- c) somatic complaints;
- d) interpersonal problems.

The CES-D was found to have very high internal consistency and adequate test-retest repeatability. The validity of the scale was established by patterns of correlations with other self-report measures and clinical ratings of depression (Radloff, 1977).

However, in terms of the present research proposal, there are several cautionary points that would mitigate against the use of the CES-D in cross-cultural studies. Radloff (1977) has noted that there appear to be problems with the understanding of some of the items by subjects. It was felt that problems of this type would be exacerbated when using a translated version of the CES-D. Trieman (1975) advised caution with the use of the scale with bilingual respondents. Another point which could affect translations, is the use of colloquial English in the questionnaire items. For example, item 20 of the CES-D states "did you feel that you could not get going", such items would be problematic to translate. These considerations would suggest that the CES-D scale is not ideally suited to the cross-cultural research design.

### 2.5.3 The Beck Depression Inventory (BDI)

The Beck Depression inventory (BDI) was first described over 30 years ago (Beck et al., 1961). It was originally designed as a brief psychiatric screening measure, but has since developed a role as a powerful assessment tool (Steer et al., 1986). The scale was developed from clinical observations about attitudes and symptoms displayed by depressed psychiatric patients. The items were chosen to assess the intensity of depression and include:

- 1) mood;
- 2) pessimism;
- 3) sense of failure;
- 4) lack of satisfaction;
- 5) guilt feelings;
- 6) sense of punishment;
- 7) self dislike;

- 8) self accusation;
- 9) suicidal wishes;
- 10) crying;
- 11) irritability;
- 12) social withdrawal
- 13) indecisiveness;
- 14) distortion of body image;
- 15) work inhibition;
- 16) sleep disturbance;
- 17) fatiguability;
- 18) loss of appetite;
- 19) weight loss;
- 20) somatic preoccupation;
- 21) loss of libido.

The BDI therefore encompasses a wide range of human emotional-cognitive experiences in its assessment of depression. The validity and reliability of the BDI is well established. The first psychometric studies were conducted on patients (N=606) who had been routinely admitted to psychiatric inpatient and outpatient services (Beck, 1978). The odd-even reliability co-efficient was 0.86 for the samples studied and the BDI total scores correlated 0.65 with clinicians' ratings of depression. Other researchers have evaluated the BDI with clinical and non clinical populations and found the levels of internal reliability and validity to be as high as in the original study (e.g. Hammen, 1980; Sacco, 1981; Byerly and Carlson, 1982; Davis, 1982; Beck and Steer, 1984; Riskind et al., 1985; Lips and Ng, 1986; Steer et al., 1986).

Hill et al. (1986) investigated British University students and concluded that the BDI principally measures depression, but also takes account of other aspects of general psychopathology. Gotlib (1984) claimed that the BDI measures general psychopathology

indiscriminately. However, other research (Bumbery et al., 1978; Hammen, 1980) supports Hill's (1986) assertion, concluding that the BDI does indeed measure general psychopathology in addition to specific aspects of depression (independent of general psychopathology).

Factor analytic studies of the BDI have also been conducted to analyse whether or not there are distinct components of depression. Factor analytic studies of clinical populations have investigated: hospitalised psychiatric patients (Cropley and Weckowicz, 1966; Weckowicz et al, 1967; Pichot and Lemperiere, 1969); alcoholics and heroin addicts (Steer et al., 1977; Steer et al, 1982); attempted suicides (Beck and Lester, 1973) and affective disorders (Berndt, 1979; Golin and Hartz, 1979; Steer et al., 1988). Studies have also been conducted with normal populations (Campbell et al., 1984).

The majority of researchers have found three general factors:

- 1) negative attitudes/suicide;
- 2) performance difficulty;
- 3) physiological manifestations (Steer et al., 1986; Steer et al, 1989).

The BDI can also be divided into two sub-scales (Steer et al, 1989):

- 1) cognitive-affective (first 14 items)
- 2) somatic-performance (final 7 items).

Cross-cultural applications of the BDI are numerous and widely documented in the depression literature, as the BDI has been translated into many languages. Lopez and Chamorro (1976) indicated that there were no sex differences or age related differences for the Spanish samples studied with the BDI as a depression measure. The Spanish BDI mean levels of intensity being comparable to the psychiatric samples reported by Beck et al., (1961). In a Chinese study of depressive symptoms in a student population, Chan (1991) reported that there were no significant differences in mean depression scores of

medical and non-medical students. Comparisons of mean BDI scores of the Chinese medical students with those reported for US medical students, revealed that the Chinese scores were higher.

A German translation of the BDI has also been utilised in a number of studies (Flegel, 1967; Heimann et al., 1969; Lukesch, 1974; Kammer, 1983). An Indian version of the scale has also been reported (Ajmany and Nandi, 1973). Other translated versions include: Danish (Bech et al., 1972; Bech et al., 1975), French (Delay et al., 1963; Bourque and Beaudette, 1982), Finnish (Tieramaa, 1977; Engblom et al., 1992), Bulgarian (Byrne et al., 1996), Swedish (Larsson and Melin, 1990), Dutch (Bosscher et al., 1986), Japanese (Shinfuku, 1973), Korean (Park and Dimigen, 1995), Turkish (Boyacioglu and Karanci, 1992; Sahin and Sahin, 1995), Chinese (Chan, 1993), Singaporean (Oei et al., 1996) and Iranian (Tarighati, 1980; Tashakkori et al., 1989).

Marsella et al. (1975) employed translated versions of the BDI in conjunction with other scales. They found it to be valid and reliable after cross-validation research on a normal population of different ethnic subjects of Chinese, Japanese and Caucasian origin. They also reported some qualitative and quantitative differences between gender and culture. The authors found that measures on the BDI were more generalisable to the female populations than the male populations studied (Marsella et al., 1975). Marsella (1982) reported that Chinese Americans express more somatic complaints, Japanese Americans complain more about interpersonal dysfunctions and appearance, while Caucasian Americans complain more about existential aspects, such as meaninglessness, depressed mood and pessimism. More recently, translations of the BDI have been used in a wide variety of non clinical settings, for example in studies examining the relationship between adolescent concerns and psychological distress in a Turkish population (Sahin and Sahin, 1995); investigations of the role of assertiveness and depressive symptom presentation in Hong Kong Chinese students (Chan, 1993); and a Finnish community study of the correlates of self perceived fatigue (Hyypä et al., 1993).

In addition to being widely used in cross-cultural settings, the BDI has also been used in studies of postnatal depression (Rees, 1971; O'Hara et al., 1982; Cutrona, 1983; O'Hara et al., 1983; O'Hara et al., 1984; Halonen et al., 1985; Philipps and O'Hara, 1991). O'Hara et al., (1991) note that the BDI has been used frequently in prospective studies of postpartum depression (e.g. O'Hara et al., 1982; Cutrona, 1983; O'Hara et al., 1984). The BDI has been used to assess postnatal depressive symptoms in a variety of studies, for example: Manly et al. (1982) examined the relationship between depressive attributional style and postnatal depression; Cutrona and Troutman (1986) proposed a model of postpartum depression based on social support, infant temperament and parenting self-efficacy; and Powell and Drotar (1992) investigated postpartum depressed mood in the context of daily stressors.

The Beck Depression Inventory has also been used in studies of postnatal depression in different cultures. Spangenberg and Pieters (1991) and Mills, Finchilescu, and Lea (1995) investigated postnatal depression using the BDI in South African populations. The BDI has also been used in a cross cultural comparison of postnatal depression in Scottish and Korean mothers (Park and Dimigen, 1995).

The BDI covers a wide range of experiences and has been validated cross-culturally in both clinical and non-clinical settings. In addition to this it has been used as a measure of depressive symptomatology in postnatal studies in Western and non Western cultures. The BDI therefore satisfies the criteria of cross-cultural utility and use in postnatal research.



#### 2.5.4 The Edinburgh Postnatal Depression Scale (EPDS)

The EPDS was developed after it became apparent from research findings that postnatal depression was rarely recognised or treated (Frommer and O'Shea, 1978; Cox et al., 1982; Kumar and Robson, 1984). In a study by Cox et al. (1982) it was found that 13 of the 101 women interviewed had a marked postnatal depressive illness but had never been given any treatment or referred to psychiatric services.

Cox et al. (1987) discussed the problem of identifying depressed mothers in the postnatal period. They commented that the screening scales utilised appeared to be at fault when used on childbearing samples. Cox et al. (1987) developed the 10 item EPDS self-report scale, specifically for the purpose of screening for postnatal depression in community samples. The subjects in the validation study (N=84) were interviewed using the Research Diagnostic Criteria for depressive illness (Spitzer et al., 1978) from Goldberg's Standardised Psychiatric Interview (SPI; Goldberg et al., 1970). The mothers were also given the EPDS. The interviewer remained blind to the EPDS result as s/he administered the SPI. The validation of the 10-item measure was established for the sample by comparing the EPDS scores with RDC clinical diagnoses of depression at three months postnatal. The scale was found to have satisfactory validity, split-half reliability and was sensitive to changes in the severity of depression across time. The authors reported that the sensitivity of the EPDS (the proportion of RDC depressed women who were true positives) was 86%, the specificity (proportion of women who were true negatives) was 78%, and the positive predictive value (proportion of women above threshold on the EPDS who also met RDC criteria for depression) was 78%. The EPDS was found to be acceptable to childbearing women and was completed by most subjects in about 5 minutes.

A study by Harris et al. (1989) found the EPDS to be a superior measure of postnatal depression compared to other commonly used scales. Harris et al. screened mothers (N=147) for major depression at 6 to 8 weeks postpartum. The EPDS was compared

with: the Beck Depression Inventory (BDI; Beck et al, 1961); the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960); the Montgomery-Åsberg Depression Rating Scale (MADRS; Montgomery and Åsberg, 1979); and the Raskin 3 Area Scale for Depression (Raskin et al, 1970). The performance rates of the scales in identifying depression were: EPDS (22%); BDI (19%); MADRS (17%); Raskin (25%). The EPDS had a sensitivity of 95% (percentage of genuine cases identified) and specificity of 93% (percentage of non-genuine cases identified) when a cut-off point of 13 was adopted. When the cut-off point was lowered to 10 and over, as suggested by Cox et al. (1987), sensitivity rose to 100% but the specificity dropped to 82%. Of the 19 false positives identified, 11 were classed as 'other' depression, e.g. 'dysthymic disorder' and 'adjustment disorder'.

The EPDS has also been used to assess postnatal depression in mothers from other cultures, such as: Sweden (Lundh and Gyllang, 1993; Wickberg and Hwang, 1997); Iceland (Thome, 1991); Chile (Jadresic et al., 1995); Greece (Areias, 1996a, 1996b); United Arab Emirates (Ghubash and Abou-Saleh, 1997); Japan (Yoshida et al., 1997); The Netherlands (Pop et al., 1992); and Portugal (Augusto et al., 1996).

In terms of the present study, the EPDS also meets the requirements of a scale which can be used to measure depressive symptoms in childbearing women, and has also been used in different cultural contexts.

## **2.6 Adopting a Measure of Depression**

From the review of depression questionnaires, it would seem that the BDI and the EPDS would be the most suitable choices for questionnaires in a study of childbirth. In recent years, the EPDS has become a popular screening device for childbearing samples, while the BDI has been criticised for the inclusion of somatic symptoms which confound depression with normal physiological changes in childbirth. The EPDS only contains one item referring to biological aspects of depression, i.e. the item on sleep difficulties.

According to Harris et al. (1989), research supports the inclusion of this item, as non-depressed mothers normally manage to sleep even when they are disturbed by feeding disruptions etc. However, it must be borne in mind that the focus of this research is a *cross-cultural* examination of depressive symptoms. As such, the questionnaire adopted must be suitable for use with a Pakistani population.

Although the inclusion of somatic items has been criticised for use with childbearing samples, somatic symptoms are an important aspect of depression in cross-cultural research (see 2.3.3). The somatisation issue cannot be ignored in the context of the present study which examines postnatal depressive symptoms in Pakistani mothers. Mukherji's (1995) observation that indigenous cultural concepts of illness may influence the interpretation and expression of symptoms, is particularly pertinent to the Pakistani population being studied in this thesis. The importance of Unani medicine and the humoural theory on which it is based, is illustrated by mothers' beliefs about the 'hot' state of pregnancy and the food choices which are dictated in pregnancy and the postpartum (see 1.3.1). The Unani medical system is based on the belief that emotions are based in organic systems (e.g. the heart and liver) and therefore emotional distress is conveyed in somatic terms. The importance of somatic symptom presentation in cases of depression in Pakistani women has been commented on by Rack (1982), while Krause (1989) has found that Punjabi immigrants considered somatic symptoms to reflect psychological *as well as* physical distress.

In the case of Pakistani mothers, a scale which does not include somatic symptoms may be too restrictive in its range of symptom measurement. It can therefore be argued that a depression scale for this study would have to assess somatic components of depressive symptoms. The BDI meets the requirements of a scale of this kind, and would therefore allow an examination of somatic symptoms. As this thesis is concerned with measuring depressive symptoms, rather than diagnosing depression, it is pertinent to note that Rehm (1988) states that the BDI is reliable in its test-retest stability and internal consistency and

is also valid when used as a measure of depressive symptoms. Another advantage of using the BDI is that the two sub-scales (cognitive-affective and somatic-performance) can be evaluated independently of each other. The use of the cognitive-affective sub-scale would allow an examination of depressive symptoms, independently of any possible confounding somatic symptoms. Support for this approach comes from O'Hara et al. (1990), who suggest that the cognitive sub-scale of the BDI may be more appropriate for childbirth research.

The BDI has been widely used in non Western settings, such as: China, Turkey and Korea (see 2.5.3). Its utility in a non Western cultural setting has been addressed by Tashakorri et al. (1989), who state that "the ease of translation, administration, and interpretation of the BDI in cross-cultural settings, as well as its value as a multifactorial measure of depression, points to its value as a measure of depression in non clinical populations" (p.601). In addition to this, it has also been used to assess postnatal depressive symptoms in other cultural contexts, such as Korea (Park and Dimigen, 1995). The BDI can also be administered orally (Beck and Steer, 1993), this is particularly useful in the case of Pakistani women as the levels of literacy in this population are low (Woods, 1991; Zaki and Johnson, 1993). On the basis of these considerations, it is suggested that the BDI be adopted as the primary measure of depressive symptoms in this thesis.

While the BDI measures depressive symptoms in somatic terms, the EPDS does not. As somatic symptoms are an important consideration in the current research study, the EPDS is not entirely appropriate for the Pakistani population being studied. However, the EPDS has become a widely used postnatal depression questionnaire, and has been used in different cultural contexts. O'Hara (1994) notes that most of the cultural work with the EPDS has been conducted in Western European cultures, with little research done outwith this context. This has since changed, with research reported on a Japanese translation of the EPDS (Yoshida et al., 1997) and an Arabic version (Ghubash and

Abou-Saleh, 1997). While it is the purpose of this thesis to examine depressive symptoms and their relationship with social support by using the BDI, it is also of academic interest to contribute to the work examining the EPDS in non Western contexts. Therefore, the EPDS will also be used as a measure of depressive symptoms in this study, with a view to comparing it with the BDI.

## **Chapter Three**

### **Psychological Disorders Associated with Childbirth**

"Childbirth, the beginning of new life, is viewed as a joyful event, and a cause for celebration. Misery in the postpartum period thus seems anomalous. While depression is expected following experiences of loss or disappointment, it is not expected following experiences that entail an increase rather than a decrease in assets." (Cutrona, 1982: p.487).

It has long been recognised that the period following childbirth is hazardous to both the physical and mental health of the mother (Pitt, 1985). The interest in childbirth related illness is not a new phenomenon. Over 2000 years ago, Hippocrates gave an account of such an illness, and suggested a physiological causation resulting from milk being diverted from the breast to the brain (Cox, 1986). In recent years the study of childbirth related illness has focused on postnatal depression (Thurtle, 1995). This interest has generated a great deal of literature which often uses interchangeable terms in discussing depression associated with childbirth. For the purposes of clarity, it must be pointed out that the terms: postnatal, puerperal, and postpartum will be used interchangeably when discussing the period after birth.

Maternal depression has been categorised into three main categories in ascending order of severity (O'Hara and Zekoski, 1988):

- 1 postpartum blues;
- 2 postpartum depression; and
- 3 postpartum psychoses.

As the main focus of this thesis is an examination of postnatal depressive symptoms, the area of postnatal depression will be given the most attention. The categories of postpartum blues and psychoses will, therefore, be considered briefly.

### 3.1 Postpartum Blues

Cultural lore has regarded the blues as a benign and normal part of childbirth (Albright, 1993). However, researchers have been interested in studying this condition, as findings may have implications for work on the premenstrual syndrome and postnatal depression (O'Hara et al., 1991).

Postpartum blues, also known as 'baby blues', is the mildest form of postpartum mood disorder. According to Knops (1993), the postpartum blues is a transient period of mood instability, characterised by weepiness, anxiety, and lack of concentration in the period after birth. Susman (1996) notes that the 'blues' develop within the first 2 weeks after birth, with peak symptoms occurring between the 3rd and 7th day after delivery. Prevalence rates for the 'blues' vary between 30 per cent and 70 per cent, with varying estimates possibly due to different methods of evaluation (Pritchard and Harris, 1996).

The symptom most often associated with postpartum blues is excessive tearfulness. One study by Yalom et al. (1968) found that continuous crying of up to two hours and more was not uncommon among recently delivered mothers. Tearfulness was provoked by seemingly minor incidents that would normally not have made mothers cry (e.g. husband late for visit, perceived criticism of self or infant). Indeed, one of Yalom et al.'s criteria for the blues, is crying for at least five minutes during the first ten days after delivery.

In a prospective study of postpartum blues, O'Hara et al. (1991) examined the role of possible biological and psychosocial causative factors. Levels of progesterone, prolactin, oestradiol, free and total oestriol, and free and total cortisol were measured during late pregnancy and early puerperium. In addition, personal and family history of depression, depressive symptoms, stressful life events and social adjustment were also assessed. They found that postpartum blues could be predicted by personal and family history of depression, social adjustment, stressful life events, and levels of free and total

oestriol. O'Hara et al. concluded that postpartum blues is within the spectrum of affective disorders. Kennerley and Gath (1989) found that blues were associated with neuroticism, anxiety and depressed mood during pregnancy, poor social adjustment, and retrospective severity of premenstrual tension, but that it was unrelated to obstetric factors. In a Dutch study, Pop et al. (1993) reported higher rates of postpartum blues in the primiparous sample of their study as compared to multiparous mothers.

The mechanism for the mood changes which take place is unknown (Pritchard and Harris, 1996). A recent study has suggested an association between postpartum blues and the levels of progesterone (Harris et al., 1994). Findings suggest that higher levels of progesterone during pregnancy were associated with the blues, as were steeper decreases in progesterone following delivery. Although so many women experience the blues, it is thought that the intensity of symptoms can be exacerbated by other factors. Blues have been found to be more pronounced when there are socioenvironmental stressors present and, can be further confounded by stressful life events (Susman, 1996).

### **3.2 Postpartum Psychoses**

Postpartum psychosis is the most severe of the psychological conditions associated with childbirth (see Brockington et al., 1988: for a comprehensive review). In its most extreme form, postpartum psychosis can endanger the life of both the mother and child. Psychotic reactions have been estimated to occur in about 2 out of 1000 births (Kendell et al., 1987).

There is still a debate regarding the classification of postpartum psychosis as a distinct entity. Cox (1986) notes that postpartum psychosis is similar to depressive psychosis, with some atypical features, such as perplexity. The World Health Organisation's classification system, ICD-10 (WHO, 1992a) includes puerperal psychosis. The guidelines advise that the diagnosis should only be applied to a mental disorder which



commences within 6 weeks of delivery, *and* when it does not meet criteria for any other disorder classified in ICD-10 (Pritchard and Harris, 1996).

According to Knops (1993), a mother with postpartum psychosis will present typical symptoms of psychotic illness: delusions, hallucinations, or impaired concept of reality. Other symptoms include depressed or elevated mood, irritability, impaired concentration and low or increased energy. Pitt (1985) comments that once postpartum psychosis has been identified, it can almost always be classified as: depressive, manic, schizophrenic, paranoid or delirious.

Postpartum psychosis has been associated with a family history of bipolar illness, a personal history of bipolar illness, primiparity, perinatal mortality, and lack of a partner support (Kendell et al., 1987). Cox (1986) notes that in developing countries, puerperal psychosis is more likely to have a physical cause, due to the greater frequency of physical illnesses like parasitic disease and malaria.

### **3.3 Postpartum Depression: Is it a Distinct Diagnosis?**

Before going on to review studies examining the variables associated with postpartum depression, it is necessary to consider the definition of postpartum depression.

Until recently no classification system included a separate categorisation for disorders associated with childbirth. Indeed, DSM-IV (American Psychiatric Association, 1994) has no diagnostic categories specific to childbirth. Susman (1996) notes that the diagnosis of postpartum depression is based on the criteria for major depression in DSM-IV. The ICD-10 (WHO, 1992) has gone some way to addressing this issue, by including section (F53), entitled 'Mental and behavioural disorders associated with the puerperium, not elsewhere classified' (Cox, 1994).

Considerable controversy surrounds the use of the term postpartum depression and its nosologic status. It has been argued that postpartum depression is not distinctively different from non postpartum depression (Romito, 1989). Watson et al. (1984) insist that there is a continuity between postnatal and other depressions, while Whiffen (1992) states that the use of the adjective *postpartum* to describe the research area has resulted in the implicit acceptance of a distinct form of depression associated with childbirth. Whiffen argues that previous studies examining postpartum depression found causative factors similar to those for non postpartum depression (e.g. Kumar and Robson, 1984; Watson et al., 1984, O'Hara et al., 1990; Cox et al., 1993), which suggests that postpartum depression is not a distinct category. Opponents of this view (e.g. Steiner, 1990) counter this argument by stating that postpartum disorders are specific to childbirth, as the biological causes of postpartum depression are distinct from those of non postpartum depression.

A recent study by Cooper and Murray (1995) investigated this issue. Cooper and Murray suggest that the scepticism concerning a distinct category of postpartum depression may be due to the fact that there are two distinct groups of women who become depressed postnatally. One group's depression is specific to the demands of childbirth and motherhood, while the other's depression is unrelated to childbirth. They argue that one of these populations may have distinctive features, and that previous work may not have recognised this distinction.

The Cooper and Murray study investigated this question by examining the recurrence of postpartum depression. They argued that if the postpartum is a stressor for some women, then those same women would be at risk after subsequent births. Three groups of women were studied for five years: those whose postpartum depression was a recurrence of previous depression, a group whose postpartum depression was childbirth specific, and a psychiatrically well control group. The results of the study found that mothers whose first onset depression had been at childbirth were more likely to be

depressed after subsequent births, than the group whose postpartum depression was a recurrence of a previous mood disorder. They conclude that the results suggest a specific nosologic reference for the concept of postnatal depression.

### **3.4 Research on the Aetiology of Postnatal Depression**

Postpartum depression has been defined as a non psychotic depressive episode that begins in or extends into the postpartum period (Watson et al., 1984; Cox et al., 1993).

The area of postnatal depression has produced a great deal of research literature. Many aetiological factors have been studied in relation to postpartum depression: postnatal blues, past history of psychiatric problems, obstetric difficulties and complications, age, anxiety during pregnancy, parity, and social class - to name, but a few. Postnatal depression findings will be summarised in sections dealing with: incidence and prevalence; demographic factors, hormonal aspects; obstetric and gynaecological factors, precipitating stressful events, psychopathology and personality, and interpersonal relationships.

#### **3.4.1 The Incidence and Prevalence of Postnatal Depression**

The incidence of a disorder is defined as the number of new cases arising over a specified period of time. Prevalence, refers to the number of cases present during a specified period. O'Hara and Zekowski (1988) comment that the need to distinguish between incidence and prevalence is important in postnatal research, as it allows the identification of depressive instances which begin before the birth, and those which arise after delivery. Reported incidence and prevalence rates vary widely as studies have used different criteria for postnatal depression, a variety of measuring instruments, and times of assessments. A few of the studies reporting incidence and prevalence rates will be cited, in order to illustrate the variability of findings and methods.

One of the earliest studies to investigate postpartum depression was conducted by Pitt (1968). Pitt developed a screening questionnaire that was given to women during pregnancy and again at 6-8 weeks postpartum. Based on Neugebauer's (1983) reanalysis of data from this study, the incidence rate was reported as 19.7 per cent.

Watson et al. (1984) conducted a prospective study investigating psychiatric disorder in pregnancy and the first postnatal year. Women (N=128) were assessed using the Standardised Psychiatric Interview (SPI) and ICD-9 criteria in the 16th week of pregnancy and at 6 weeks postpartum. Subjects were evaluated another six times during pregnancy and five more times after delivery. The incidence of depression was 9.4 per cent during pregnancy and 7.8 per cent at 6 weeks postpartum. Prevalence level of clinical disorder throughout the course of the study was reported as 27 per cent. Prevalence levels were reported to be highest in the first three postnatal months and lowest during the middle trimester of pregnancy.

O'Hara et al. (1984) conducted a study with 99 subjects who were followed from the second trimester of pregnancy until approximately 6 months postpartum. Depression severity was assessed with the Beck Depression Inventory (BDI), and depression diagnoses were made using Research Diagnostic Criteria (RDC) in the context of a modified Schedule for Affective Disorders and Schizophrenia (SADS). The authors report prevalence rates of 9.0 per cent during pregnancy and 12 per cent at 9 weeks postpartum, with an incidence of 7.8 per cent.

Cox et al. (1993) evaluated the prevalence, onset and duration of postpartum depression using a two stage screening procedure. They used the SPI (Standardised Psychiatric Interview) in conjunction with the EPDS (Edinburgh Postnatal Depression scale), with a cut-off point of 9 recommended for screening major and minor depression according to RDC criteria. Prevalence rates were reported as 9.1 per cent at 6 months postnatal and 13.8 per cent during the 6 month period. No differences in prevalence were found

between the childbearing sample and matched controls. However, the authors did report a threefold higher rate of depression onset within the first five weeks after birth. Cox et al. state that this finding "suggests that childbirth and its immediate psychosocial sequelae were likely to be important causal factors for the non psychotic depressions, as well as for the psychoses" (p.30).

The problems in comparing prevalence rates from studies with disparate methods and assessment designs has been addressed by O'Hara and Swain (1996). The researchers aggregated data from studies using diagnostic criteria (including those using the Hamilton Depression Rating Scale), and self report studies which met several cut-off point criteria for inclusion : Beck Depression Inventory  $\geq 10$ ; Edinburgh Postnatal Depression Scale  $\geq 13$ ; Zung Depression Scale  $\geq 48$ ; and Centre for Epidemiological Studies Depression Scale  $\geq 16$ . Several factors were examined in relation to prevalence rates of postpartum depression: country in which the study was conducted; whether assessment was self report based or interview; the length of postpartum period evaluated; and the time since delivery when depression was assessed. In total, 59 studies were included, with a total of 12 810 subjects. The overall prevalence rate was reported as 13 per cent. Self report studies reported larger prevalence estimates than interview studies, as did studies with longer times of assessment. The number of days postpartum when depression assessments were completed, and the country in which the studies were conducted did not predict prevalence rates significantly.

#### 3.4.2 Demographics and Postpartum Depression

Research which has studied demographic factors in relation to postpartum depression has failed to reveal consistent epidemiological patterns.

An association between age and postpartum depression has been found linking younger age to postpartum depression (Handley et al., 1980; Paykel et al., 1980; Feggetter et al.,

1981; and O'Hara et al., 1984). Other studies have found associations between older primiparae and postpartum depression (Kumar and Robson, 1984; Astbury et al., 1994). In the Kumar and Robson study primiparae over the age of 30 were found to be at increased risk, while the Astbury study identified primiparae over the age of 34 as being at increased risk of postpartum depression. While these results are mixed, other studies have found no relationship between age and postpartum depression (Pitt, 1968; Spangenberg and Pieters, 1991; and Viinamäki et al., 1994).

Findings regarding the association between parity and postnatal depression are also mixed. Most studies have found no relationship between the number of children and postpartum depression (e.g. Handley et al., 1980; O'Hara et al., 1982; Watson et al., 1984; Spangenberg and Pieters, 1991). Others have reported associations between postpartum depression and higher parity (Playfair and Gowers, 1981), and also with lower parity (Bridge et al., 1985).

Marital status has been found to be significantly associated with postpartum depression. Feggetter and Gath (1981) found that being unmarried was associated with a higher risk of depression. Other studies have found no evidence of a relationship between marital status and depression (Watson et al., 1984; Viinamäki et al., 1994).

Socioeconomic status (SES) has also been investigated in relation to postpartum depression. Feggetter and Gath (1981) and Playfair and Gowers (1985) found that higher socioeconomic status was significantly associated with lower levels of depression. Cutrona (1982) reports that most studies have found no relationship between SES and postpartum depression (e.g. Watson et al., 1984). This is a striking finding as it contradicts the findings in non puerperal depression (e.g. Brown and Harris, 1978). The Brown and Harris study developed a model which included social class as an important vulnerability factor in the development of depression in women. A study by Murray et al. (1995) comparing postnatal and non-postnatal controls also found

similar results. They reported that SES was associated with depression in non postnatal controls, but that no relationship was found for postnatal women.

Other demographic variables which have been assessed in relation to postpartum depression include: education level, income and occupation. In a study by Campbell and Cohn (1991), paternal occupation and educational level were associated with postpartum depression. The authors suggest that better educated women may have had an easier time adapting to the new demands of parenthood and that better educated spouses were more supportive. In Warner et al.'s study (1996), postpartum depression was associated with mothers' unemployment after maternity leave and the unemployed status of partners. Other studies have found no relationship between education level and postpartum depression (O'Hara et al., 1982; Viinamäki et al., 1994). The findings for income have also been mixed, with some authors reporting an association between lower incomes and postpartum depression (e.g. McGill, 1995). Other authors have found no evidence of a relationship between income and postpartum depression (e.g. O'Hara et al., 1982; Viinamäki et al., 1994).

### 3.4.3 Hormonal Aspects of Postnatal Depression

The coincidence of depressive symptom onset in the first few days postpartum and physiological changes associated with the post birth experience, have stimulated research into the role of hormonal factors in the development of postnatal depression.

Harris (1996) outlines the various changes in hormone levels throughout normal pregnancy. These include progestins, adrenal hormones, thyroid hormones, oestrogens, androgens, and anterior pituitary hormones. Thyroid gland enlargement is common during pregnancy, with uptake of iodine from the blood increasing in the first trimester to compensate for excess urinary excretion of iodide (Harris, 1993). Levels of prolactin, total cortisol and corticosteroid binding globulins all increase throughout pregnancy, with cortisol levels increasing further during delivery. Progesterone levels increase after

conception to a predelivery stage which is several hundred times the level associated with the preluteal phase of the menstrual cycle, similar increases are observed in oestrogen levels.

In the first few days after delivery there is a very large drop in levels of oestrogen and progesterone (Glover, 1992). According to Cutrona (1982) there is some evidence that progesterone acts as a central nervous system depressant, this has prompted researchers to investigate the possibility that depressive symptoms after birth are precipitated by the withdrawal of the anaesthetic like qualities of progesterone. Depression occurrence has been hypothesised to be most likely when levels of oestrogen and progesterone are low (O'Hara, 1987). Dalton (1989) also notes that researchers have investigated the role of oestrogen metabolites: oestriol and oestradiol, while others examine the association between levels of prolactin (increases with onset of lactation) and depression. Another line of inquiry focuses on the hypothalamic-pituitary-adrenal axis, in particular, the role of increased cortisol and postpartum depression.

Research has found little direct evidence to implicate changes in hormones to postpartum depression. Various studies examining the role of hormones and postpartum depression have found no evidence of increased risk. Handley et al. (1980) found no evidence of a predicted positive association of cortisol level and postpartum depression. Similarly, Gard et al. (1986) found no evidence to support an association between postpartum depression and plasma cortisol, progesterone or oestrogen levels .

Recent studies have examined the association of maternity blues and postpartum mood with progesterone profiles using salivary progesterone levels as a more accurate measure, as compared to plasma indicators (Harris et al, 1989; Harris et al., 1994; Harris et al, 1996). The 1989 study examined 147 mothers in the six to eight week postnatal period. Mothers completed the Beck Depression Inventory, Edinburgh Postnatal Depression Scale, the Montgomery Åsberg, and Raskin scales. In addition to this they



provided plasma for assay of cortisol, oestradiol, progesterone and prolactin, and saliva for assay of cortisol and progesterone. The authors reported significant correlations between depression ratings and salivary progesterone and prolactin in breastfeeding mothers who were not taking oral contraceptives. Plasma prolactin levels and progesterone were found to be inappropriately low in depressed breastfeeders and the authors concluded that they could benefit from progesterone treatment. Another study by Murray (1989) found that a comparison of women who later became depressed with those who did not, could not be distinguished by their original intention to breastfeed. In most cases, it was found that depressive symptoms preceded the decision to wean-this makes a hormonal interpretation of the association between ceasing breastfeeding and depression less convincing.

Harris et al. (1994) found an association between maternity blues and high antenatal progesterone levels, and also found an association with greater decreases in progesterone after delivery. However, no associations were found between hormone levels and depression at 5 to 6 weeks postpartum. The authors conclude that the progesterone decrease after delivery and expulsion of the placenta, may be linked to postpartum blues. Harris (1986) comments on the possibility that some postpartum depressions are triggered by progesterone changes, as some research suggests a link between severe cases of maternity blues and postpartum depression (Cox et al., 1982). However, Harris et al.'s (1996) study was unable to demonstrate this. This study assessed associations of mood at 5 to 6 weeks postpartum with peripartum saliva cortisol and progesterone profiles. The prospective study involved 120 women who collected saliva twice daily from two weeks before delivery to 35 days postpartum. Findings indicated that no association between mood at 5-6 weeks postpartum and progesterone emerged. They did, however find that lower levels of evening cortisol in the immediate peripartum period were associated with postnatal depression. Based on the cortisol findings, Harris et al. indicate that more research is needed into the role of the hypothalamic-pituitary-adrenal axis in postnatal depression.

A factor which is indirectly associated with the hormonal theory is premenstrual tension. The similarities between hormone changes associated with childbirth and those associated with the menstrual cycle have led to studies investigating the association between premenstrual tension and postnatal depression (Cutrona, 1982). In the normal menstrual cycle, oestrogen and progesterone levels build up until one or two days before the menstrual flow and then decline sharply. Yalom et al. (1968) found an association between premenstrual tension and postpartum blues, while Spangenberg and Pieters (1991) and McGill et al. (1995) have found associations with postnatal depression. The findings are inconsistent, with other authors reporting no associations between premenstrual problems and postnatal depression (O'Hara et al., 1982).

In conclusion, it would seem that the role of hormonal changes in the aetiology of postnatal depression is not clear cut. However, Harris (1996) notes that "an alternative view is that hormonal profiles in affected women are within normal limits, and that those normal peripartum changes trigger off other pathological mechanisms at neurotransmitter or receptor level, resulting in mood disorders" (p.27).

#### 3.4.4 Obstetric and Gynaecological Factors

The role of Caesarean sections has often been examined as a possible risk factor in the development of postpartum depression. It has been reported that women who undergo unplanned emergency Caesarean sections often experience feelings of guilt, failure and frustration (e.g. Lipson and Tilden, 1980). In a study by Hannah et al. (1992), it was found that depression at one week postpartum was significantly associated with a low birth weight baby, delivery by Caesarean section, and a delivery which had been more difficult than anticipated. At 6 weeks postnatal, depression was associated with an obstetric factor of Caesarean section only. Astbury et al. (1994) also found that assisted delivery (Caesarean section, forceps, and vacuum extraction) was associated with depression. Others have found no differences between type of delivery and postpartum depression. For example, Cox et al. (1982) report that delivery by Caesarean section or

forceps did not distinguish between depressed and non depressed mothers, while Mills et al (1995) found no increased risk associated with vaginal versus Caesarean births.

Campbell and Cohn (1991) reported that depressed mothers were more likely to report pregnancy and delivery complications compared to non depressed mothers. O'Hara et al. (1982) reported that delivery stress, derived from rating birth records of subjects, was a significant predictor of postpartum depression level. Warner et al. (1996) studied several obstetric risk factors, defined as: unplanned pregnancy, subfertility, primiparity, complicated pregnancy, Caesarean section, low birthweight, baby in special care unit, and absence of breast feeding at 6 weeks postpartum. The results of the study did not replicate Kumar and Robson's (1984) association of depression with subfertility. The only obstetric risk factors which were found to be associated with increased risk of depression were unplanned pregnancy and not breastfeeding at 6 weeks. The authors suggest that unplanned pregnancy may result in ambivalence towards the child antenatally or contribute to a lack of commitment to the infant. The finding that bottle feeding mothers were more depressed may be due to breastfeeding enhancing the self-esteem of mothers, thereby making depression less likely. Alternatively, it may be that depressed mothers were more unhappy with the maternal role, and therefore more likely to discontinue breastfeeding. The evidence regarding benefits of breastfeeding are also mixed, with Alder and Cox (1983) reporting that breastfeeding mothers were at increased risk of depression attributed to endocrine changes.

The results of studies examining obstetric and gynaecological factors has produced mixed results, and has focused on obstetric complications. Many other researchers have found no association between obstetric factors and depression; for example, Spangenberg and Pieters (1991) and Viinamäki et al. (1994). According to O'Hara and Zekoski (1988) the differences in findings may be due, in part, to how obstetric complications are defined by researchers. For example, while Pitt (1968) studied the effects of pregnancy complications (toxaemia and anaemia), Paykel et al. (1980)

examined labour complications. Another contributing factor to the inconsistency of findings could be the use of different measures and criteria for defining postpartum depression. Finally, it may also be important to consider the woman's feelings of control over obstetric interventions, as this may influence the subsequent development of postpartum depression. Day (1982) suggests that unplanned and unexpected interventions, such as a Caesarean section conducted under general anaesthetic, can contradict the expectations of women, especially after a normal pregnancy and early labour, and thus precipitate feelings of loss of control.

#### 3.4.5 Precipitating Stressful Life Events

The experience of pregnancy and birth are often regarded as stressful life events which may lead to depression (Holmes and Rahe, 1967). However, as most new mothers do not become depressed, researchers have instead suggested a link between postpartum depression and additional stressful life events. The relationship between additional stressful life events and depression in non puerperal women has been well established. Stressful life events such as: family crisis, bereavement, unsuitable housing, financial problems and no outside employment, have been associated with depression in women (Brown and Harris, 1978). In terms of childbearing women, an additive model of stress is suggested, where the arrival of a child adds to previous levels of stress and overwhelms the mother's coping ability, which subsequently leads to depression.

The association between stressful life events and postpartum depression has been reported by a number of researchers. Paykel et al. (1980) found that moderate to severe life events (financial strain and inadequate housing) were associated with increased depression, as rated by the Raskin Three Area Depression Scale. These authors commented that the probability of becoming depressed after childbirth is approximately three times higher if a recent stressful life event has been experienced. O'Hara et al. (1982) reported that high levels of life events from the beginning of pregnancy to 3 months postpartum were associated with higher levels of depressive symptoms and an

increased probability of receiving a depression diagnosis. In a study comparing correlates of depression in mothers and fathers, Areias et al. (1996) found that a negative impact of life events was associated with depression in mothers but not fathers.

Postpartum depression has also been linked to other stressful events: bereavement, and unresolved grief related to previous stressful events of miscarriage, abortion, or stillbirth (Cox et al., 1982; Watson et al., 1984).

O'Hara et al. (1984) comment that stressful life events research in postnatal studies has to go beyond single measures of general life events and include measures which reflect the experience of postnatal women. In particular, the authors note that stress related to child care events must also be assessed, in order to fully evaluate the environmental stressors a new mother faces. The study reported that general measures of life events did not significantly predict postpartum depression. However, child care related events were found to make the early postpartum more stressful, and were associated with increased depressive symptoms and postpartum depression diagnoses. Cutrona (1983) and Hopkins et al. (1987) also reported an association between depressive symptoms and child care related stressors. Cutrona and Troutman (1986) found that depression was related to 'difficult' babies, who cried longer and more frequently. Merchant et al. (1995) reported that the interaction of marital adjustment and child-care stress was related to postpartum depression at 9 months after the birth in a primiparous sample.

Other researchers have also recognised the need to assess more than just general life events in postnatal studies. Powell and Drotar (1992) conducted a study which examined the role of major life events, 'microstressors' and child care related stress to the development of postpartum depressed mood. The 'microstressors', or hassles, included irritants in the areas of environment, work, and financial responsibilities, among others. The study found that hassles were significantly correlated with depressed mood, as measured by the BDI, at 2 and 6 months postpartum. Major life events, such as the death of a spouse, or loss of a job were reported infrequently or were perceived as

having little impact by subjects. The authors also reported that child care related stress was not associated with postpartum depressive symptoms. The hypothesis that hassles, or daily microstressors, would have a negative impact on postpartum women was confirmed. The authors suggest that the accumulation of changes in the lives of new mothers may be viewed as disruptive, distressful, and hence be viewed as hassles. These hassles, acting as minor chronic stressors, may then predispose mothers to developing depressed mood. Powell and Drotar comment that their study's lack of support for previous findings implicating child care related stress (e.g. Cutrona, 1983), may indicate that this type of stress is specific to primiparous mothers, whereas their study also included multiparae.

Other studies have found no association between stressful life events and postpartum depression (e.g. Pitt, 1968; Kumar and Robson, 1984; Viinamäki et al., 1994). Cutrona (1982) comments that it is important to note that many women who experience recent stress *do not* become depressed. In light of this, Cutrona suggests that it is necessary to consider other factors which may interact with stress to cause depression, and also to consider factors which protect mothers from stress related depression. One such factor has been suggested by the work of Brown and Harris (1978). These authors found that supportive social relationships help to protect against depression, whereas negative relationships increase vulnerability to depression. Another consideration, in terms of stressful life events, is that if puerperal depression is related to childbirth specific vulnerability factors, then it may have a different outcome and be qualitatively different from depression related to general life events (Holden, 1991).

#### 3.4.6 Psychopathology and Personality

Many different variables have been studied in order to determine whether any psychological factors predispose women to develop postpartum depression. The factors discussed here, include: anxiety and neuroticism, psychiatric history, and attributional style.

### Neuroticism and anxiety

Pitt (1968) reported that women who were depressed in the postpartum were more neurotic and introverted compared to non depressed puerperal controls. Watson et al. (1984) also examined neuroticism using the Eysenck Personality Questionnaire (EPQ) and found that depressed mothers were more neurotic throughout pregnancy. Other research has found no relationship between neuroticism and postpartum depression (Kumar and Robson, 1984).

Ballard et al. (1993) reported a 6 per cent prevalence rate of generalised anxiety disorder in postpartum women. Cox et al. (1982) found that anxiety during pregnancy was very common, and usually indicated mothers' concerns about delivery and the baby's health. Studies have reported mixed results regarding the relationship between prepartum anxiety and postpartum depression. Watson et al. (1984) found that anxiety during pregnancy was associated with depression after birth. Similarly, Playfair and Gowers (1981) reported that anxiety during pregnancy predicted levels of depressive symptoms 12 weeks after the birth. In contrast, Pitt (1968) and Cox et al. (1982) reported that puerperally depressed and non depressed women did not differ on measures of anxiety during pregnancy.

### Psychiatric history

The results of studies investigating the role of previous psychiatric history have been inconsistent. Researchers have attempted to determine whether women with past histories of depressive episodes are predisposed to develop postpartum depression.

Many studies have reported that a previous history of depression is associated with increased risk of postpartum depression (e.g. Paykel et al., 1980; O'Hara et al., 1983; O'Hara et al, 1984). Paykel et al. (1980) found that women with a previous history of psychiatric disorder were more likely to become depressed, even in the absence of additional stressful events. Watson et al. (1984) found that postpartum depression could

be explained in terms of previous psychiatric history, with findings indicating that puerperal depression was more likely in women who had received psychiatric care. Feggetter and Gath (1981) found that postpartum depression was associated with a general history of general practitioner consultations for psychiatric problems. Depressed mothers were also more likely to have contacted their doctor regarding psychiatric symptoms at some time before the birth of the index child. In a study examining postpartum depression in parents, Areias (1996) found that postnatal depression was associated with a previous history of depression in both mothers and fathers. Studies which did not find any evidence of an association between psychiatric history and depression after birth have been reported by Pitt (1968) and Kumar and Robson (1984).

Some studies have also implicated family psychiatric history as contributing to increased risk of postpartum depression. For example, O'Hara (1986) found that women who were depressed after delivery were more likely to have a first degree relative with a history of depression. Contrary findings were reported by Kumar and Robson (1984), who reported that family psychiatric care did not predict postnatal depression.

### Attributional style

Research has also focused on the role of cognitive variables, in particular, attributional style and its relationship to postpartum depression. Postnatal studies have tested the propositions of the reformulated learned helplessness model (Abramson et al., 1980). This model suggests that an attributional style which attributes undesired outcomes to internal, stable and global characteristics, is more likely to be associated with depression in the face of uncontrollable events.

O'Hara et al. (1982) and Cutrona (1983) reported that depressive attributional style was related to postpartum depression. O'Hara et al. found that attributional style was a significant predictor of postpartum depressive symptoms, as measured by the Beck



Depression Inventory. In the Cutrona study, attributional style assessed in pregnancy predicted postpartum depression levels, only for those primiparae who were not depressed during pregnancy. Attributional style did not predict postpartum depression in women who were depressed during pregnancy. However, recovery from postpartum onset depression was related to attributional style.

Other studies have found no evidence of a relationship between attributional style and postpartum depression. O'Hara et al. (1984) reported a non significant correlation between attributional style during pregnancy and postpartum depression. Manly et al. (1982) reported similar findings, stating that there was negligible support for the notion of depressive attributional style. The authors posit that postpartum depression may have unique characteristics which differentiate it from other types of non psychotic postpartum depression, and may therefore have different patterns of attribution. Cutrona (1983) also argues that the inconsistency of findings in studies of postnatal women, may necessitate a revision of the reformulated learned helplessness model.

#### 3.4.7 Interpersonal Relationships

Several studies have examined the role of interpersonal relationships in postpartum depression. O'Hara and Zekoski (1988) note that the social context of mothers around the time of birth can influence psychological well being. The role of parental and marital relationships will be discussed here.

#### Parental relationships

Frommer and O'Shea (1973) found that women who had been separated from one or both parents before 11 years of age, or those whose mother had died, were more likely to be anxious and depressed about their babies. The importance of subjects' relationships with their own mothers has been demonstrated in a number of studies. Mills et al. (1995) found that depressed women were more likely to report a difficult relationship with their own mothers compared to non depressed mothers. The authors report that

these difficulties were evidenced by descriptions of the mother-daughter relationship given by subjects. The depressed women were unable to : discuss feelings with their mothers, ask for general help or direct help with the baby, ask for referral to books or other resources. Mills et al. comment that the emotional problems evident with their own mothers, may be related to the increased incidence of depression in this group. Murray et al. (1995) found that a poor relationship with mothers was associated with depression in a postnatal group only, with no association being found for non puerperal depression. These authors conclude that the relationship between a woman and her mother may be a contributing factor in postnatal depression. Kumar and Robson (1984) reported that postnatally depressed woman had often endured a period of childhood separation from their fathers.

A study by Paykel et al. (1980) found no evidence of a link between parental relationship and postpartum depression. In this study, depressed women did not report any more problems in childhood or current relationships with either parent than non depressed women.

### Marital relationships

Romito (1989) has reported that women who lack an intimate confiding relationship with their husbands or partners are at increased risk of puerperal psychiatric disorders. Kumar and Robson (1984) report that marital tension and conflict before the birth were associated with increased risk of postpartum depression. In a study by Paykel et al. (1980), it was found that depressed mothers had a less supportive and communicative relationship with their husbands, while Watson et al. (1984) found that depressed mothers were more likely to report marital dissatisfaction than non depressed women. Postnatally depressed women were also more likely to report: marital problems during pregnancy and after delivery (Viinamäki et al., 1994); an inability to discuss infant related problems with husbands and less support with baby from husbands (Feggetter and Gath, 1981); and, serious deterioration in partner relationship after the birth (Cox et

al., 1982; McGill et al., 1995). Mills et al. (1995) found that most postnatally depressed women reported that: their partners tended to withdraw from conflict situations, both physically and emotionally; there was a lack of communication and consensus in the marriage; there was an inability to discuss feelings with their partner-and as a consequence they tended to display anger behaviourally. More depressed mothers found their partner's presence during labour unhelpful compared to non depressed mothers. Contrary findings were reported by Hopkins et al. (1987), who found no association between marital satisfaction and postnatal depression.

O'Hara and Swain (1996) conducted a meta analysis to determine effect sizes for a number of putative risk factors assessed during pregnancy to predict postpartum depression. They reported that the strongest predictors of postpartum depression were: past psychiatric history and psychological disturbance during pregnancy, poor marital relationship, low social support, and stressful life events. The issue of social support and postpartum depression will be discussed in chapter 4.

### **3.5 The Effects of Postpartum Depression**

Richards (1990) notes that postnatal depression can have many adverse personal, family and social consequences. Common symptoms of depression, such as anxiety, loss of energy, sleep problems, and suicidal thoughts can effect the child, as well as altering a mother's interactions with her children, or contribute to family disharmony (Puckering, 1989). This section will briefly report some of the work done in this area, in order to give an insight into the impact of postpartum depression on infants and children.

Mother-infant studies have looked at the deleterious effects of maternal depression on children and found that infants are sensitive to the problems resulting from relationships with a depressed mother (e.g. Gelfand and Teti, 1990; Murray, 1992). A study by Campbell et al. (1992) followed 70 depressed primiparae with 59 demographically matched non depressed controls from birth to 24 months. Depressed women perceived

their infants as more difficult compared to non depressed primiparae. They were also more likely to show less positive engagement and more negative affect in interactions with their infants. For example, depressed women were found to express more annoyance at the baby, and to be intrusive and interfering.

Cutrona and Troutman (1986) reported that mothers' levels of depressive symptoms, based on the Beck Depression Inventory, were associated with difficult infant behaviour at 3 months. Gelfand et al. (1992) studied parenting stress in depressed and non depressed mothers of infants aged between 3 and 13 months. Their observations revealed that depressed mothers behaved less optimally with their children, evidenced by lower scores on scales measuring sensitivity, warmth, animation, and engagement with the infant. Similar to Campbell et al.'s findings, depressed mothers were found to express anger more often. Depressed mothers' ratings of infant temperament indicated that they found them only slightly more difficult. Gelfand et al. suggest that mixed findings concerning depressed mothers' ratings of infant temperament may be due to the use of different measures to assess temperament, or the study of infants at various stages of development.

Other studies have evaluated the effects of maternal depression on the child. A study by Zekoski et al. (1986) induced depressed mood in mothers and examined the effects on 4 month old infants. They found that maternal depressed mood resulted in dysphoria, and decreased responsiveness towards the mother. Puckering (1989) comments that these kind of effects may predispose learned helplessness in infants as a response to maternal interaction difficulties, and subsequently become generalised to other social interactions. However, findings which suggest deficits in infant behaviour due to maternal depression, may instead be due to an interaction between maternal depression and socioeconomic vulnerability (see Murray, 1996: for a more detailed discussion).

Children at later stages of development have also been studied. Coghill et al. (1986) reported that the children of mothers who had been depressed in the first year postpartum, performed less well on the McCarthy Scales of Children's Abilities at 4 years of age. The authors also reported that concurrent depression had no effect on abilities. A study by Philipps and O'Hara (1991) reported the results of a prospective four and a half year follow up study of women who had previously been involved in a study of postnatal depression. Child behaviour was assessed through mothers' reports on the Child Behaviour Checklist (CBCL). The CBCL assessed possible problems, such as, depression, aggression, withdrawal and hyperactivity. The authors reported no direct association between postpartum depression and child behaviour problems. They did, however, report an increased risk of further depression in women who had been depressed postnatally. Further depressions themselves *were* found to be associated with child behaviour problems. Philipps and O'Hara posit that postpartum depression may affect child behaviour, indirectly by increasing the risk of further non puerperal depressions.

Philipps and O'Hara (1991) conclude that their findings underscore the possible benefits of therapeutic intervention during the postpartum period for those women who were thought to be at risk, i.e. who had a history of depression. They note that, "beginning therapeutic intervention with the mother when the child is quite young, may serve to prevent subsequent maternal depressive episodes, as well as minimise the deleterious effects of maternal depression on the child" (p.154).

### **3.6 Treatment of Postpartum Depression**

The finding that at least 1 in 10 women experience depressive symptoms in the first few weeks after childbirth (Cutrona, 1982; Holden, 1996) merits attention from health service providers.

The first step in any treatment and prevention programme is the identification of vulnerable women and diagnosis of postpartum depression. Susman (1996) suggests that primary care physicians should familiarise themselves with the risk factors associated with puerperal depression, such as inadequate support, previous depression, and stressful life events, in order to facilitate early recognition. Harris (1996) notes that biological risk factors such as thyroid dysfunctions can be enquired about and treated, both before and after the birth. In addition, the importance of screening women through the use of self report questionnaires, such as the BDI and the EPDS, has also been promoted (Holden et al., 1989; Susman, 1996).

Several types of treatment for postnatal depression exist, this section will briefly consider pharmacotherapy, and counselling and health visitor interventions.

### 3.6.1 Pharmacotherapy

The use of antidepressants in the treatment of moderate to severe postpartum depression has been advocated. Pritchard and Harris (1996) note that it is essential to use antidepressant treatment in a safe manner, by ensuring that adequate doses are prescribed and that the breastfeeding status of mothers is also taken into account. The breastfeeding issue is related to concerns over the effects of drugs in breast milk, and the possible damage to infant brain development. Susman (1996) also comments that the use of tricyclic antidepressants may be affected by physiological changes in pregnancy, and advocates that drug therapy must be monitored extremely carefully. Other considerations in the use of tricyclic antidepressants centre on the efficacy of these drugs in conjunction with oral contraceptives, this situation may require reduced doses of antidepressants.

### 3.6.2 Counselling and Health Visitor Interventions

Gjerdingen et al. (1991) suggest that health professionals should play a role in educating pregnant women, their partners and other support persons about ways to help the expectant mother. This can take the form of encouraging women to attend prenatal classes, while husbands can be informed of the importance of emotional support and sharing of household responsibilities. The role of midwives and health visitors has also been identified as important in aiding the transition to new parenthood (Nicolson, 1990).

Holden et al. (1989) report the findings of a study examining counselling and health visitor intervention. Health visitors in the study had been trained in non directive (Rogerian) counselling techniques, which emphasised the therapeutic benefits of discussing feelings, rather than simply offering advice. Mothers found to have high scores on the EPDS at 6 weeks postpartum were assessed by a psychiatrist at 12 weeks to confirm whether they were depressed. These mothers were then randomly assigned to treatment or control groups, with treatment groups receiving a half-hour of non directive counselling at home for 8 weeks. All women in the study were reassessed five weeks later. The authors report that significantly more mothers in the treatment group recovered (69%) as compared to the control group (38%). The EPDS scores of the control group were found to be unchanged, while the treatment group's scores were significantly lower. The authors conclude that in addition to counselling benefits, the mothers accepted the health visitors' role in the support process.

Another study by Elliot et al. (1988) also reported positive results in a controlled trial, examining the effectiveness of psychosocial intervention in 'vulnerable' women. The intervention aimed to provide a continuity of care from pregnancy to puerperium, to offer education, and to provide information and referral to self help groups. The intervention achieved these aims mainly through monthly support sessions with a midwife and clinical psychologist. The groups provided the opportunity of formal support from health professionals as well as peer group support. Various information

topics were addressed at the support sessions, including: the possible effects on the couple's relationship and sex life, the importance of asking for support, planning extra rest and relaxation, choice of feeding method, and possible problems due to obstetric intervention, postnatal depression, and sibling rivalry. A two month postnatal assessment revealed that the prevalence of depression in the treatment group was significantly lower (13%) compared to the control group (33%).

The effective use of local resources has been demonstrated by intervention trials, and illustrates the benefits of implementing support groups in antenatal and primary care settings (Holden, 1996). However, Holden also points out that there are potential problems in implementing such support programmes. The addition of intervention programmes may generate too much demand on the time of health visitors, resulting in added stress and increased workloads. Ethical dilemmas may also pose a problem for health visitors, when faced with complex decisions outwith their area of expertise (for example: when faced mothers who are suicidal, or at risk of battering their infants).

The importance of cooperation between primary and secondary health care workers is emphasised by Pritchard and Harris (1996), who state: "Perinatal psychiatry can only benefit from the current emphasis on community care, and is perhaps one of the psychiatric fields in which extensive community care is most likely to work. It is an important field which merits the best service we can provide, in which the life and well being of two individuals are at risk, one of them starting off on life's journey, the other experiencing huge changes and life events. To manage perinatal psychiatry well is to improve the psychiatric prognosis of the mother, and reduce the risks for the future health of the child. To ignore it is to jeopardise both" (p.561).



### **3.7 Depression in Childbirth: A Cultural Perspective**

Most research conducted on depression and childbirth has been confined to Western settings, particularly to Europe and the United States. More recently, researchers have suggested the importance of a cultural approach to the study of psychological conditions associated with childbirth (Kumar, 1994; Cox, 1996). Childbirth represents a very important life event which although physiologically similar in all cultures, is conceptualised, structured, and therefore experienced differently by mothers in different cultures. According to Kumar, a transcultural approach to the study of puerperal disorders provides a unique opportunity to determine whether putative risk factors associated with postnatal conditions are relevant in other cultural settings.

### **3.8 Cross Cultural Studies of Puerperal Depression**

#### **3.8.1 Maternity Blues and Postpartum Psychosis**

Kumar (1994) reviewed cross-cultural studies examining the incidence of maternity blues and postpartum psychoses. He comments that a direct comparison of incidence rates for maternity blues is hampered by the use of different methodologies, although he does point out that Japanese studies have reported lower rates of maternity blues (e.g. Okano and Nomura, 1992). Kumar concludes that cultural differences in maternity blues, if any, can only be ascertained when standardised, reliable instruments are used in different settings.

The comparison of puerperal psychosis in different cultures appears to be a simpler exercise. This is primarily due to the proposed organic aetiology of psychoses, independent of psychosocial putative factors. Based on studies reviewing incidence rates of non Western postpartum psychoses, Kumar (1994) states that psychotic illness occurs in 0.22 to 0.7 per 1000 live births and is comparable to incidence rates reported in the West. He suggests that further supporting evidence of similar rates of psychoses in non Western cultures, would strengthen the argument that psychoses are caused by factors unique to the reproductive process.

### 3.8.2 Postpartum Depression

Cox (1979) conducted a prospective study to investigate psychiatric disorder among a group of Ugandan women. He reported that a definite antenatal psychiatric morbidity was found in 17 per cent of the pregnant women, as compared to half that rate in matched non pregnant non puerperal women. Using a Luganda translation of the Goldberg et al. (1970) interview schedule at 3 months postnatal revealed that 10 per cent of women (N=183) had a depressive illness. Another study by Cox (1983) compared the same Ugandan women to Scottish mothers and found a similar frequency of postnatal depression in Scottish mothers (13%). Symptomatic differences were observed, with Ugandan mothers significantly less likely to report guilt and self-blame than Scottish women. Cox concludes that the study provides evidence contrary to the anthropological view that postnatal depression is more common to Western cultures (see 3.8.3). However, Cox (1988) points out that the medical records of African depressed mothers showed that many were reminded of previous abortions and stillbirths and that the level of obstetric care was less advanced than that of the UK. Had these factors been present to the same extent in the Scottish sample, it is likely that the rates of depression would have been far higher than that found in the Ugandan sample.

Other studies investigating childbearing samples in Nigeria have also been conducted. Jinadu and Daramola (1990) conducted a prospective study of postnatal depression in a group of Yoruba women from Nigeria (N=348). The authors used their own measure of psychological distress which included symptoms of: insomnia, anorexia, 'feeling hot in the head', palpitations, increased tension and anxiety, apprehension, guilt feelings, nausea/vomiting. The questionnaire was administered during the third trimester of pregnancy and at 3 weeks postnatal. Jinadu and Daramola found that women reported significantly more symptoms during pregnancy compared to the postnatal assessment. During pregnancy, about one third of women reported sleep difficulties, impaired appetite, feelings of 'hotness in the head', and worry and anxiety. The authors concluded that the proportion of Yoruba women reporting psychological disturbances was less than

that in Western mothers. However, this conclusion is based on comparisons with studies using different methodologies, and as such must be viewed with caution.

Another study of postnatal emotional disorders in Nigerian women has been reported by Aderbigbe et al. (1993). Subjects (N=162) were evaluated for psychiatric morbidity in the second trimester of pregnancy and at 6 weeks postnatal using the General Health Questionnaire (GHQ). The authors reported higher rates of morbidity prenatally compared to postnatal levels, with somatic and anxiety items endorsed more during pregnancy. Although an overlap between prenatal and postnatal morbidity was reported, women tended to have either prenatal or postnatal morbidity. Aderbigbe et al. comment that this is similar to findings in Western samples reported by Kumar and Robson (1984) and O'Hara et al. (1990). Morbidity was found to be related to recent adverse life events, with postnatal morbidity associated with marital and familial events. The authors conclude that their findings support psychosocial aetiological explanations of non psychotic depressive disorders in pregnancy and beyond, irrespective of cultural setting.

A UK study (Watson and Evans, 1980) compared indigenous English mothers, English speaking immigrant mothers, and non English speaking Bengali mothers in the first year after delivery. Depression was assessed using the General Health Questionnaire (GHQ), interviewer judgement and personal opinions. The authors concluded that there was a high level of agreement in rates of depression across the three groups and similar symptoms. However, the use of the GHQ with Bengali mothers was problematic, as some items were not meaningful to them. In addition to this, there were low rates of agreement between the three measures of depression adopted, which makes the authors' conclusions tentative, at best.

Shimizu and Kaplan (1987) conducted a comparative study investigating mild postpartum depression in Japan and the United States at 4 to 6 weeks postpartum. The

authors note that postnatal depression is not readily recognised in Japanese society. Like other non Western societies, Japanese culture also has a tradition of postnatal rituals. Mothers often go back to their parents home for the first month postpartum, where the mother and baby can be cared for. The authors cite Honda (1974), who notes that postpartum depression may occur when the mother leaves this support network and returns to her own home. Shimizu and Kaplan compared 29 Japanese women and 21 American women using Pitt's (1968) postpartum depression scale. The hypothesis predicted that Japanese women would have less depressive symptoms and be less isolated than the American sample. Instead, the authors found that there were no significant differences in depressive symptoms, with 33.3% of American women and 37.9% of Japanese women meeting Pitt's criteria for postnatal depression. No significant differences were found between the two cultures for social isolation after delivery. Role concept was the only predictor of postpartum depression in Japanese women, suggesting that women with traditional role concepts were more likely to be depressed. The authors conclude that more research is required to determine the nature of puerperal depression in Japanese culture. Although no significant differences were found, this may have been due to the small sample sizes used. The findings suggest that larger scale studies in this area would be a useful exercise.

A more recent study of postnatal depression in a Japanese population has been reported by Yoshida et al. (1997). This study assessed Japanese women (N=98) who were living in England at the time they became pregnant and who remained in the UK for the birth. Depression was assessed using a Japanese translation of the Edinburgh Postnatal Depression Scale (EPDS), in addition to psychiatric interviews based on Research Diagnostic Criteria (RDC). The authors hypothesised that Japanese mothers in the UK would be more depressed than mothers in Japan as they do not have the traditional postnatal rituals (*satogaeribunben*) and the associated support of their family, especially their mother. Mothers were assessed from 36 weeks gestation to 3 months postnatal. Yoshida and colleagues reported a 12% incidence rate of postpartum depression during

the first 3 months after delivery, with the peak onset occurring at 1 month postpartum (based on RDC criteria). The authors report that the incidence of postnatal depression is similar to other studies conducted in Japan, for example, they cite Yamashita et al.'s (1995) finding of a 14% incidence rate of postnatal depression at 3 months after delivery. Although no differences were found between mothers in the UK and Japan, the peak incidence of postpartum depression coincided with the time that visiting mothers returned to Japan, indicating that withdrawal of support may be a risk factor. The Japanese translation of the EPDS, indicated that scores on individual items failed to discriminate between depressed and non depressed women. On the basis of interview findings, the authors conclude that low EPDS scores were related to the scale's focus on mood to the exclusion of physical symptoms.

Contrary to Yoshida's findings with the EPDS, Ghubash and Abou-Saleh (1997) reported that an Arabic translation of the EPDS performed well in their study investigating the prevalence of postpartum depression in Arab women. The study reported a prevalence rate of 17.8% (EPDS) at 7 days postpartum, which was higher than reported rates in non Western studies. Similar to findings in Western studies, the authors reported that vulnerability for postpartum depression was predicted by past psychological problems, previous and on going marital difficulties, and early postpartum psychological symptoms. However, the authors did not report whether there increased rates of somatic presentation in their sample, making comparisons with Yoshida's study problematic.

Upadhyaya (1981) examined psychiatric symptoms in a UK population of mothers attending well-baby clinics. Depression was assessed using a psychiatric screening instrument (SRQ: Self Reporting Questionnaire; Harding et al., 1980), designed specifically for use in developing countries. The study reported no differences in rates of depression between indigenous women and Asian mothers (from India and Pakistan). However, when the reasons for their visits to a doctor were examined, it was found that

indigenous mothers were more likely to present with depression, whereas the Asian mothers tended to present with exclusively somatic symptoms. Although the study found no cultural differences in somatic versus psychological symptoms, it would seem that somatic symptoms are still a prominent mode of expression when consulting a doctor.

Contrary results, to the findings of similar rates and presentation of postnatal symptoms between cultures, have been reported by Park and Dimigen (1995). Scottish and Korean mothers' depressive symptoms were assessed using the Beck Depression Inventory (BDI) at 6 to 10 weeks postnatal. The authors reported that Korean mothers had significantly higher levels of depressive symptoms. The higher Korean scores were explained as a possible withdrawal reaction related to the end of the ritual postpartum period. While no differences in cognitive-affective symptoms were found between the cultures, Korean mothers expressed significantly more somatic symptoms compared to Scottish mothers. This suggests that somatic symptoms are an important indicator of depressive postnatal symptoms, for non Western mothers.

Perhaps surprisingly, the majority of studies of postnatal depression in different cultures have revealed more similarities than differences. Certainly, more research is needed to evaluate postnatal depression and depressive symptoms in non Western cultures.

### 3.8.3 Anthropological Approach

The study of postpartum depression has been addressed by anthropologists, as well as psychologists and psychiatrists. Mead and Newton's (1967) anthropological work illustrated the importance of childbirth across cultures. Based on their comprehensive review of childbirth customs in 222 cultures, they found that pregnancy and childbirth were never treated indifferently, and that it elicited a whole range of emotions by parents and others. They also found that many societies exhibited culturally patterned behaviours related to reproduction and childbirth. The anthropological approach has

focused on the importance of such customs and rituals in childbirth and the role this plays in postnatal depression. Pillsbury (1978) argues that Chinese mothers receive far more attention than American mothers in the postpartum, and that this may be instrumental in preventing postpartum depression in Chinese women. The Chinese customs specify specific behavioural rules about the first month postpartum, including: the avoidance of washing, restrictions on leaving the home, and rules about which foods should be eaten and those which should be avoided.

Anthropologists have regarded childbirth as a 'rite of passage' which alters the status and responsibilities of the new mother, and marks the transition to parenthood. Seel (1986) describes the three components of rites of passage as:

- 1 The rite of separation;
- 2 The liminal period; and
- 3 The rite of incorporation.

He notes that the three components may last for long periods of time and incorporate a number of ritual actions. In the case of childbirth, the rite of separation involves the removal of the mother from her old environment to a new place where cleansing and purifying rituals take place. For mothers in the West, this applies to the hospital setting where mothers are separated from their families and 'ritually prepared' for childbirth. In the liminal period, mothers are devoid of any status and enter the transition phase between old and new roles. This stage has been described as involving humiliation and a lack of control- similar to that experienced by many women in hospital. This stage also involves instruction, usually of a symbolic form, which prepares the individual for society's expectations of the new role. A period of waiting also precedes the end of the liminal period- in the case of mothers, this applies to the continued hospitalisation after delivery. The rite of incorporation moves the subject back to their new status, which is celebrated by feasting and rejoicing. This stage also involves a privileged and respected status for the person who has undergone the ritual process.

Seel argues that the first two stages are highly ritualised in Western obstetrics, but that the third stage of incorporation is not adequately dealt with. He argues that the incompleteness of the ritual process leaves parents in a state of limbo and vulnerable as a result. Seel proposes that the absence of consistent advice, rituals and routines may all contribute to the onset of depression after childbirth.

Cox (1996) notes that perinatal social transitions accompanied by ritual and taboos are common to almost all non Western societies, which typically provide support for forty days postpartum. The importance of ritualised childbirth has been addressed by Stern and Kruckman's (1983) anthropological critique of postpartum depression. The authors suggest that postnatal depression is a culture bound syndrome, peculiar to the West. They state that the role of customs, rituals and taboos serve to prevent postpartum depression in non Western cultures, where postnatal depression is not commonly reported. This is accomplished by strategies, employed in these cultures, which serve to mobilise social support to the new mother and aid postnatal psychological adjustment.

Based on aspects of support common to other cultures in the period after childbirth, Stern and Kruckman identify six elements of postpartum structure which may be missing from Western birth environments:

#### 1. Structure

This refers to the cultural patterning of the postnatal period. The authors note that this period is typically forty days long in Spanish, Caribbean, Latin American and Muslim cultures. The postnatal period represents a time of recuperation and support from relatives, usually female.

#### 2. Vulnerability/pollution

The postnatal period is often regarded as a time when the mother is vulnerable, or polluted. Jiminez and Newton (1979) reviewed 202 traditional societies and found that postpartum restrictions provided a time to rest and recuperate, and were also related to



ritual impurity of newly delivered mothers in about half of the cultures studied. In the case of Punjabi mothers, Gideon (1962) reports that new mothers are protected from 'polluting' influences of women who have experienced recent birth, abortion or miscarriage.

### 3 and 4. Mandated rest and Seclusion

Stern and Kruckman comment that ideas of vulnerability and pollution have encouraged periods of postnatal rest and seclusion. In Gideon's study of Punjabi birth practices it was noted that the new mother is secluded from others for the first five days postpartum, with the exception of female relatives and a midwife. The rest period allows successful lactation and nursing (Mead and Newton, 1967) as well as excusing the mother from normal household routines. In non Western cultures the period of rest and seclusion can sometimes encompass the first forty days after delivery, while in the West this period is limited to the few days of post delivery hospital care.

### 5. Functional assistance

In non Western cultures the period after birth is usually accompanied by family assistance, in particular from female relatives. Mead and Newton (1967) report that this assistance includes protective, economic, and personal aspects of care. The personal aspects of assistance usually involve support during labour, helping with older children, cooking and household chores. In the Punjab, women often return to their parental home in order to receive postnatal care and support (Gideon, 1962).

### 6. Social recognition of the mother's status

The mother is given much attention throughout the course of the postpartum period. She may be subject to dietary restrictions, behavioural taboos, and purification rituals which focus on her newly acquired status, and have been referred to as 'mothering the mother' (Raphael, 1976). The social recognition of the mother often involves a ceremony or ritual to celebrate the end of the postnatal period.

On the basis of a supposed lack of postnatal depression in cultures with ritualised postnatal periods, Stern and Kruckman suggest that postnatal depression in the West may result from a lack of: (a) social structuring of postpartum events; (b) instrumental support and aid for the new mother; and (c) social recognition of the role transition for the new mother.

Harkness (1987) conducted a study examining childbearing women in a rural Kipsigis community in Kenya. Her study examined the affective functioning of ten women by using reports of memories and affective content of dreams during the last half of pregnancy, at 2-3 weeks postpartum, and at 2-3 months postpartum. These mothers were compared with a matched non pregnant sample. Based on an analysis of dreams and memories, Harkness reported no evidence of postpartum depression. However, she did report more that women had more disturbed and negative dreams during pregnancy. This finding is similar to O'Hara et al.'s (1990) finding of higher depressive symptoms during pregnancy in a Western sample. Findings of cultural differences in expression and prevalence of postpartum depression have led anthropologists to stress the role of social factors in the aetiology of depression, rather than hormonal or psychological aspects.

The anthropological focus on the use of childbirth customs and rituals is of particular relevance to this thesis. The two groups being examined fit into the anthropological dichotomy of non Western cultures with culturally patterned childbirth customs (Pakistani) and Western cultures which are largely devoid of culturally sanctioned childbirth ritual (Scottish), of the type described by Stern and Kruckman (1983).

## **Chapter Four**

### **Social Support**

#### **4.1 Introduction**

The importance of social relationships and the impact they have on health, has long been recognised. According to Sarason et al. (1990), early work in clinical medicine by Charles Darwin and the sociological work of Emile Durkheim on suicide, recognised the positive effects of social relationships on health. According to Stewart and Tilden (1995) many studies have demonstrated that social support has positive benefits for health and reduces mortality, while stressful relationships can exacerbate health problems and impair well-being (e.g. House et al., 1988; Kaplan and Toshima, 1990).

The work in the field of social support grew from two papers, published in the 1970's by Cassel (1976) and Cobb (1976). Based on animal and human research, Cassel stressed that the social environment was an important factor in protecting against disease agents. Cassel's work supported a buffering theory of social support and stress. The buffering theory advocates that social support acts as a resistance factor, or buffer, which serves to reduce the negative effects of stress. Cassel advocated that disease could best be prevented by increasing and bolstering an individual's social support, rather than reducing exposure to stressors.

Cobb (1976) also provided evidence in support of a buffering model of social support and stress. According to Cobb, the definition of social support is information which results in: feelings of being cared for; the belief that one is loved, esteemed and valued; and the sense of belonging to a reciprocal network. Like Cassel, Cobb stated that social support was protective in both psychological and physical domains. Other studies have also confirmed a stress buffering model of social support (e.g. Brown et al., 1975; Kaplan et al., 1977; House, 1980).

In addition to the stress buffering approach, a main effect model has been proposed. The main effect model maintains that social support directly benefits individuals, and that changes in support or a lack of social support can be a stressor itself, in the absence of adverse events. Several authors have provided supporting evidence for this model, with findings indicating an inverse relationship between support and psychological distress (e.g. Andrews et al., 1978; Aneshensel and Frerichs, 1982; Thoits, 1983a). The main effect model has also been supported by studies investigating social networks which have been adversely affected by loss or marital problems. A study by Kennedy et al. (1990) found that poorer networks were associated with health difficulties and compromised immune function.

In a review of social support studies, Cohen and Wills (1985) conclude that the main effect and the buffering effect models of social support and stress are both correct to some extent, but each model represents a different process through which social support may affect health.

One of the problems regarding this area of inquiry, centres on the definition of social support. Many conceptual definitions of social support have been offered. Caplan (1974) describes the social support system as "continuing social aggregates that provide individuals with opportunities for feedback about themselves and for validations of their expectations of others" (p.4). According to Caplan, the members of the support system provide guidance and information, as well as practical help and emotional support when it is needed. Cobb's (1976) definition of social support is more limited, and concerns the role of emotional and informational support from others, which is hypothesised to enhance self-esteem. Others have offered a more detailed description of social support (for example; House, 1981). House described social support as an interpersonal exchange which includes: emotional concerns; instrumental help; information; and appraisal (information for self-evaluation).

Although there have been many varied definitions of social support, they all seem to agree on one aspect-the multidimensional nature of social support. From the few definitions cited previously, it can be seen that social support encompasses many different areas, such as: emotional needs, information, practical help, and appraisal support. According to Dunkel-Schetter and Bennett (1990) the problems in measuring social support are partly "due to the lack of conceptual clarity regarding what social support is, its components, and the process by which it benefits an individual's psychosocial and physical well-being" (p.267). This lack of agreement has had consequences for the manner in which social support has been investigated. Sarason et al. (1990) outline the three approaches which have been used to measure social support:

- 1 network models;
- 2 received support models; and
- 3 perceived support models.

#### **4.2 Network Models**

Network models examine an individual's social integration and dynamics within a group. Network measures address the network ties of those people who are in a position to provide support. Sarason et al. (1990) note that these measures are more similar than other types of social support inventories. However, there are also areas which differ between measures, in terms of: the questions asked; the network of interest, and the exact components to be measured. While some inventories focus on specific groups, others address general populations. Questionnaires often ask subjects to list a limited number of support individuals and to specify the relationship of these people to themselves. House and Khan (1985) have suggested that collecting information on more than 5 to 10 members of a network is not a valuable exercise, as more detailed data may not be any more informative.

The network components addressed by social support measures can include: network structure, relationships, size, and density. The relationships are often assessed in terms of

the frequency of behaviours, intensity, and specifics of the help provided. The issue of whether network size is an important aspect of adequate support has been investigated. Seeman and Berkman (1988) reported that the size of network was weakly associated with the availability and adequacy of support. These findings imply that larger networks do not necessarily mean that a person has more support available in times of need. Sarason et al. (1990) conclude that the use of network measures in the study of social support have not been too successful when investigating the relationship of support to health outcomes. However, they also point out that the network approach may be more usefully incorporated into more focused theoretical models of specific stressors and their associated support needs.

### **4.3 Received and Perceived Social Support**

Many researchers have made a distinction regarding the functional aspects of social support, i.e. between received and perceived support (e.g. Gottlieb, 1985; Barrera, 1986; Wethington and Kessler, 1986; Sarason et al., 1987). Received social support examines what support people get from others. This can be termed 'enacted' support or 'received' support. Enacted support focuses on the behaviours which others perform in providing support, whereas received support examines the supportee's accounts of what support was provided, and how useful it was. As most questionnaires focus on the accounts given by recipients of support, the discussion will centre on received support, rather than enacted support. Perceived support refers to the perception of support believed to be available, if and when it is needed.

There are problems in interpreting the role of received support and health outcomes. Received support is often more than a function of the support available to an individual, in that the perceptions of others regarding whether support is needed, will also affect the provision of support. According to Thoits (1982) several factors will influence the support that is received, such as: the severity of life event as perceived by others, and the coping skills an individual is perceived as having. Thoits' observations may explain

findings which suggest a positive relationship between stress, symptomatology and social support (e.g. Aneshensel and Frerichs, 1982; Cohen and Hoberman, 1983). The impact of adverse life events may encourage support to be given by others in the social network, either because of an awareness of the stress imposed, or because the afflicted person asks for help, or is perceived as being unable to cope.

The consideration of perceived support in any discussion of social support is justified by research findings which indicate an inverse relationship between perceived social support and psychological distress (Cohen and Wills, 1985; Barrera, 1986). Measures of perceived support reflect the expectations and confidence that adequate support would be available when needed. The importance of perceptions of support is explained in the context of cognitive appraisal. Work in the area of stress and coping has illustrated the importance of appraisal in assessing the degree of threat in any situation and subsequent coping strategies adopted (Lazarus and Launier, 1978; Folkman et al., 1979; Smith and Lazarus, 1990). The role of cognitive appraisal was demonstrated to be the most important aspect of experienced stress. In terms of social support, the experience of stress was determined by perceptions of the need for support, as well as actual support provision.

#### 4.3.1 The Distinction Between Perceived and Received Support

Empirical support for a theoretical distinction between perceived and received support has been reported. McCormick, Siegert and Walkey (1987) compared the factor structures of two questionnaires, one of which measured perceived support, and the other measured received support. The Inventory of Socially Supportive Behaviours (ISSB: Barrera et al., 1981) was used as the assessment of received support and compared to the perceived support measure, the Social Support Questionnaire (SSQ: Sarason et al., 1983). The authors reported that the questionnaires had distinct factor structures. Based on subjects' reports of both kinds of support, the study revealed that reports of the actual support received, differed from the support that was perceived as being available. Other

researchers have also reported a mild relationship between perceived and received support, with findings indicating that measures of perceived support do not necessarily reflect received or enacted support (e.g. Barrera, 1986; Heller et al., 1986; Lakey and Cassaday, 1990).

#### 4.3.2 Explanations for the Discrepancy Between Received and Perceived support

Dunkel-Schetter and Bennett (1990) have reviewed many of the possible explanations for the discrepancy between received and perceived support. Some of these arguments will be presented here briefly, in order to provide an understanding of why these functional aspects of support differ.

At the most basic level, discrepancies in received and perceived support may be due to errors in judgement regarding the amount and quality of available support. These errors may cause an over confident evaluation of the amount and quality of available support, or conversely the perception of available support may underestimate these aspects.

Another issue may be the 'victimisation perspective', where adverse negative life events do not engender socially supportive behaviour from network members (Wortman and Lehman, 1985; Coyne, Wortman, and Lehman 1988). In this situation, it may be the case that network members who would be expected to provide support, are themselves overwhelmed by the stressor and are consequently unable to provide adequate support. The types of events in which this can happen are often serious or life threatening, such as: chronic debilitating illness, bereavement, rape, and natural disasters. In these situations, network members may provide ineffective support, based on the misguided belief that they should ignore the negative aspects of the life event in question. Such a 'pull yourself together' approach can hinder effective recovery from the effects of adverse life events, which may require a lengthy period of adjustment (Silver and Wortman, 1982).



Other possible reasons for the discrepancy between received and perceived support may be due to the effects of prolonged support requirements. It is likely that initial support may meet expectations, but that this will decrease in frequency and effectiveness over longer periods of time (Dunkel-Schetter and Bennet, 1990). Initially conscientious efforts on behalf of network members may lapse into haphazard responses over time. Support may also be withdrawn if there is no sign of recovery, this is particularly pertinent in cases where the supporter is closely involved with the afflicted person. A lack of progress can be interpreted as an indictment of support efforts and result in friction and acrimony (e.g. Coyne et al., 1988). Various mediating factors have also been posited to explain the discrepancy between these functional aspects of support: individual differences in sensitivity and perceptiveness of support providers; role of supportee characteristics (e.g. self-esteem); differences in coping styles; and social network characteristics (see Dunkel-Schetter and Bennet, 1990).

#### 4.3.3 Effects of Received and Perceived Support

Studies have reported findings relating to the efficacy of perceived and received support in relation to health outcomes. In general, it has been reported that studies of the functions of support find evidence for a buffering model of social support and stress. Alternatively, studies which examine social integration usually report findings in accordance with a main effects model (Cohen and Wills, 1985).

Research on the role of received and perceived support in relation to health has found that perceived support moderates the relationship between stress and psychological outcomes. Cohen et al. (1984) reported the results of a study examining perceived and received support in relation to adverse life events and depressive symptoms in a college population. They found that perceived support results were consistent with main and buffering effect models, but reported no such findings in relation to received support. In a broader study of national survey data, Wethington and Kessler (1986) reported a stress buffering effect for perceived support only. These findings indicate that perceived

support is important in buffering the effects of stress, while received support plays no role in the process. However, other researchers have suggested that received support is important in the aftermath of a stressful event. Indeed, several authors contend that the provision of support at a stressful time will be more important in buffering the effects of stress than perceived support (Gottlieb, 1985; Heller et al., 1986).

The contradictory findings concerning the role of perceived and received support may be due to the broad and general nature of social support investigation. Cutrona and Russell (1990) have argued that early social support research did not address the specific types of stress that people encounter in the context of similar life events. This will be discussed further in the next section.

#### **4.4 Social Support and Stress: An Optimal Matching Approach**

Although we intuitively realise that specific types of social support are more suited to certain events and situations, early research tended to ignore this aspect, in favour of an overall estimate of support (e.g. House, 1981; Cohen and Wills, 1985; Heller et al., 1986). Cutrona and Russell (1990) observe that it would be more fruitful to establish whether certain types of support promote adjustment and adaptation in specific situations. The authors also note that as previous studies examined social support in general community populations experiencing diverse sources of stress (e.g. Holmes and Rahe, 1967), they could not make inferences about the support requirements of specific events. They argue that an optimal needs-fit model would contribute to our understanding of the role of social support in health outcomes.

##### **4.4.1 Multidimensional Measures of Social Support**

The assessment of specific types of support requires a multidimensional model of social support. Several authors have suggested multidimensional models which encompass a range of potential support components (Caplan, 1974; Weiss, 1974; Cobb, 1976; Khan, 1979; House, 1981; Schaefer et al., 1981; Cohen and Wills, 1985). There are similarities

in the components used to define social support across these different conceptualisations. According to Cutrona and Russell (1990) it seems that there are five common dimensions of support: emotional support; social integration; esteem support; tangible aid; and informational support.

To address the issue of investigating specific types of support and stress, Cutrona and Russell (1987) developed an inventory for this purpose. The theoretical basis of the Social Provisions Scale (SPS; Cutrona and Russell, 1987) drew on the work of Weiss (1974) in interpersonal relationships and loneliness. This model was chosen as its components of support reflected a broad range of behaviours which were suited to investigations of both general and stressful life events. Weiss's (1974) components of support included the five common elements of support identified in most other multidimensional models. In addition to this, Weiss included a nurturance dimension which assessed support *given* to others, rather than support received.

The six provisions in this model (Weiss, 1974) are categorised as assistance related or non-assistance related. The assistance related dimensions are *guidance* (advice and information) and *reliable alliance* (knowing that others can be relied on for practical help). These dimensions are considered to be most pertinent to problem-solving in a stressful situation. The non-assistance related dimensions are considered to be important in situations of high and low stress. Weiss (1974) suggests that these effects are probably mediated by cognitive processes (e.g. by enhancing self-efficacy). This category includes the *reassurance of worth* dimension, which addresses the evaluation of self competence and skills. The inclusion of this dimension is based on the work of Bandura (1982) on self-efficacy, which suggests that perceptions of self-efficacy determine the amount of effort and persistence in the face of aversive events and obstacles. It is suggested that a positive sense of *reassurance of worth* is protective in high stress situations as it buffers the effects of stress and facilitates coping. Even in low stress situations, increased self-esteem would benefit day to day functioning. Self-esteem is also important to the

*opportunity for nurturance* dimension. Based on the assumption that giving support may also enhance well-being, Cutrona and Russell (1987) also include this dimension in the SPS. The other dimensions are *attachment* (feelings of security and strength of emotional bonds) and *social integration* (sense of belonging to a group with similar interests). Both of these provisions address aspects of support usually provided by friends, family, and spouse/partner.

In addition to the broad range of dimensions of the Social Provisions Scale, the SPS has empirically validated dimensions. This is important, as previous authors had suggested dimensions of social support which were not necessarily independent and distinct constructs (e.g. Schaefer et al., 1981). To avoid this potential pitfall, Cutrona and Russell (1987) conducted confirmatory factor analyses on responses to the SPS in a large group of subjects (N=1792). They reported that the factor structure responded to the six dimensions of the SPS. In addition, they also found a second order factor which identified a general, global support factor.

## **4.5 Considerations in a Model of Optimal Matching Between Stress and Social Support**

### **4.5.1 Dimensions of Stress**

Cutrona and Russell (1990) state that an optimal matching model requires a categorisation system for stressful life events. Based on the theoretical work of Lazarus and colleagues (Lazarus, 1966; Coyne and Lazarus, 1980; Lazarus, 1981; Folkman and Lazarus, 1984), the authors define stress as "a relationship between the person and the environment, in which the individual perceives that something of personal value is at stake and judges that his or her resources are taxed or overwhelmed by the situation" (Cutrona and Russell, 1990; p.324). Using this definition, the level of stress is determined by whether an individual feels that they have sufficient resources to counter a potential threat or loss. The authors categorise stressful events on the basis of: cognitive appraisal of a situation (where it is perceived as a challenge, threat, or actual harm/loss),

and the content domain (assets, relationships, self-esteem). Based on coping research, four dimensions were considered important in outlining an optimal matching model: controllability; desirability; duration of consequences; and life domain of events.

#### 4.5.2 Controllability of Events

Based on psychopathology research, particularly in the field of depression, several other aspects of life events were hypothesised to be important in a model of stress. According to the authors, the issue of controllability of events (Abramson et al., 1978) is of primary importance in terms of social support requirements. Studies of perceived controllability of events as a predictor of psychopathology have generally reported that negative uncontrollable life events represent a more potent risk factor for depression, as compared to perceived controllable events (e.g. Paykel, 1974; Paykel, 1979; Husaini and Neff, 1980; Fava et al., 1981).

Cutrona and Russell (1990) propose that the negative feelings precipitated by uncontrollable events require 'emotion-focused coping' (Lazarus and Folkman, 1984). As such, they propose that adequate social support in these conditions would have to focus on emotional support, in order to address the problems specific to uncontrollable events. In contrast, controllable events are said to require 'problem-focused coping' (Lazarus and Folkman, 1984). In the context of Weiss's (1974) model of social provisions, the authors propose that the problem-solving dimensions of social support, guidance and reliable alliance, would be the most beneficial in this stressful context. As self esteem is hypothesised to be of use in a problem solving situation (Cutrona and Troutman, 1986), reassurance of worth is also hypothesised to be a useful social support in controllable events.

#### 4.5.3 Desirability and Duration of Consequences

The issue of desirability is important in considering the negative impacts of events. In general, the uncertainty of attaining a goal (desirable event) is associated with anxious

feelings (Beck and Emery, 1985), while undesirable events are associated with depression (Thoits, 1983b). The consequences for a model of matched support and stress suggest that desirable events require support which will reduce anxiety, while undesirable events require social support which can deal with depression.

Duration of consequences represents a measure of event severity (Brown and Harris, 1978). Those events which had long term consequences were considered severe, while relatively short term effects were classed as non severe. In terms of testing the proposed model, duration of effect was not included as it is more relevant to amount of support as opposed to type of support needed.

#### 4.5.4 Life Domain

Consideration of the life domain affected by stress was influenced by Stroebe and Stroebe's (1985) deficit model and Hobfoll's (1989) resource conservation model. Central to these theories, is the idea that the type of loss will in turn dictate the type of support required. This supports the idea of optimal matching of social support and type of stress. For example, a loss of assets would be associated with a need for tangible support (reliable alliance). The reassurance of worth provision would be most suited to situations where there is a threat to self-esteem and beliefs about skills and capabilities, such as a failed promotion at work. Obviously, the loss of an intimate relationship would benefit from emotional support (attachment provision). The loss of more casual relationships, such as friends and acquaintances, would require network support (social integration).

### **4.6 Empirical Support for the Optimal Matching Issue**

As a test of the proposed model, Cutrona and Russell (1990) examined the results of 42 studies by grouping stressful events in terms of controllability, desirability and domain. The findings of studies examining uncontrollable events, included: loss of assets, unemployment, medical illness, and loss of relationships. Among the studies of

controllable events, the areas examined were: threats or challenges to assets (e.g. smoking cessation), interpersonal threats or challenges (e.g. abortion), and social role change (e.g. transition to parenthood). Overall, the authors reported that model based predictions regarding support were applicable to about two-thirds of the life events studies reviewed. As this thesis explores issues relating to childbirth, findings regarding the transition to parenthood will be the main focus of this section. In the interests of brevity, only one of the uncontrollable events examined by Cutrona and Russell (1990) will be mentioned.

#### 4.6.1 Medical Illness

One area of negative and uncontrollable events examined was medical illness. Typically, illness poses a threat to physical well-being and may result in subsequent depression. As such, the model would predict that emotional support and emotion focused coping would be paramount in assuaging fear, depression and anger in this context. In addition, some form of instrumental support (guidance, information) was hypothesised to be beneficial. The authors reviewed the findings of five studies investigating social support and health outcomes (primarily psychological) in different populations: hearing impaired adults (Frankel and Turner, 1983); hemodialysis patients (Dimond, 1979); breast cancer patients (Bloom, 1982); and community samples (Wethington and Kessler, 1986; Arling, 1987). The hypotheses regarding the most useful types of social support provision were supported by the findings of these studies. In particular, all studies which examined the role of emotional support and psychological adjustment, reported that this support provision was predictive of improved psychological health (Dimond, 1979; Bloom, 1982; Frankel and Turner, 1983; Wethington and Kessler, 1986). In a study of chronically ill adults, a positive association between emotional adjustment and the receipt of spousal instrumental support was reported by Wethington and Kessler (1986).

Although common elements of support were found to be important across these studies, they all used different methods of assessing social support. For example, emotional support was assessed by the number of times it was received (Wethington and Kessler,

1986), and by nursing staff's subjective ratings (Dimond, 1979). Clearly, an optimal matching approach would benefit from consistent methods of support measurement, as this would generate more comparable findings regarding the role of support types in diverse situations.

#### **4.7 Social Support and Postpartum Depression**

The transition to parenthood was viewed as a controllable event, requiring problem focused coping and social support provisions which would facilitate this. As controllable events have an element of preparation, informational and emotional support were hypothesised to be useful in dealing with stress in this context. Childbirth represents a challenge in the domain of social roles for primiparous mothers. Cutrona and Russell (1990) reviewed the findings of ten studies of transition to parenthood, and found that instrumental (informational and tangible) support was the most important for mothers. To a lesser extent, there was evidence that emotional support was useful to mothers at this life stage (e.g. Paykel et al., 1980; O'Hara, 1986).

Cutrona (1984) assessed the role of social support in a longitudinal study of primiparae (N=85). The mothers were assessed at three times: during the third trimester of pregnancy, two weeks after delivery, and 8 weeks after delivery. The Social Provisions Scale (SPS: Cutrona and Russell, 1987) was used to assess support provision during pregnancy. Depressive symptoms, at all time assessments, were measured using the Beck Depression Inventory (BDI: Beck et al., 1961) and the Hamilton rating Scale for Depression (HRSD: Hamilton, 1960). Results suggested that the guidance provision (informational) was important at 2 weeks after delivery. Results were inconsistent with a buffering explanation of stress and social support, with support more strongly associated with depression at *lower* levels of childcare stress. By 8 weeks after delivery, social integration was the most important predictor of depressive symptoms. This finding is consistent with the needs of the social role domain, and indicates that network support aids the transition to the 'new mother' identity.



In another study of the transition to parenthood, Cutrona and Troutman (1986) tested the mediational aspects of their model. They proposed that if social support can improve self belief in abilities, then it may facilitate coping behaviour through the mediation of self-efficacy. The study investigated the impact of infant temperament on maternal adjustment, and examined the role of social support in coping with a difficult infant. The authors hypothesised that mothers of difficult infants would experience more depressive symptoms and feel less competent in their parenting role, but high levels of social support would protect mothers by enhancing beliefs of self-efficacy in their new role. Married mothers (N=55) were assessed during pregnancy and again at 3 months postpartum, results indicated that mothers with temperamental infants were more depressed. Consistent with the hypothesis, it was found that mothers with higher levels of social support had improved levels of parenting self-efficacy, and subsequently lower levels of depressive symptoms. The authors also note that alternative explanations for these findings may centre on personal resources. For example, it could be that people with high self-esteem are 'attractive' to others and this contributes to the likelihood that others will help. Alternatively, high self-esteem itself may be protective against adverse effects of stress and subsequent depression.

O'Hara et al. (1983) investigated social support and depression during the puerperium. They reported that depressed women perceived confidants and, in particular, their spouse as providing less support in the postpartum. The depressed mothers reported deficiencies in spousal instrumental support (e.g. baby sitting, household chores) and emotional support. A later study by O'Hara (1986) examined social support and depression during pregnancy and the postpartum period (N=99). The results of this study confirmed previous findings regarding the role of emotional and instrumental support from the spouse as being protective against depression, but no evidence for the role of confidant support. O'Hara (1986) also found that depressed mothers expressed more dissatisfaction with the support provided by parents and in-laws, even though the frequency of these behaviours was the same as the non depressed group. In addition to support for the view

that instrumental support is important to postpartum adaptation, these studies emphasise the importance of the source of support provision.

Collins et al. (1993) examined social support in pregnancy in relation to postpartum depression in a sample of economically disadvantaged mothers. Mothers up to 15 weeks gestation were recruited (N=129) and perceived social support was assessed on four components: material aid, assistance with tasks, advice/information, and listening while one expresses beliefs or feelings. The authors reported that mothers who were dissatisfied with prenatal support received (especially from the partner) were more likely to exhibit depressive symptoms and mood at 6 to 8 weeks after delivery. Mothers with less network resources during pregnancy were also found to be at increased risk of depression in the postpartum. Again, this study illustrates the importance of instrumental and emotional support.

At a more general level, authors have also found that overall social support is negatively associated with postpartum depression, suggesting that less social support is associated with increased risk of depressive symptoms (e.g. Cutrona, 1984; McKenry et al., 1990; Thorpe et al., 1992; Logsdon et al., 1994; Demyttenaere et al., 1995).

Logsdon, McBride, and Birkimer (1994) investigated discrepancies between prenatal social support expectations and perceptions of received support and their relationship to postpartum depression. Perceived support was measured using an instrument designed by the first author. The Postpartum Support Questionnaire contained 34 items of specific social support measures (e.g. 'Need help in cooking meals'; 'Need to have information on which skin rashes are normal for baby to have'). Three discrepancy scores were calculated on the basis of: changes in importance of support measures at prenatal and postnatal (1 month postpartum) stages; changes in prenatal and postnatal support ratings, and a weighted deviation of support (combination of importance and support ratings).

The authors reported a borderline significant difference between mothers' prenatal expectations and actual support received. Differences were found in the predicted feelings of closeness to husband and actual feelings, with actual feelings of closeness falling short of perceived expectations. This aspect of support was associated with depression, mothers who felt closer to their husband had less depressive symptoms. Discrepancy measures relating to the importance of support, indicated that increased ratings of support importance in the postpartum period were associated with increased depression. The discrepancy measure of deviations in support indicated an increased risk of depression when actual support received was not matched by expectations. Although, this study did not discuss support in terms of sub types, it reveals interesting results regarding the discrepancy between perceived and received support. As the sample (N=105) consisted of primiparous mothers, a possible explanation in this discrepancy may be due to errors of judgement. It is quite possible that a first time mother will not be realistic in support expectations, as she has never experienced this social role. A study of multiparous mothers would contribute to a greater understanding of this issue.

#### 4.7.1 Social Support in an Obstetric Context

Wolman et al. (1993) examined the role of social support in the context of the labour room environment. The authors were interested in effects of clinical surroundings and their contribution to postpartum depression. The study hypothesised that "confidence in one's competence as a mother is an important contributor to the prevention of postpartum depression, that during labour women are uniquely vulnerable to environmental influences, that modern obstetric care has the effect of impairing women's feelings of competence.." (p.1389). The study examined the role of support in first births by comparing a control group with mothers who received additional birth companionship during labour.

The study recruited volunteer females to act as birth companions for women in labour (N=92), the minimum length of companionship provided was five hours. Emotional support during labour was tactile and verbal, and centred on comforting, reassuring, and praising the women. The day after the birth, all women were interviewed regarding labour and pain perception, in addition to completing anxiety and self-esteem measures. At 6 weeks postpartum, measures of self-esteem, anxiety, depression, attitudes toward motherhood and infant related issues were completed. Significantly more women in the additional support group reported that they coped well during labour. Similarly, these mothers also reported more positive attitudes to motherhood and higher self-esteem at 6 weeks postnatal. Mothers in the supported group were also found to be less depressed at 6 weeks after delivery. The authors conclude that the provision of emotional support during labour and delivery was beneficial in terms of self-esteem, maternal competence, and reduced depression. However, the authors did not evaluate mothers' perceptions of other sources of support. It may be that other sources of support could have contributed to the difference between these groups. This apart, these findings indicate the importance of support during a sensitive and taxing time for mothers, and raises the possibility that early support can facilitate adaptation to a demanding new social role.

The role of prenatal social support in several obstetric outcomes was evaluated by Collins et al. (1993), using measures of birth weight, Apgar scores, and labour progress. The authors investigated the quality and quantity of received support on maternal and infant health indicators in a primarily Latina population (65%). The inclusion of baby's birthweight was justified as providing the most objective determinant of infant health, and was adjusted according to gestational age at birth. The Apgar scores used were taken at five minutes, rather than one minute, as these are judged to be of greater clinical importance. Infant Apgar scores are rated on five criteria: heart rate, respiratory effort, muscle tone, reflex irritability, and skin colour. Labour problems were coded based on abnormal progress in first stage labour.

The authors reported evidence in favour of a main effects model, as regards the role of prenatal social support in obstetric and infant outcomes. Mothers who experienced higher levels of support during pregnancy had less complicated labours and healthier infants (as assessed by five minute Apgar scores). Mothers who were more satisfied with the *quality* of their support delivered healthier babies. In terms of the types of support which were optimal for these outcomes, higher Apgar scores were predicted by assistance with tasks, material aid, and informational support. Labour progress was associated with task assistance, material support, and confiding support. Higher birth weights were found to be associated with more social network resources. Findings consistent with a main effects model in this study of low income, socially disadvantaged women, concur with findings of other 'stressed' populations (e.g. adolescents: Cutrona, 1984). The authors suggest that task and material support were more important to health outcomes than emotional support. Although ethnicity did not affect the study's findings, Collins et al. consider the possibility that culture may play a role in defining the provision and receipt of support. According to Collins et al., it may be that different cultures benefit from different types of support.

Another study which investigated the role of social support in childbirth was conducted by Tarkka and Paunonen (1996). These authors examined the social networks available to mothers and the role that these played in the experience of childbirth. Support types were based on Khan's (1979) definition of social support, which included: affect (appreciation, respect, love); affirmation (reinforcement and feedback); and aid (financial, practical). These aspects of social support were assessed via a structured questionnaire designed by the author, while received support was measured using Norbeck's Social Support Questionnaire.

The social networks of mothers consisted mostly of spouse, family and close friends. During labour, the primary source of emotional support (affect) was the midwife. Of the support provisions assessed, midwives provided least support in the area of affirmation

(reinforcement and feedback). The authors also reported that primiparae received more affect and affirmation support than multiparae, while the youngest mothers received the most aid. The majority of mothers, primiparous and multiparous, reported positive experiences of childbirth. Where negative experiences were reported, these often alluded to the 'lack of time' that the midwife spent in the labour room, the use of different midwives, and the management of pain. Of the three components of social support examined, only emotional support (affect) distinguished between positive and negative experiences of childbirth, with greater emotional support associated with more positive perceptions of childbirth. Although this study only examined a relatively short frame of time in a new mother's life, the findings point to the importance of emotional support during labour and delivery from a professional person. Unlike, Wolman's (1993) research, this study examined multiparous mothers too, and found that emotional support was important to both groups' perceptions of childbirth.

#### **4.8 Social Support: Maternal Characteristics and Infant Related Issues**

The importance of social support to postpartum adjustment and subsequent parenting has been examined. Cronenwett (1985) examined perceived support in a sample of married primiparae (N=50). The study investigated the role of emotional, material, informational, and comparison support (being able to relate to the support provider). Associations were found between emotional and instrumental support received during pregnancy and mothers' confidence in coping with parenting at 6 weeks postpartum.

A study by Crnic et al. (1983) examined maternal attitudes and mother-infant interactions in the context of social support and stress in mothers of full term (n=53) and premature infants (n=52). One month after hospital discharge, a structured home interview assessed life stress, social support, satisfaction with parenting, and general life satisfaction. At 4 months corrected gestational age, mothers participated in behavioural observation sessions. Group differences were not found and data was pooled. Intimate (spousal) support was found to provide more global positive effects than support from

other sources (e.g. friends, community). Mothers who were more stressed had less positive attitudes, while mothers with greater support were more positive. Greater stress and less support was associated with decreased infant responsiveness. The authors underscore the importance of social support for mothers in providing developmental benefits to the infant.

A more recent study by Goldstein et al. (1996) also investigated the role of social support in maternal adaptation and mother-infant interactions. Specifically, the authors were interested in examining the source of support, the distinction between quantity of support and satisfaction, support as a buffer for stressful life events, and negative aspects of support. The authors assessed support quantity and satisfaction during pregnancy and at 3 months postnatal. Based on the coding of mother-infant interactions, social support during pregnancy and the postnatal was associated with maternal sensitivity, but not maternal expressivity. Mothers with larger support networks were reported to be more sensitive in interactions with their infants. The authors suggest that larger networks may have provided the emotional support that mothers required, and therefore allowed them to concentrate on their infants' needs. Sensitivity to infant needs was also associated with more varied support from the spouse during pregnancy and satisfaction with the support given. Negative effects of social support during pregnancy were reported, specifically, increased satisfaction with parental support was associated with less sensitive maternal behaviour. The results indicate the importance of support during pregnancy as well as during the postnatal period, and the possible long term effects this can have through maternal interactions.

#### **4.9 Social Support Interventions**

From the studies discussed previously, it is apparent that social support plays a role in adjustment to motherhood. The importance of social support provision has been addressed by using social support interventions of various kinds. Two studies which examine the utility of social support interventions and their effects are reported here.

Fleming et al. (1992) compared three groups of mothers: one group took part in an eight week social support group; another group received social support material through the mail; while a third group received no intervention. Maternal feelings, responsiveness and attitudes were assessed before the intervention at 6 weeks postpartum and afterwards at 5 months postpartum. The social support intervention consisted of a 2 hour session led by two psychologists and involved informal talking and sharing of experiences, usually based on a suggested topic. The 'mail' group received objective information derived from the social support sessions. The initial sessions addressed various issues, such as: birth experiences, depression, mood changes, feelings about motherhood, self, spouse, infant and others. In addition to discussing feelings, later sessions involved instruction in infant massage and learning about developmental infant norms. The last sessions also discussed issues relating to sexual and emotional intimacy with their partner, division of childcare duties, support and returning to employment.

In terms of affect, the intervention was found to have no significant effect on mood. All groups were reported to have improved mood in the postnatal period as compared to the prenatal evaluation. The intervention appeared to have negative effects on maternal attitude for depressed mothers. The authors reported that the least positive attitudes (at 5 months postnatal) were reported by depressed mothers in the intervention group, in areas of: self image, identification with motherhood, and relationship with spouse and mother. The most positive group at 5 months postnatal were the non depressed mothers in the intervention group. The authors suggest that it may not be helpful to mix depressed and non depressed mothers in the same group, as comparisons with well adjusted mothers may heighten feelings of inadequacy in depressed mothers. However, there were positive aspects of the intervention in terms of mother-infant interactions. Depressed mothers in the support group engaged in more non instrumental interactions with their babies.

Another study by Stamp et al. (1995) evaluated a support intervention during pregnancy and the postnatal period, and its effects on postnatal depression. Using an antenatal



screening questionnaire, women identified as more vulnerable to depression were randomly allocated to support intervention groups or control groups, and stratified by parity. Three intervention sessions were offered at 32 and 36 weeks gestation, and at 6 weeks postnatal. The antenatal groups offered information and opportunities for preparation, support and goal setting. The six week group offered a chance to share birth experiences, and discuss the impact of the baby in parents' lives. Depression was assessed using the Edinburgh Postnatal Depression Scale at 6 weeks, 12 weeks and 6 months postnatal.

The authors reported no significant differences between groups at each of the three assessments. The absence of improvement in intervention groups designed specifically for vulnerable women is interesting in light of Fleming et al.'s (1992) suggestion that depressed mothers may not benefit from interventions when they are in the same group as more adjusted mothers. These findings suggest that even when similarly vulnerable mothers are grouped together, expected benefits of intervention may not be forthcoming. The authors suggest that the specific focus of 'avoiding depression' in these groups may have been stigmatising to women, and may have contributed to the low attendance observed.

From the two studies mentioned, it is apparent that the provision of support intervention is not as simple as one would imagine. Other studies have reported reduced depression via intervention (e.g. Elliot et al., 1988; Holden, 1989; Holden 1996) and more positive relationship satisfaction, emotional affect, and parenting attitudes (Coffman et al., 1994). Clearly, further research on which methods are optimal for effective intervention are indicated. It is likely that the most vulnerable women are less likely to attend such groups (Stamp et al., 1995). The use of counselling interventions provided by health visitors at mother's homes would tackle this issue, and has been shown to have positive results in terms of reducing depression (see Holden: 1989, 1996).

#### **4.10 Social Support and Childbirth: A Cultural Context**

The cross-cultural aspects of support which are relevant to this thesis concern childbirth rituals. Various aspects of postpartum rituals have been described in chapters one and three. Very little research has been conducted comparing the childbirth social support systems of Western cultures with those cultures that have a tradition of postpartum ritual support. There have been studies comparing puerperal depression in Western and non Western ritualised cultures (e.g. Cox, 1983; Shimizu and Kaplan, 1987; Park and Dimigen, 1995), these findings have been discussed elsewhere in this thesis (chapter 3). However, few of these cross-cultural studies describe the social support associated with childbirth in any detail.

There are a few exceptions. For example, Shimizu and Kaplan's (1987) study of Japanese and American mothers hypothesised that the postpartum rituals of Japanese women would make them less isolated in the postpartum period compared to Japanese mothers. For both groups of mothers, the authors predicted that isolation and inadequate support would be associated with increased postpartum depression (4-6 weeks postpartum). Contrary to predictions, the authors reported no difference in isolation between the two groups of mothers. Interestingly, isolation and depression were significantly related in the American sample, but no significant relationship was found for the Japanese group. Also, greater need for help was associated with depression in American mothers only. These results point to differences between cultures in the relationship of social support to psychological outcomes. As suggested by Collins et al. (1993), different cultures may have different support needs.

A study by Park and Dimigen (1994) compared the social support networks of Scottish and Korean mothers. Korean mothers have a period of structured social support after the birth which allows them to rest and recover from childbirth, while female relatives assist with household and childcare duties. Based on the presence of this ritual support in Korean culture, Park and Dimigen (1994) hypothesised that Korean mothers would have

a greater support network, and be more satisfied with the quantity and quality of support they received compared to Scottish mothers. Based on the two types of family systems which prevail in these cultures, they also hypothesised that Scottish mothers (nuclear family) would have their spouse as a primary support person, but that spouses in the Korean sample (extended family) would play a lesser role in support.

The authors assessed support in nine areas: socialising, emotional reassurance, practical help, social reinforcement, guidance, physical comfort, appreciation, giving care, and giving advice. Contrary to expectations, Scottish mothers reported larger network sizes for socialising, emotional support and guidance. Korean mothers only reported a larger support network for physical comfort support. The hypotheses regarding satisfaction with the quality and quantity of support were not upheld. Scottish mothers reported greater satisfaction with received and given support in almost all nine support types. In line with predictions regarding the role of husband as support person, Scottish mothers mentioned the spouse as a primary supporter more often than Korean mothers. Korean mothers often named other family members as primary support persons, rather than the spouse. The findings regarding network size and satisfaction of support are explained in terms of expectations. Korean mothers expect ritual support and may therefore be less appreciative of support given, viewing it as a right, not a privilege. In terms of the psychological outcome, Korean mothers were reported to have higher depressive symptoms as measured by the Beck Depression Inventory (Park and Dimigen, 1995). The findings regarding support and depression may relate to the time of testing between six and ten weeks postnatal. It is possible that reports of smaller support networks and less satisfaction with support are due to the withdrawal of ritual support in the later weeks after birth. Further studies would have to examine social support over a longer period of time to determine what changes in support occur and how these relate to health outcomes.

The current study addresses some of the problems of previous studies by examining social support during pregnancy as well as in the postnatal period. Similar to the studies

mentioned in this section, this thesis investigates social support and depression in a Western and non Western culture.

#### **4.11 Adopting Measures of Perceived and Received Support**

In the context of the current thesis, it must be borne in mind that the study is a cross-cultural comparison, and the chosen measures of support should be appropriate for both the Scottish and Pakistani populations being studied. Another consideration relates to the multidimensional nature of social support. In the course of this chapter, it has been emphasised that specific types of support are beneficial to certain kinds of stress (Cutrona and Russell, 1990). As such, the social support questionnaires should reflect this multidimensional aspect.

A consideration of perceived support is important as studies have demonstrated an inverse relationship between perceived support and psychological distress (Cohen and Wills, 1985; Barrera, 1986). Various self report questionnaires have been used to assess perceived and received support. For example, perceived support has been measured using: the Interpersonal Support Evaluation List (ISEL; Cohen, Mermelstein, Kamarck, and Hoberman, 1985); the Perceived Support Scales for Family and Friends (PSS-Fa and PSS-Fr; Procidano and Heller, 1983); and the Social Support Questionnaire (SSQ; Sarason, Levine, Basham, and Sarason, 1983). Sarason et al. (1987) have reported high correlations between these measures, suggesting that there is a common underlying construct.

However, the use of these questionnaires is problematic. In the case of the Interpersonal Support Evaluation List (ISEL), some of the items are not particularly appropriate to Pakistani mothers. For example:

Item 11: "If I was stranded 10 miles out of town, there is someone I could call to come and get me."

Item 24: "If I decide on a Friday afternoon that I'd like to go and see a movie that evening I'd find someone to go with me."

These items are not particularly relevant to the experience of Pakistani mothers as these women generally live in a strict Muslim environment, which would make either of these items unlikely propositions.

The Perceived Support Scales for Family and Friends (PSS-Fa and PSS-Fr) only evaluates the need for support, information and feedback from family and friends. This is unnecessarily restrictive as mothers may rely on a broader set of support sources, such as health visitors, midwives etc. The Social Support Questionnaire (SSQ) focuses on the number of perceived supporters and satisfaction with perceived support. Although the items of the SSQ deal with various aspects of support, there is no emphasis on measuring different subtypes of support. The SSQ is therefore unsuitable to the needs-fit approach of social support and stress.

Interestingly, Sarason et al. (1983) commented that Weiss's (1974) categorisation of social support provisions had yet to be conveniently operationalised. However, this has since been remedied, and the provisions are operationalised as the Social Provisions Scale (Cutrona and Russell, 1987). In terms of the multidimensional measurement of perceived support, this questionnaire is the most suitable. As has already been discussed, the SPS encompasses all of the common elements of social support types: reliable alliance, attachment, guidance, social integration, and reassurance of worth. In addition, the SPS has a provision which measures support given, rather than received (*opportunity for nurturance*). This aspect of support has often been neglected in social support measures, but is included in Weiss's (1974) theoretical model as an important component of interpersonal relationships, and focuses on the importance of feeling needed by others. In the context of childbirth, this is an interesting component of support to examine, as it allows an investigation of perceptions regarding giving support to others.

The SPS items are also suitable for use with a Pakistani population, as none of the items asks about support in the context of events which are unlikely to apply to Pakistani mothers. For example, the ISEL asks about practical support in statements like, "There is no one I could call on if I needed to borrow a car for a few hours", whereas the SPS asks about the same type of support in a more general manner, "There are people I can depend on to help me if I really need it". The items of the SPS are therefore more suited to this cross-cultural evaluation, as it does not define support situations which may be culture specific. In terms of cross cultural utility, and a comprehensive measurement of support types, the SPS is the most suitable questionnaire for perceived support in the current study.

The measurement of received support is important in evaluating the actual support that is mobilised in any given situation. Gottlieb (1985) suggests that received support is more important to health outcomes after a stressful event than perceived support. Following the rationale of a needs-fit model of perceived social support, any consideration of received support would have also have to meet these requirements. A useful measure of received support should distinguish between the different subtypes of support provision, in order to evaluate which support types may be important in different contexts and at different times.

Received support has been measured using a variety of different measures, such as, the Inventory of Socially Supportive Behaviors (ISSB; Barrera et al., 1981); the Stress Questionnaire (Dunkel-Schetter et al., 1987), and the Arizona Social Support Interview Schedule (ASSIS; Barrera, 1981). As with measures of perceived support, there are problems with the use of these questionnaires in this particular study. Firstly, the ISSB is not appropriate to the measurement of specific types of received support as it is a context free inventory, and measures only general support behaviours. The Stress Questionnaire asks respondents to identify a particular stressful event occurring in the last month and then identify support persons who provided three types of support: information, aid, and

emotional support. The measurement of these three support types is not wide ranging enough for the current study of childbirth. The transition to parenthood is a challenge in the domain of social roles (Cutrona and Russell, 1990), and as such, a measure of social integration support would be useful in evaluating received support. The ASSIS is a more useful questionnaire as it assesses six different types of support receipt: confiding, material aid, advice, positive feedback, physical assistance, and social participation. In addition it also evaluates the number of support persons and satisfaction with the support given.

However, for the purposes of this study, it would be more appropriate to have a measure of received support which matches the perceived support provisions assessed by the SPS. In particular, an inventory which includes a measure of support given to others (*opportunity for nurturance*) is relevant to the arrival of a new baby in the postnatal period. For these reasons, an inventory based on the provisions of the SPS was developed for use in this study. There were three versions of the inventory: Prenatal Inventory of Socially Supportive Behaviours, Six Week Inventory of Socially Supportive Behaviours, and Eight Week Inventory of Socially Supportive Behaviours (hereafter referred to as Prenatal ISSB, Six Week ISSB, and Eight Week ISSB).

The timing measurement of these inventories were designed to provide a picture of received support over a certain period of time. The Prenatal ISSB assessed received support during the third trimester of pregnancy, the Six Week ISSB assessed received support in the six weeks following the birth, while the Eight Week ISSB assessed support received from six to eight weeks postnatal. Assessing the first six weeks after childbirth was important in order to describe aspects of received support in the context of the postpartum ritual period observed in Pakistani culture. The measurement of received support in terms of Weiss's (1974) provisions allows a description of the forty day ritual period in the context of: reliable alliance, attachment, guidance, nurturance, social integration, and reassurance of worth support. As support activation is a multifaceted

process (Dunkel-Schetter and Bennet, 1990), these inventories measure the frequency of support, network size, and support satisfaction. The use of three timed measures from the prenatal stage to two months postnatal also allows an analysis of changes in received support measures over time, from the end of pregnancy, during the six weeks postnatal, and in the two weeks after the ritual support period ends. These ISSB measures allow a comparison of the ritual support period in Pakistan with the relatively unstructured support system of Scottish mothers, within the context of a multidimensional conceptualisation of support.



## Chapter Five

### The Present Research: Aims, Objectives and Method

#### 5.1 Aims and Objectives of the Present Research

It is the purpose of this thesis to contribute to a growing area of research on cultural aspects of childbirth. "The case for carrying out more cross-cultural research into conditions is compelling because of the singular methodological advantage that not only does the event of birth identify subjects at risk, but also because the same event is surrounded by customs and rituals and social responses to parenthood that are discernibly different across selected cultures" (Kumar, 1994: p.261).

The different cultural traditions and their hypothesised benefits in preventing postnatal depression have been addressed by various anthropologists (e.g. Pillsbury, 1978; Harkness, 1987). This study investigates Stern and Kruckman's (1983) assertion that ritualised childbirth traditions provide support which helps to prevent postpartum depression. The two cultures studied in this thesis, Scottish and Pakistani, are illustrative of the cultural differences in Western and non Western birth traditions described by the aforementioned authors.

While Stern and Kruckman have based their proposition on anthropological accounts of childbirth, this thesis aims to examine this issue in a more objective manner. As the postnatal ritual period is hypothesised to prevent depression, an assessment of the time preceding and following this period would be instructive. This thesis addresses the issue by assessing depressive symptoms from the prenatal stage to two months postnatal. This allows an examination of the changes in depressive symptomatology over time and also permits a cultural comparison of cognitive and somatic depressive symptoms (see chapter 2 for a discussion of depressive symptom assessment and questionnaire choice). In particular, this will allow a comparison of depressive symptoms between a culturally patterned childbirth context and a relatively unstructured Western context.

While it has already been argued that the Beck Depression Inventory (BDI) is the most suitable questionnaire for this research, it is also useful to compare the performance of the BDI with the Edinburgh Postnatal Depression Scale (EPDS) (see chapter 2). The unique contribution of this thesis, is that there have been to date, no published studies of depressive symptoms in a childbearing Pakistani population using these questionnaires.

The role of support is implicated in the benefits of ritualised childbirth traditions. Stern and Kruckman have outlined six components of support in non Western cultures: the structuring of a distinct postpartum period, protective measures to ensure the new mother's safety, social seclusion, mandated rest, practical assistance, and social recognition of the mother's new role. In terms of the present study, this definition applies to Pakistani mothers who have such a traditional ritual support period (*chilla*). While, Stern and Kruckman identified these elements of support in non Western cultures, this thesis aims to compare the social support available and received by mothers in the context of a multidimensional model of support. On the basis of research by Weiss (1974) and Cutrona and Russell (1987), it is proposed that support be quantified and measured in terms of six provisions: reliable alliance, attachment, guidance, nurturance, social integration, and reassurance of worth (see chapter 4). This will allow an examination of social support in terms of these provisions, both across time and between cultures. While previous research has addressed the utility of certain forms of support in postnatal adaptation in the West (e.g. O'Hara et al., 1983; Cutrona, 1984; Cutrona and Troutman, 1986; Collins et al., 1993), this has been never been reported in the context of Pakistani birth culture. This thesis aims to define and describe the culturally patterned support system of Pakistani mothers in terms of a social support model which allows the opportunity to compare these two cultures.

The present study also aims to identify the possible sources of support which contribute to depressive symptoms. This is important in terms of recognising similarities and differences in support requirements in different childbirth contexts. Collins et al.'s

(1993) observation that different cultures may benefit from different types of support will be addressed by examining the elements of perceived and received support associated with depressive symptoms in each cultural group.

## **5.2 Method**

### **5.2.1 Design**

A longitudinal within subjects repeated measures design was utilised. Subjects participated in three main data collection sessions. Time 1 assessments were conducted during the prenatal stage (third trimester), time 2 occurred three weeks postnatally, and time 3 took place at eight weeks postnatal.

### **5.2.2 Participants**

Seventy-five subjects in total participated in this study, of which there were 36 Scottish mothers and 39 Pakistani mothers. Several inclusion criteria for the study were adopted in order to recruit women with comparable pregnancies. The participants who were recruited for the study were:

- in the third trimester of pregnancy, approximately 36 weeks gestation.
- classed by medical staff as having a low risk pregnancy.
- having a singleton pregnancy (i.e. no twins etc.)
- in a stable relationship (either married or co-habiting).

Two subjects did not complete the study in the Scottish group as one did not meet the study criteria, and the other withdrew from the study. In the Pakistani group 25 subjects did not complete the study. Of this group, 7 could not continue due to the death of the baby in the first few weeks after birth. There were 6 subjects who withdrew their consent to participate, 8 mothers could not be contacted and the remaining 4 subjects moved away to their in-laws/own homes before the study could be completed.

The Scottish group consisted of 25 first-time mothers (primiparous) and 11 mothers with varying numbers of children (multiparous). Of the Pakistani group, there were 17 primiparous and 22 multiparous mothers.

Demographic information relating to subjects is summarised in tables 5.1 - 5.3.

**Table 5.1 Demographic variables relating to age, marital status and household size for Scottish and Pakistani subjects\***

	Scottish		Pakistani	
	primiparous	multiparous	primiparous	multiparous
age (years)	30.5 (4.49)	30.1 (4.74)	21.2 (4.67)	26.9 (4.11)
marital status	married 88% cohabit 12%	married 73% cohabit 27%	married 100%	married 100%
marriage/ rship (years)	4.7 (2.73)	7.1 (4.09)	2.3 (3.02)	8.7 (3.43)
household size (no. of people)	2.0 (0.00)	3.6 (1.29)	9.6 (7.01)	8.8 (7.32)
no. of children	----	1.6 (1.29)	----	2.8 (1.48)

\* standard deviations in parenthesis

From the table it an be seen that the Pakistani mothers were younger than their Scottish counterparts. All of the Pakistani mothers were married as were the majority of Scottish mothers. Not surprisingly, multiparous mothers in both cultures had been involved with their husbands/partners for a longer period of time. Pakistani mothers lived in larger households than the Scottish mothers, as would be expected in an extended family system.

Information was also collated regarding the educational qualifications of subjects (table 5.2)

**Table 5.2 Time spent in education and qualifications gained for Scottish and Pakistani subjects\***

	Scottish		Pakistani	
education and qualifications	primiparous	multiparous	primiparous	multiparous
years spent in education	14.4 (3.08)	13.4 (2.42)	4.7 (5.07)	4.7 (5.06)
postgraduate	20%	9%	----	----
graduate	32%	18%	----	----
FE college	12%	18%	18%	9%
school qual.	28%	37%	12%	9%
none	8%	18%	70%	82%

\* standard deviations in parentheses

From the table it can be seen that Pakistani mothers had very little formal education, in comparison to Scottish mothers. This concurs with previous observations regarding the low levels of literacy in Pakistani women (Woods, 1991; Zaki and Johnson, 1993).

Information concerning employment status of subjects is summarised in table (5.3).

Occupations were categorised as follows:

- i) IMAP (intermediate managerial administrative or professional): for example, this included qualified pharmacists, deputy librarians, senior retail buyers and small restaurant owners.
- ii) JMAP (junior managerial administrative or professional): for example, this included secretaries, data entry clerks, salesmen, and student nurses.
- iii) Skilled manual: included craftsmen, plumbers, laboratory assistants, farmers with no employees etc.
- iv) Manual: included, for example, farm labourers, waiters, casual workers etc.
- v) Housewife: mothers who were not involved in paid employment of any kind.

**Table 5.3: Occupational categories for Scottish and Pakistani subjects**

	Scottish		Pakistani	
occupational categories	primiparous	multiparous	primiparous	multiparous
IMAP	16%	9%	----	----
JMAP	76%	36%	----	9%
skilled manual	4%	----	----	5%
manual	4%	9%	6%	9%
housewife	----	46%	94%	77%

From the table it can be seen that none of the Scottish primiparae were housewives, as compared to 94% of Pakistani first-time mothers. Almost half of the Scottish multiparous group (46%) were housewives compared to 77% of their Pakistani counterparts.

At a more informal observational level, it is of interest to note the cultural differences which defined these two groups of subjects. The Scottish sample were mainly well educated, middle class women who lived in the south side of Glasgow, or in East Kilbride. The demographic constitution of the Scottish group is very similar to volunteer samples used in other childbirth studies. These mothers were very keen to take part in the study and were happy to have the opportunity to discuss their pregnancies and births with the researcher. Indeed, it was notable that only one subject withdrew her consent to participate in the project. Most of the Scottish mothers lived in suburban areas, with adequate housing, and access to their own transport. The management of pregnancy and birth was dealt with by Rutherglen Maternity Hospital. All mothers were referred to the hospital by their family doctor. Subsequent to the booking visit, all antenatal appointments were usually dealt with by midwives, with some women being seen by the consultant obstetrician to whose care they had been assigned. As is the case for most births in the UK, all mothers in this group gave birth in a hospital setting. The

length of hospital stay after the birth varied between a few hours and five days. The length of time spent in hospital was dictated by a number of factors, with primiparous mothers and those who had an assisted delivery (e.g. Caesarean section) usually staying for longer periods.

The situation in Pakistan was very different. The Pakistani sample consisted of mothers with low levels of literacy, larger households, and a lower standard of living compared to the Scottish group. However, while there were obvious demographic differences between these two groups, the Pakistani group was actually representative of the local population. The study was conducted in the city of Rahim Yar Khan in the state of Punjab. The Punjab is mainly an agricultural area which specialises in the harvest of cotton and wheat crops. This background was reflected in the occupations of some subjects' spouses which were listed as farmers (landowners) or farm labourers. While the largest proportion of husbands in the Scottish sample were employed in junior managerial and professional categories, the pattern in the Pakistani sample indicated that skilled manual labour was the largest occupational group (e.g. electricians, builders, tailors, farmers). This is perhaps unsurprising, as the majority of these occupations did not require high levels of literacy, thus reflecting national patterns.

Unlike the situation in Scotland, there is no Pakistani equivalent of the NHS and its associated medical benefits. Specifically, this means that antenatal care is the responsibility of the mother. As mothers are usually required to pay for any check-ups and tests they have, mothers-to-be often attend a variety of different hospitals and private obstetric practices for their antenatal care. In the case of this study, the Sheikh Zayed Hospital was well attended, as it offered free antenatal checks, although a nominal fee was charged for scans and medical tests. In contrast to the Scottish birth situation, the majority of Pakistani mothers (approximately 90%) opted to have a home birth, under the care of a traditional or trained birth attendant. Of the four mothers who had hospital births, only one mother actively chose to have her baby in hospital. The

other three hospital cases occurred as these mothers had been advised that there were pregnancy complications which required medically assisted deliveries.

As has been noted previously, seven of the babies in this study died soon after birth. The most apparent reason for the majority of these deaths was the insistence of many mothers' families that the child should be born at home. In one such case, a young primiparous mother was advised to book into the hospital as she had a breech presentation and would not be able to deliver the baby naturally. However, her sisters-in-law insisted that they would bring her back as soon as she had packed enough clothes for her stay. Unfortunately, they did not return. The young mother was kept at home during the labour while a 'dai' was called on to assist the delivery. The baby boy was eventually delivered, but did not survive. Other problems contributing to compromised birth outcomes stemmed from the lack of organised medical emergency facilities (e.g. ambulance type services). Mothers were often located in remote villages which were many miles from the hospital. In cases where traditional birth attendants could not manage deliveries adequately there were often problems and delays in locating suitable transport to get mothers to the hospital, thus contributing to infant deaths.

Another obvious difference between these two groups concerned subjects' co-operation in the course of the study. It has already been mentioned that Scottish mothers were very keen to participate in the research. The situation in Pakistan was more difficult as mothers were unaccustomed to the concept of research projects. Indeed, while some mothers were happy to participate, there was often a problem with participation due to the disapproval of other family members. However, in most cases these 'objections' and suspicions could be dealt with by explaining the nature of the study and the procedure in the subjects' first language. Spoken fluency in Punjabi and Urdu and a detailed knowledge of cultural sensitivities ensured that these problems were adequately dealt with by the researcher.



### 5.2.3 Instruments

A variety of questionnaires and interview schedules were administered in the course of the study. All materials had to be translated for use with Pakistani subjects. A system of back-translation, as described by Brislin (1980) and Prieto (1992), was used to produce the materials in Urdu. Back translation refers to a technique which requires a bilingual person to translate text into a target language. In this case a Pakistani psychologist who was fluent in both English and Urdu translated the English text into Urdu. The translated text was then back translated by others into English, and the texts were compared. Translations were modified as a result of comparing texts in order to try and achieve as accurate a translation as possible.

#### **1. Personal Data Questionnaire**

This questionnaire was designed to record demographic information relating to subjects. Questions addressed personal details such as age, marital status and religion. Other areas covered details of occupation, educational qualifications, family and household information. The full versions of this questionnaire are contained in appendix 2A (English version) and appendix 2B (Urdu version).

#### **2. Beck Depression Inventory (BDI)**

The revised Beck Depression Inventory (BDI: Beck, Rush, Shaw and Emery, 1979) was used to assess depressive symptoms in this study. This version of the BDI replaced the original version developed in 1961 (Beck et al.).

The 1979 version of the BDI contains 21 items which can be sub-divided into 2 sub-scales. The cognitive-affective sub-scale consists of items 1-14 and the somatic-performance sub-scale covers items 15-21. The cognitive-affective items assess symptoms of: mood, pessimism, sense of failure, lack of satisfaction, guilt, punishment, self-dislike, self accusation, suicidal ideation, crying, irritability, social withdrawal, indecisiveness, and body image change.

The somatic-performance items assess symptoms of: work difficulty, insomnia, fatiguability, loss of appetite, weight loss<sup>1</sup>, somatic preoccupation, and loss of libido.

Each symptom is assessed by 4 independent statements. Statements differ in terms of the severity of symptom expressed therein. The items of the BDI were chosen to assess severity of depressive symptoms, without reflecting any particular theory of depression. Items are scored from 0-3, with increasingly severe symptoms receiving higher scores.

For example:

- (0) I do not feel sad
- (1) I feel sad
- (2) I am sad all the time and I can't snap out of it
- (3) I am so sad or unhappy that I can't stand it

Scores on the BDI vary between 0 and 63. Full versions of the BDI are displayed in appendix 3A (English version) and appendix 3B (Urdu version).

### **3. The Edinburgh Postnatal Depression Scale (EPDS)**

The EPDS was developed to assist primary care workers and health professionals to detect postnatal depression in new mothers.

Originally, the EPDS was developed as a 13 item questionnaire as described by Cox (1986). A factor analysis of the 13 item EPDS found two distinct 'depression' factors. This finding led to the development and validation of a 10 item EPDS which omitted the three questions contributing to the second depression factor. Further validation of the 10 item EPDS found that it had increased specificity compared to the original (Cox et al., 1987).

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<sup>1</sup> For the purposes of this research, the item on weight loss was not scored. Support for the removal of this item is cited in Powell and Drotar (1992), who state that: "the question about weight loss, as worded, was not relevant to the assessment of depression during or immediately after pregnancy and was therefore deleted" (p.259).

The EPDS consists of 10 short statements. The mother is required to underline one out of the four statements which is closest to how she has been feeling during the previous 7 days. Items are scored from 0-3, with higher scores indicating increased severity of depressive symptoms.

For example:

I have looked forward with enjoyment to things

- (0) As much as I ever did
- (1) Rather less than I used to
- (2) Definitely less than I used to
- (3) Hardly at all

Of the 10 statements, seven items are reverse scored. EPDS scores can range from 0-30. The full versions of the EPDS are contained in appendix 4A (English version) and appendix 4B (Urdu version).

#### **4. Social Provisions Scale (SPS)**

The SPS (Cutrona and Russell, 1987; Russell and Cutrona, 1984) assesses perceived social support across six dimensions based on the work of Weiss (1974):

- i Reliable alliance - assurance that one can count on others for tangible assistance.
- ii Attachment - a sense of emotional closeness and security.
- iii Guidance - advice and information.
- iv Nurturance - a sense of responsibility for the well-being of another person.
- v Social integration - a sense of belonging to a group of people who share common interests and recreational activities.
- vi Reassurance of worth - acknowledgement of one's competence and skill.

All provisions, except nurturance, assess support given by others to the respondent. Nurturance support refers to support given when taking care of others. Each of the

social support provisions is assessed by four statements. Two of the statements refer to the presence of the provision, while the other two items refer to the absence of the provision. For example, two statements used to assess reliable alliance are:

"There are people that I can rely on to help me if I really needed it"

and

"If something went wrong, no one would come to my assistance."

The SPS requires respondents to rate the degree to which these provisions are currently being provided in their relationships. Ratings are made on a four point scale, ranging from strongly disagree (1) to strongly agree (4). Items which refer to the absence of social support provisions are reverse scored. The SPS was scored by summing together negative and positive scores for each sub-scale, which could in turn be summed together to obtain a total SPS score across all provisions.

Internal consistency for the total scale has been reported as relatively high, ranging from 0.85 to 0.92 across a variety of different populations. Alpha coefficients for the individual sub-scales range from 0.64 to 0.76, and factor analysis has confirmed the six factor structure of the SPS (Russell and Cutrona, 1984). Full versions of the SPS are contained in appendix 5A (English version) and appendix 5B (Urdu version).

## **5. Inventory of Socially Supportive Behaviours (ISSB)**

This questionnaire was designed specifically for use in this study by the author. This inventory was designed to elicit more information about the social network and support satisfaction relating to the six sub-scales of the Social Provisions Scale (SPS). Three slightly different versions of the ISSB were given to mothers in the study. The versions differed in their titles: Prenatal ISSB, Six Week Postnatal ISSB and Eight Week Postnatal ISSB). The actual texts of the ISSB only differed slightly in their instructions regarding the time period to which the questions referred. The time period for the Prenatal ISSB referred to 'the past few weeks' of pregnancy. The Six Week Postnatal

ISSB referred to the 6 week period since the birth of the baby. The Eight week Postnatal ISSB referred to the 6 - 8 week postnatal period.

As the ISSB was designed to elicit more detailed information about support provisions, the time span assessed was longer, compared to the other questionnaires used in the study. The interest in the 6 week period after birth as an important marker, meant that the 6 week ISSB was given to mothers at 6 weeks postnatal. This was the only questionnaire completed outwith the three main times of assessment.

Information about network support and satisfaction was obtained for each of the social provisions outlined in the SPS: reliable alliance, attachment, guidance, nurturance, social integration and reassurance of worth. The ISSB consisted of 6 sections, encompassing each of the sub-scales of support. For example, referring to reliable alliance at the prenatal stage, mothers were asked,

"In the past few weeks, including now, have you been getting practical assistance or services from others? (i.e. chores, tasks, financial help, etc.)"

Mothers were then asked to indicate how frequently they had received reliable alliance support on a 5 point scale ranging from 'not at all' (1) to 'about every day' (5). Mothers also indicated who was involved in providing this support. Up to a maximum of 9 support persons could be listed by indicating the initials of people's names and also the relationship of the people to themselves.

The ISSB also asked mothers to rate their satisfaction with the amount of support received. Mothers indicated satisfaction on a 6 point scale, ranging from 'very dissatisfied' (1) to 'very satisfied' (6). They were also asked to rate their satisfaction with the quality of support received, which took the same format as ratings of amount satisfaction.

All the SPS sub-scales were assessed in the same way, with the exception of nurturance support. Nurturance support is the only support sub-scale which refers to support given to others, all other support provisions concern received support. The difference in the nurturance section of the ISSB concerns the absence of a question asking mothers to rate the quality of support. This was excluded as it seemed too biased to ask mothers to evaluate the quality of nurturance support they provided. Instead, mothers were asked an additional question about the amount of support required of them:

'Would you prefer more or less of this (nurturance support) in your life, or is it about right?'" Mothers could then choose to tick a response corresponding to 'more', 'about right' or 'less'.

Full versions of the ISSB can be found in the appendices. Appendix 6A contains the Prenatal Inventory of Socially Supportive Behaviours (English version), while appendix 6B contains the Urdu version. The Six Week Inventory of Socially Supportive Behaviours can be found in appendix 7A (English version) and appendix 7B (Urdu version). The Eight Week Postnatal Inventory of Socially Supportive Behaviours is contained in appendix 8A (English version) and appendix 8B (Urdu version).

## **6. Interview Questions**

Mothers were interviewed using a semi-structured interview technique at each time of assessment. The questions addressed issues pertinent to the particular stage of pregnancy or postnatal period being assessed. Three sets of questions were generated for the study, in order to gain more insight into the mothers' feelings, concerns and coping behaviours.

At time 1, the Antenatal Interview Questions addressed issues dealing with conception, pregnancy, feelings about the impending birth and the baby's arrival. A full version of these questions is contained in appendix 9A (English version) and 9B (Urdu version).

At time 2 (3 weeks postnatal) mothers were asked about their birth experience, support received since the birth, dietary considerations, and various aspects of child care. A full version of the questions posed to mothers at time 2 can be found in appendix 10A (English version) and appendix 10B (Urdu version).

At time 3 (8 weeks postnatal) mothers were asked questions which addressed many areas common to time 2, in order to establish changes in routines and support available to mothers. Again, mothers addressed issues of child care management and their coping behaviours at this time. A full version of these questions is contained in appendix 11A (English version) and 11B (Urdu version).

#### 5.2.4 Procedure

Ethical approval for the study was required in order to gain access to Scottish mothers through antenatal clinic attendance. The research project was discussed with all of the consultant obstetricians at Rutherglen Maternity Hospital: Drs. Mowat, Björnsson, Kraszewski, McDougall and Mack. All of the consultants were informed about the background to the research project and gave their approval to approach antenatal out-patients at their clinics. After the consultants' approval had been granted, an official proposal was submitted. The research proposal was subsequently submitted to The Victoria Infirmary NHS Trust Ethics Committee in Glasgow, and approval for the project was granted (appendix 12).

Access to subjects in Pakistan was gained via a series of meetings with health service providers in the Rahim Yar Khan district to discuss the research project. Permission to approach mothers was obtained by arranging a meeting with the director and administrator of The Sheikh Zayed Hospital in Rahim Yar Khan. The purpose of the research and the co-operation required by the obstetric staff were discussed. Permission

to approach women at the hospital was granted and a staff midwife, Mrs Shehnaz Begum, was assigned to identify women who met the study criteria.

Out-patients who met the study criteria of low risk single pregnancy of approximately 36 weeks and who were involved in a stable relationship were approached and asked whether they would participate in the research study. Women who agreed to participate were asked to suggest a suitable time for the first meeting at their homes.

At the first meeting (time 1), subjects completed the personal data questionnaire, the BDI, SPS and prenatal ISSB. Mothers also participated in a semi-structured interview which was tape recorded. Mothers were contacted to arrange another meeting at their homes for the time 2 assessment at 3 weeks postnatal. Mothers completed the BDI and SPS and were also interviewed. At 6 weeks postnatal, mothers were asked to complete the 6 week ISSB. Arrangements were made to meet mothers at home for the final meeting at 8 weeks postnatal (time 3). At this meeting mothers completed the BDI, SPS and 8 week ISSB, in addition to participating in an interview.



**Chapter Six**  
**Results: Analyses of Depressive Symptoms**

**6.1 Analyses of BDI Global Scores**

Descriptive statistics for the BDI are summarised in table 6.1. The table summarises means and standard deviations of global scores on the BDI for each sub-group across time.

**Table 6.1 Group means and standard deviations on BDI global scores for each time assessment**

	Time 1		Time 2		Time 3	
subgroup	mean	s.d.	mean	s.d.	mean	s.d.
Scottish primiparae	9.48	4.66	7.88	5.13	6.00	4.89
Scottish multiparae	10.72	5.02	7.27	4.26	6.09	2.38
Pakistani primiparae	11.82	7.40	9.94	6.89	10.65	5.94
Pakistani multiparae	16.27	9.89	13.68	10.24	10.54	8.23

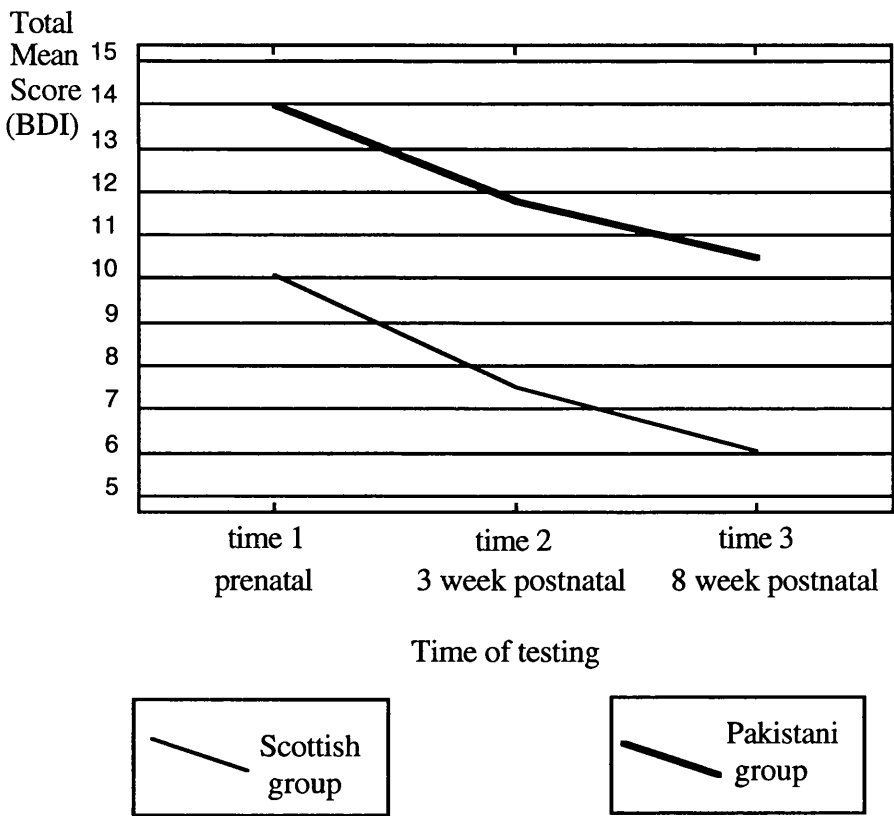
A 3 way repeated measures analysis of variance was conducted. Between subjects variables were culture and parity, and the within subjects measure was time of testing. The dependent variable was scores on the BDI. Anova results are summarised in table 6.2.

**Table 6.2 Analysis of variance results: global scores on BDI**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	917.99	71	103.32	8.88	.01
Parity (P)	1	109.96	71	103.32	1.06	n.s
Time (T)	2	248.69	142	19.43	12.80	.001
CxP	1	73.19	71	103.32	.71	n.s
CxT	2	1.35	142	19.43	.07	n.s
PxT	2	35.98	142	19.43	1.85	n.s
CxPxT	2	24.09	142	19.43	1.24	n.s

The results of the analysis of variance show that there were significant main effects for culture,  $F(1, 71) = 8.88$ ,  $p < 0.01$  and time of assessment,  $F(2, 142) = 12.80$ ,  $p < 0.001$ . None of the interactions were significant. There was also no significant main effect of parity, demonstrating that primiparous and multiparous mothers responded similarly. These effects are illustrated graphically in Figure 6.1, showing that the Pakistani group scored significantly higher on the BDI than the Scottish group at all time assessments. The significant main effect of time is also apparent from the graph, with scores decreasing over time, the highest scores at time 1 and the lowest at time 3.

Figure 6.1 Graph of culture and time interaction: global scores on BDI



A post-hoc Newman-Keuls analysis investigated the significant main effect of time in more detail (table 6.3).

Table 6.3 Newman-Keuls summary: main effect of time on global scores of BDI, means and probability levels.

main effect Time	Scottish means	Pakistani means	Probability levels *		
			Time 1	Time 2	Time 3
1	10.10	14.05		.001 (S)	.001 (S)
2	7.54	11.81	.001 (P)		n.s (S)
3	6.05	10.55	.001 (P)	n.s (P)	

\* S = Scottish group      P = Pakistani group

The pattern of results is the same for both Scottish and Pakistani subjects. From table 6.3 it can be seen that there were significant differences between times 1 and 2 and also between times 1 and 3. Differences between times 2 and 3 were non significant for both groups.

As the analysis of global scores revealed no significant main effect of parity, data was collapsed across parity for all of the remaining analyses pertaining to the BDI.

## **6.2 Analysis of BDI Sub-Scales:**

### Average sub-scale scores

Further to the analysis of global scores, an analysis of the sub-scales of the BDI was carried out.

Mean scores were calculated for each of the sub-scales by adding together the scores and dividing by the number of items in each sub-scale (table 6.4). These mean sub-scale scores will be referred to as scale scores in the following text. There were fourteen items in the cognitive-affective sub-scale and six in the somatic-performance sub-scale.

Ordinarily, there are seven items in the somatic-performance sub-scale, however, item number 19 was removed from the analysis. It was felt that item 19, which related to the weight loss dimension, was not appropriate due to possible confounding with normal physiological changes associated with weight gain and loss in the course of pregnancy and the postpartum. This was further supported by the assertion of subjects that this item was not relevant to them, especially during pregnancy.

**Table 6.4 Means and standard deviations \* of cognitive-affective and somatic-performance sub-scales at each time assessment**

	Time 1		Time 2		Time 3	
subgroup	cognitive affective	somatic performance	cognitive affective	somatic performance	cognitive affective	somatic performance
Scottish	0.30 (0.23)	0.95 (0.40)	0.28 (0.25)	0.62 (0.33)	0.24 (0.21)	0.45 (0.32)
Pakistani	0.54 (0.46)	1.14 (0.54)	0.49 (0.52)	0.88 (0.48)	0.43 (0.39)	0.75 (0.42)

\* Standard deviations in parentheses

Both sub-sales were analysed using a manova on the scale score data

MANOVA: comparing the cognitive affective and somatic performance sub-scales

A MANOVA was conducted using the cognitive-affective and somatic-performance scale scores as dependent variables. Results of this analysis are given in table 6.5.

**Table 6.5 MANOVA results: comparison of cognitive-affective and somatic-performance sub-scales**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	5.92	73	.53	11.23	.001
Time (T)	2	2.65	146	.10	25.35	.001
subscale(S)	1	19.89	73	.10	204.51	.001
CxT	2	.01	146	.10	.10	n.s
CxS	1	.02	73	.10	.25	n.s
TxS	2	1.31	146	.06	22.76	.001
CxTxS	2	.06	146	.06	1.03	n.s

The results of the analysis show that there is a significant main effect of culture ( $F(1, 73) = 11.23, p < 0.001$ ), with Pakistani subjects scoring higher on both sub-scales (means: cognitive-affective = 0.48; somatic-performance = 0.92) compared to the Scottish group (means: cognitive-affective = 0.27; somatic-performance = 0.68). Although there are significant main effects of time and sub-scale, there is also a significant time x sub-scale interaction ( $F(2, 146) = 22.76, p < 0.001$ ). This result demonstrates that the sub-scales were differentially affected by time of testing. These results were further investigated by post-hoc Newman-Keuls analysis of the significant interaction (table 6.6).

**Table 6.6 Newman-Keuls summary: time and sub-scale interaction**

time	sub-scale	group means	probability levels *					
			time 1 CA	time 1 SP	time 2 CA	time 2 SP	time 3 CA	time 3 SP
1	CA	.30 (S) .54 (P)		.001(S)	n.s (S)	.001(S)	n.s (S)	.001(S)
	SP	.95 (S) 1.14(P)	.001(P)		.001(S)	.001(S)	.001(S)	.001(S)
2	CA	.28 (S) .49 (P)	n.s (P)	.001(P)		.001(S)	n.s (S)	.001(S)
	SP	.62 (S) .88 (P)	.001(P)	.001(P)	.001(P)		.001(S)	.001(S)
3	CA	.24 (S) .43 (P)	n.s (P)	.001(P)	n.s (P)	.001(P)		.001(S)
	SP	.45 (S) .75 (P)	.001(P)	.001(P)	.001(P)	.001(P)	.001(P)	

\* S = Scottish group

CA = cognitive-affective

P = Pakistani group

SP = somatic-performance

Results demonstrate that Pakistani and Scottish subjects both responded differently on the cognitive-affective dimension of the BDI, as compared to the somatic-performance sub-scale at each time assessment ( $p < 0.001$ ). Scores on the cognitive-affective dimension were lower compared to the somatic-performance sub-scale.

Both cultural groups demonstrated the same pattern of results over time. The post-hoc results demonstrate that there were no significant differences over time on the cognitive-affective sub-scale. However, the somatic-performance sub-scale was affected by time of testing. Group means for both cultures demonstrate a pattern of decreasing scores over time. For both Scottish and Pakistani subjects, scale scores are significantly different from each other at each of the three times of testing ( $p < 0.001$ ).

Figure 6.2 graphically illustrates the pattern of responding on both sub-scales over time and between cultures.

**Figure 6.2 Graph of the cognitive-affective and somatic-performance scale scores over time for Pakistani and Scottish subjects.**

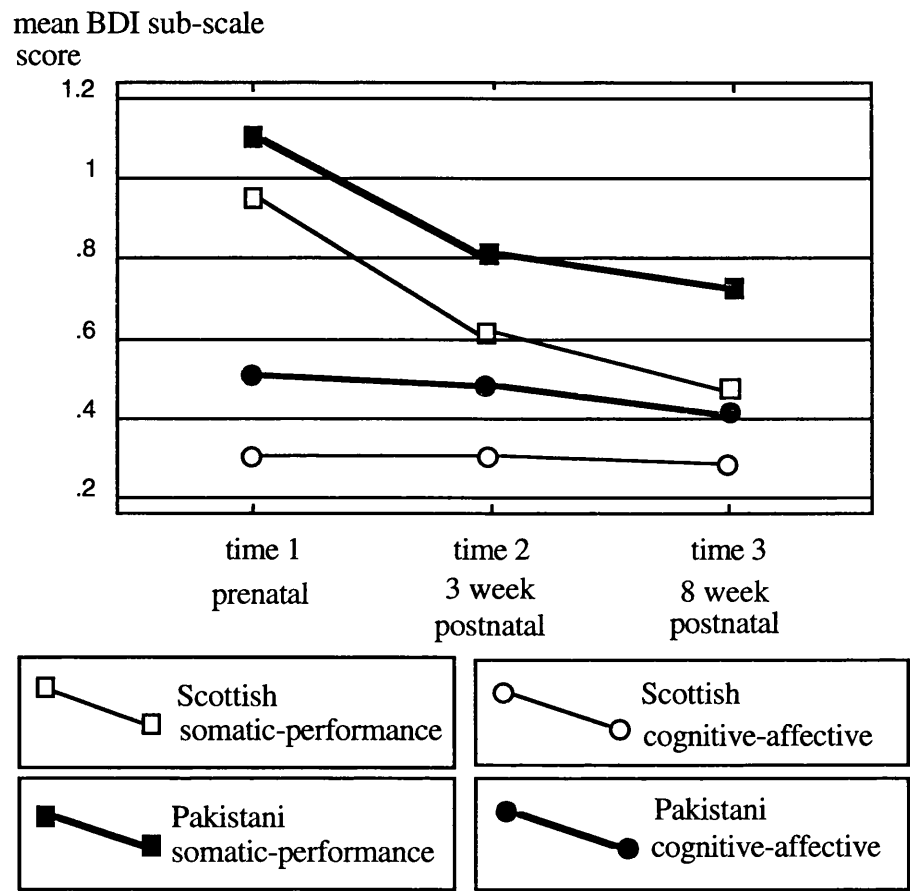


Figure 6.2 clearly shows that the cognitive affective sub-scale scores remained relatively unchanged over time for both groups. The somatic-performance sub-scale, however, was clearly affected by time of testing, with scores decreasing over time for both groups. On both sub-scales, Pakistani subjects' scale scores were significantly higher compared to Scottish subjects.



### 6.3 Analyses of the Levels of Depression (BDI)

Scores on the BDI can be categorised according to increasing levels of severity. O'Hara et al. (1984) classed scores above 9 in the so called 'depressed' category, with scores of 0-9 being defined as 'non-depressed'. Beck and Steer's (1993) manual for the scoring of the BDI provides a more detailed breakdown of scores in the depressed category. These allow a clearer picture of severity of depression to emerge from the data without conflicting with the cut-off score dichotomy used by O'Hara in research with similar populations. Beck and Steer classed scores of 0-9 as 'minimal depression', 10-16 as 'mild depression', 17-29 as 'moderate' and scores of 30-63 as 'severe depression'. For the purposes of categorising the scores in the current study, scores of 0-9 will be classed as 'non-depressed'.

**Table 6.7 Percentage levels of depression at each time assessment for Scottish and Pakistani subjects**

Percentage levels of depression at each time assessment			
depression category	time 1 prenatal	time 2 3 week postnatal	time 3 8 week postnatal
non depressed (0-9)	Scottish 53% Pakistani 38%	Scottish 64% Pakistani 54%	Scottish 80% Pakistani 49%
mild (10-16)	Scottish 36% Pakistani 23%	Scottish 33% Pakistani 13%	Scottish 17% Pakistani 33%
moderate (17-29)	Scottish 11% Pakistani 31%	Scottish 3% Pakistani 28%	Scottish 3% Pakistani 15%
severe (30-63)	Scottish 0% Pakistani 8%	Scottish 0% Pakistani 5%	Scottish 0% Pakistani 3%

At the prenatal assessment (Time 1) it can be seen from table 6.7 that approximately half of the Scottish group scored in the 'non-depressed category', as compared to 38% of Pakistani subjects. In the 'mild depression' category there were 36% of Scottish subjects

as compared to 23% of Pakistani subjects. The pattern of scoring is reversed in the final two categories of depression, with Pakistani subjects scoring more in these categories compared to Scottish mothers. In the 'moderate depression' category, there were 11% of Scottish mothers compared to 31% of Pakistani mothers. In the 'severe depression' category, there were no Scottish subjects with scores high enough to be included in this sub-division. Among the Pakistani group, there were 8% of mothers whose scores met the criteria for inclusion in this category.

At the 3 week postnatal assessment (time 2) a higher percentage of subjects, compared to time 1, met the criteria for the 'non-depressed' category. Again, there was a larger percentage of Scottish mothers (64%) than Pakistani mothers (54%) in this category. Score criteria in the 'mild depression' category were met by 33% of Scottish mothers compared to 13% of Pakistani mothers. In the other two depression categories, the pattern was again reversed, with more Pakistani mothers represented in these groups. The 'moderate depression' category included 3% of Scottish mothers compared to 28% of Pakistani mothers. Again, in the 'severe depression' category there were no Scottish subjects as compared to 5% of Pakistani subjects.

At the final 8 week postnatal assessment (time 3), 80% of the Scottish sample's scores fell into the 'non-depressed' category compared to 49% of Pakistani mothers. The 'mild depression' category included 17% of Scottish mothers compared to 33% of Pakistani mothers. There were 3% of Scottish mothers in the 'moderate depression' category compared to 15% of the Pakistani sample. Again, at time 3, there were no Scottish mothers in the 'severe depression' category compared to 3% of Pakistani mothers.

The pattern of scores over time in each depression category differed for each cultural group. Scottish mothers were increasingly represented in the non depressed category as assessments progressed. The Pakistani sample's representation in this category increased from time 1 to time 2 and then decreased slightly at time 3.

In the 'mild depression' category the percentage of Scottish subjects decreased over time, with the largest decrease occurring from time 2 to time 3. The Pakistani sample's percentage decreased from time 1 to time 2 and then increased at time 3.

In the 'moderate depression' category, there was a large decrease in the percentage of Scottish subjects scoring in this sub-division from time 1 to time 2. The percentage of Scottish subjects in the 'moderate' category remained unchanged from time 2 to time 3. The Pakistani sample's percentages in this category decreased steadily over time.

Finally, there were no Scottish subjects in the 'severe' category at any of the time assessments. The only subjects in this category were a small proportion of Pakistani subjects. The pattern of scores in this category decreased over time.

Scores were reclassified according to O'Hara et al.'s (1984) dichotomy of depressed and non-depressed subjects. In a study of pregnant and postnatal subjects, they used a cut-off point of 9 to distinguish the groups.

### 6.3.1 Chi Square Analyses of BDI Total Scores, Based on 'Depression' Categorised as Scores >9 at each Time Assessment

A series of 2x2 chi-squares were conducted using the cut-off point of 9 to categorise the groups into 'non-depressed' and 'depressed'.

At the time 1 assessment, Scottish and Pakistani subjects were compared,  $\chi^2(1) = 1.55$ ,  $p = 0.21$ . Differences were non significant, with 55% of both cultural groups scoring above the cut-off point of 9.

At time 2, both cultural groups were compared,  $\chi^2(1) = 0.78$ ,  $p = 0.38$ . Differences were again non significant with 59% of both Pakistani and Scottish mothers scoring below 9.

At the final assessment (time 3), Pakistani and Scottish subjects were again compared. Chi-square results revealed a significant difference between groups,  $\chi^2(1) = 8.24$ ,  $p < 0.01$ . More Pakistani mothers scored above the cut-off point of 9 (51%), compared to Scottish mothers (19%) .

### 6.3.2 Chi Square Analyses of BDI Scores Based on Categories of Depressive Severity

The analysis was further refined by comparing the groups across levels of depressive severity (see table 6.7), as opposed to the previous 'depressed' and 'non depressed' dichotomy. The Scottish and Pakistani subjects were compared on three redefined depression categories: 'non depressed', 'mild', and 'moderate to severe'. The comparisons were conducted for each of the three times of testing.

#### Time 1

A 3x2 chi-square test produced a significant result,  $\chi^2(2) = 7.46, p < 0.05$ . This demonstrated that categorisation of subjects into these depression groupings was significantly different for the two cultural groups. A further 2x2 chi-square was conducted on two depression categories: 'non depressed and mild' as compared to 'moderate and severe'. The results indicated a significant difference between Pakistani and Scottish subjects on this dichotomy of severity,  $\chi^2(1) = 7.40, p < 0.01$ . More of the Pakistani subjects scored in the 'moderate/severe' category (38.5%) as compared to Scottish subjects (11%).

#### Time 2

A 3x2 chi-square was conducted, results were highly significant,  $\chi^2(2) = 13.16, p < 0.001$  demonstrating that grouping the scores on the BDI into these depression categories was significantly different for Pakistani and Scottish subjects. Again, a further 2x2 chi-square was conducted on the 'non depressed and mild' category as compared to 'moderate and severe'. Results were highly significant,  $\chi^2(1) = 11.51, p < 0.001$  demonstrating that these two grouping categories were also significantly different for both groups of subjects. A greater number of Pakistani subjects scored in the 'moderate/severe' category, 33% compared to just 3% of the Scottish group.

Time 3

Results of the 3x2 chi-square demonstrated that both groups were again significantly different based on these score categories,  $\chi^2(2) = 9.06$ ,  $p < 0.01$ . A 2x2 chi-square investigating the 'non depressed and mild' category as compared to 'moderate and severe' across the two groups of subjects was also significant,  $\chi^2(1) = 4.52$ ,  $p < 0.05$ . Significantly more Pakistani mothers (18%) scored in the 'moderate/severe' category compared to the Scottish sample (3%).

### **6.3.3 Analyses of Variance Results: BDI Scores in the Depressed Categories (Scores >9)**

The depressed category scores were further investigated by a series of analyses of variance conducted on BDI total scores above the cut-off point of 9.

Time 1

At the prenatal assessment there was a significant main effect of culture,  $F(1,39) = 8.20$ ,  $p < 0.01$ . Pakistani subjects scored higher (mean = 19.5) than the Scottish group (mean = 13.9). The mean score for the Pakistani 'depressed' subjects falls into the 'moderate depression' category, whereas the mean for the Scottish group falls into the 'mild' category.

Time 2

At the 3 week postnatal assessment there was a significant main effect of culture  $F(1, 29) = 11.96$ ,  $p < 0.01$ . Pakistani subjects scored higher (mean = 20.1) than the Scottish group (mean = 13.0). Again, the mean scores for the Pakistani depressed subjects falls into the 'moderate depression' category, whereas the mean for the Scottish group falls into the 'mild' category.

Time 3

At the 8 week postnatal assessment there was no significant main effect of culture. The Scottish group mean was 13.0 and the Pakistani group mean at time 3 was 15.8. The Scottish group mean again fell into the 'mild depression' category. However, in comparison to the other time assessments, the Pakistani group mean fell into the upper range for 'mild depression'.

## 6.4 Item Analyses of BDI

An investigation of the items of the BDI was conducted to determine which depressive symptoms contributed to the significant differences found by previous analyses. The two cultural groups' scores on each item of the BDI across time were analysed using analysis of variance. Items 1-14 represent the cognitive-affective sub-scale, and items 15-21 represent somatic-performance. Scores on each item ranged from 0 to 3, with higher scores reflecting increased depressive symptoms.

### 6.4.1 Item Analyses of the Cognitive-Affective Sub-Scale

The results of the analyses of variance for the cognitive-affective items of the BDI are summarised in table 6.8.

**Table 6.8 Significant anova results: item analyses of cognitive-affective sub-scale (items 1-14)**

Item name	2 way anova: significant results
1. mood	main effect of culture: $F(1, 73) = 30.27, p < 0.001$
2. pessimism	main effect of culture: $F(1, 73) = 43.31, p < 0.001$
3. sense of failure	main effect of culture: $F(1, 73) = 18.62, p < 0.001$
4. self dissatisfaction	main effect of culture: $F(1, 73) = 8.72, p < 0.01$
5. guilt	main effect of culture: $F(1, 73) = 7.90, p < 0.01$
6. sense of punishment	main effect of culture: $F(1, 73) = 19.82, p < 0.001$
7. self-dislike	main effect of culture: $F(1, 73) = 9.28, p < 0.01$
8. self-accusations	no significant differences
9. suicidal ideation	main effect of culture: $F(1, 73) = 8.17, p < 0.01$
10. crying	no significant differences
11. irritability	no significant differences
12. social withdrawal	no significant differences
13. indecisiveness	no significant differences
14. body image change	main effect of time: $F(2, 146) = 4.21, p < 0.05$



The results of the anovas revealed that there were significant main effects of culture for 8 out of 14 items in the cognitive-affective sub-scale. These differences were found on items measuring mood, pessimism, sense of failure, self dissatisfaction, guilt, sense of punishment, self dislike and suicidal ideation. In all of these analyses, the Pakistani item means were higher compared to the Scottish group. There were no significant differences on symptoms measuring self accusations, crying, irritability, social withdrawal, and indecisiveness.

Item 14 (body image change) was the only item in the cognitive-affective sub-scale which demonstrated a significant main effect of time. A post-hoc Newman-Keuls analysis revealed that there were differences between mean scores at time 1 (0.65) and time 2 (0.40). However, no significant differences were found when comparing the time 3 mean (0.50) with other assessment times.

### 6.4.2 Item Analyses of the Somatic-Performance Sub-Scale

The results of the analyses of variance for the somatic-performance items of the BDI are summarised in table 6.9.

**Table 6.9 Significant anova results: item analyses of somatic-performance sub-scale (items 15-21)**

Item name	2 way anova: significant results
15. work difficulty	culture x time interaction: $F(2, 146) = 3.73, p < 0.05$
16. insomnia	main effect of time: $F(2, 146) = 39.30, p < 0.001$
17. fatiguability	main effect of time: $F(2, 146) = 13.91, p < 0.001$
18. loss of appetite	culture x time interaction: $F(2, 146) = 3.91, p < 0.05$
19. weight loss	item 19 excluded from analysis
20. somatic preoccupation	main effect of time: $F(2, 146) = 3.63, p < 0.05$
21. loss of libido	main effect of culture: $F(1, 73) = 27.46, p < 0.001$ main effect of time: $F(2, 146) = 4.25, p < 0.05$

Item 15- work difficulty: the anova results revealed a significant culture and time interaction. A post-hoc Newman-Keuls was conducted to investigate this result further. Only the Scottish group demonstrated significant differences over time. The means for this group decreased over time, with significant differences between time 1 (1.00) and time 2 (0.58), and also time 1 and time 3 (0.36). The difference between time 2 and time 3 was non significant. No significant differences were found across time in the Pakistani group (means: time 1 = 0.90, time 2 = 0.77, time 3 = 0.79). The only significant difference between cultures was found at time 3. Again, the Pakistani subject mean (0.79) was higher than the Scottish group mean (0.36).

Item 16- insomnia: a significant main effect of time was found for this item. A post-hoc Newman-Keuls analysis was conducted. Scottish and Pakistani group means decreased over time. For both groups there was a significant difference between time 1 (Scottish

mean = 1.36, Pakistani mean = 1.26) and time 2 (Scottish mean = 0.47, Pakistani mean = 0.62). There was also a significant difference between time 1 and time 3 (Scottish mean = 0.31, Pakistani mean = 0.51). There was no significant difference between times 2 and 3.

Item 17- fatiguability: a significant main effect of time was found on this item. A post-hoc Newman-Keuls analysis revealed that there were significant decreases between time 1 (Scottish mean = 1.25, Pakistani mean = 1.35) and time 2 (Scottish mean = 1.02, Pakistani mean = 0.97). There was also a significant difference between time 1 and time 3 (Scottish mean = 0.78, Pakistani mean = 0.97). No significant difference was found between time 2 and time 3. The pattern over time revealed a decrease from time 1 to time 3. The Pakistani group means were non significantly higher at all time assessments, except time 2 on the fatiguability item.

Item 18- loss of appetite: a significant culture and time interaction was found on this item. A post-hoc Newman-Keuls analysis revealed that there were no significant differences across time for the Scottish group (means: 0.50, 0.47 and 0.25). Pakistani group results revealed significant differences between time 1 (mean = 0.79) and time 2 (mean = 0.23). There was also a significant difference between time 1 and time 3 (mean = 0.15). No significant difference was found between time 2 and time 3. Between cultures, there was one significant difference at time 1, with the Pakistani group mean for this item higher than the Scottish mean. The Pakistani group mean was higher than the Scottish mean, only at time 1.

Item 19- weight loss: this item was excluded from the analysis as subjects felt that it was not relevant to them, especially at the prenatal stage of testing. In addition to this, Pakistani subjects were often unsure of whether they had indeed lost weight at postnatal assessments.

Item 20- somatic preoccupation: a significant main effect of time was found. Post-hoc Newman-Keuls analysis revealed significant decreases between time 1 (mean = 0.58) and time 3 (means = 0.38).

Item 21- loss of libido: this was the only item in the somatic-performance sub-scale that revealed a significant main effect of culture. The mean score for the Pakistani subjects (1.85) was higher than the Scottish group mean (0.85). There was also a significant main effect of time which was further investigated by a post-hoc Newman-Keuls analysis. This revealed significant decreases between means at time 1 (1.48) and time 3 (1.14), and also between time 2 (1.44) and time 3. Differences between time 1 and time 2 were non significant.

6.5 Analyses of the Edinburgh Postnatal Depression Scale (EPDS)

6.5.1 Analyses of EPDS Global Scores

Descriptive statistics for the EPDS are summarised in table 6.10. The table summarises means and standard deviations of global scores on the EPDS for each sub-group over time.

Table 6.10 Group means and standard deviations on EPDS global scores for each time assessment

	Time 1		Time 2		Time 3	
subgroup	mean	s.d.	mean	s.d.	mean	s.d.
Scottish primiparae	8.24	3.82	9.96	5.43	6.20	3.92
Scottish multiparae	10.36	4.43	8.54	4.08	9.00	3.92
Pakistani primiparae	6.00	5.22	7.00	5.50	7.18	4.57
Pakistani multiparae	10.00	5.66	8.23	8.31	6.00	6.64

A 3 way repeated measures analysis of variance was conducted. Between subjects variables were culture and parity, and the within subjects variable was time of testing. The dependent variable was global scores on the EPDS. Anova results are summarised in table 6.11.

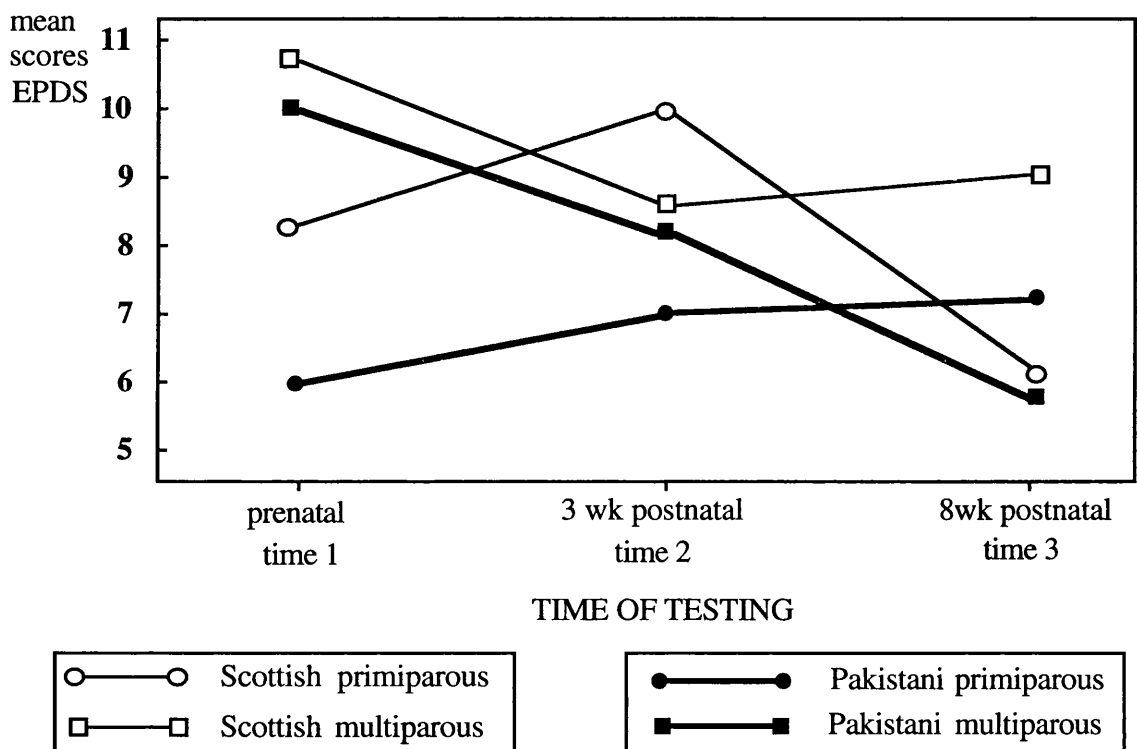
**Table 6.11 Analysis of variance results : global scores on EPDS**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	88.57	71	63.36	1.40	n.s
Parity (P)	1	81.00	71	63.36	1.28	n.s
Time (T)	2	48.35	142	12.31	3.93	n.s
CxP	1	.42	71	63.36	.01	n.s
CxT	2	1.68	142	12.31	.14	n.s
PxT	2	44.90	142	12.31	3.65	.05
CxPxT	2	55.73	142	12.31	4.53	.05

The results of the analysis of variance reveal a significant 3 way interaction between culture, parity and time,  $F(2, 142) = 4.53, p < 0.01$ . This result indicates that culture and parity are differentially affected by time, as shown in figure 6.3.

Figure 6.3 shows the parity and time interactions for both cultural groups. A post-hoc Newman-Keuls analysis was conducted to investigate this result further. Three significant differences were found on the post-hoc test. In the Scottish group, primiparous subject scores were significantly higher at time 2 (mean = 9.96) compared to time 3 (mean = 6.20). This indicates the only significant difference found in the Scottish group ( $p < 0.01$ ).

**Figure 6.3 Graph of parity and time interaction on EPDS for Scottish and Pakistani subjects**



Although no other significant differences were found for the Scottish group, it is evident from the graph that primiparous and multiparous subjects showed different patterns of responding on the EPDS over time. Scottish primiparae mean scores on the EPDS increased from time 1 to time 2 and then dropped to their lowest level at time 3. Scottish

multiparae mean scores decreased from time 1 to their lowest point at time 2, and then increased slightly at time 3.

The other two significant differences on the post-hoc test related to the Pakistani group. There was a statistically significant difference at time 1 ( $p < 0.05$ ), the Pakistani multiparous mean score (10.00) on the EPDS was higher than Pakistani primiparous subjects (6.00). The other significant difference ( $p < 0.01$ ) was found between mean scores of Pakistani multiparae at times 1 and 3. The mean score at time 1 (10.00) was higher than the score at time 3 (6.00).

As with the Scottish sample, the pattern of responding as shown by the graph differs over time. Pakistani primiparae scores show a gradual increase over time. Pakistani multiparae show the opposite pattern, with scores decreasing steadily over time.

The pattern of responding on the EPDS did not seem to conform to a similar pattern over time for each sub-group. In general, the Pakistani mean scores were lower compared to the Scottish group. From the graph (figure 6.3), the most obvious distinction seems to be between primiparae and multiparae as opposed to a cultural distinction in responding.



### 6.5.2 Analyses of the Levels of Depression (EPDS)

Scores on the EPDS can be categorised into 'depressed' and 'non depressed' categories using the cut-off point of 12/13 (Holden, 1994).

**Table 6.12 Percentages of 'non-depressed' and 'depressed' subjects (scores of 12-30)**

	Time 1		Time 2		Time 3	
Group	non depressed	depressed	non depressed	depressed	non depressed	depressed
Scottish primiparae	84% N= 21	16% N= 4	52% N= 13	48% N= 12	88% N= 22	12% N= 3
Scottish multiparae	73% N= 8	27% N= 3	73% N= 8	27% N= 3	64% N= 7	36% N= 4
Pakistani primiparae	82% N= 14	18% N= 3	65% N= 11	35% N= 6	82% N= 14	18% N= 3
Pakistani multiparae	59% N= 13	41% N= 9	68% N= 15	32% N= 7	86% N= 19	14% N= 3

A series of 2x2 Chi-squares comparing within cultural groups and between cultures were all non significant.

A series of 2 way analyses of variance were conducted on scores above the cut-off point of 12 to determine whether there were any differences attributable to culture or parity in 'depressed' scores.

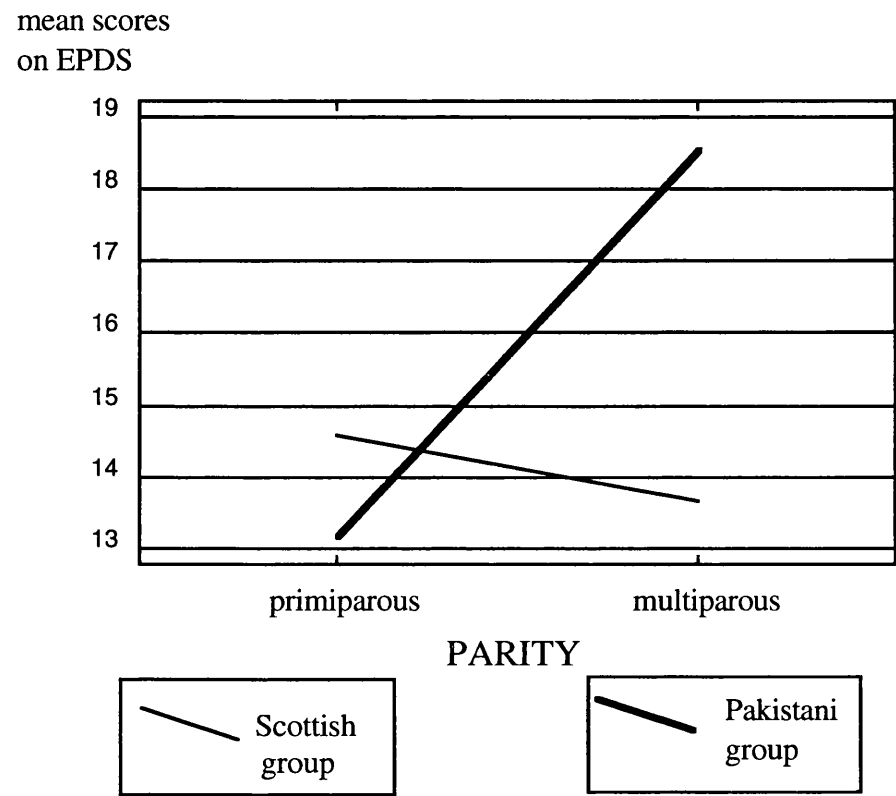
#### Time 1

There were no significant differences at time 1, indicating that neither culture or parity distinguished between mothers who scored above the threshold of 12 on the EPDS.

Time 2

At time 2 there was a significant culture and parity interaction,  $F(1, 24) = 4.29, p < 0.05$ . This is illustrated graphically in figure 6.4.

**Figure 6.4** Graph of culture and parity interaction at time 2 on EPDS



Post-hoc results revealed that there was a significant difference ( $p < 0.05$ ) between mean scores of primiparae and multiparae in the Pakistani group. Primiparous mean for the Pakistani group was lower (13.17) compared to the multiparous mean (18.57). No significant differences were found in the Scottish group, with the pattern indicating higher scores in primiparous subjects (mean = 14.15) compared to multiparae (12.40).

Time 3

Similar to time 1, there were no significant differences at time 3. Again, neither culture or parity distinguished between mothers who scored above 12 on the EPDS at time 3.

A more detailed analysis of the EPDS was conducted by examining each item individually.

### 6.5.3 Item Analyses of EPDS

In order to illustrate which items on the EPDS were important in determining observed differences in responding, analyses of variance were conducted on item scores over time. Between subjects variables were culture and parity, and the within subjects factor was time of testing. Results of these analyses are summarised in table 6.13. Scores on each item of the EPDS range from 0-3.

**Table 6.13 Summary of anova results on items of the EPDS**

Item statement	3 way anova: significant results
1. "I have been able to laugh and see the funny side of things"	no significant differences
2. "I have looked forward with enjoyment to things"	no significant differences
3. "I have blamed myself unnecessarily when things went wrong"	main effect of culture $F(1, 71) = 8.75$ , $p < 0.01$
4. "I have been anxious or worried for no good reason"	main effect of culture $F(1, 71) = 42.23$ , $p < 0.001$ main effect of parity $F(1, 71) = 4.51$ , $p < 0.05$ main effect of time $F(2, 142) = 3.33$ , $p < 0.05$
5. "I have felt scared or panicky for no good reason"	culture x parity x time interaction $F(2, 142) = 6.67$ , $p < 0.01$
6. "Things have been getting on top of me"	parity x time interaction $F(2, 142) = 5.97$ , $p < 0.01$
7. "I have been so unhappy that I have had difficulty sleeping"	main effect of culture $F(1, 71) = 6.59$ , $p < 0.05$
8. "I have felt sad or miserable"	no significant differences
9. "I have been so unhappy that I have been crying"	main effect of culture $F(1, 71) = 6.46$ , $p < 0.05$
10. "The thought of harming myself has occurred to me"	no significant differences

Of the 10 items, 4 items revealed no significant results, indicating that these items did not contribute to differences in scores (items 1, 2, 8 and 10).

There were three items on which there was solely a significant main effect of culture. Analysis of item 3 ("I have blamed myself unnecessarily when things went wrong"), revealed that the Scottish group mean (1.50) was significantly higher than the Pakistani group mean (0.98). Items 7 and 9 were the only items of the EPDS to show the opposite pattern, with Pakistani subjects scoring higher than their Scottish counterparts. Means for item 7 ("I have been so unhappy that I have had difficulty sleeping") were 0.64 for the Scottish group as compared to 0.94 for the Pakistani group. On item 9 ("I have been so unhappy that I have been crying") the Scottish mean was again 0.64 compared to the Pakistani mean of 1.08.

Analysis of item 4 ("I have been anxious or worried for no good reason") revealed significant main effects of culture, parity and time. Scottish subjects scored higher (mean = 1.62) than Pakistani subjects on this item (mean = 0.56). The main effect of parity demonstrated that multiparous mothers scored higher (mean = 1.27) as compared to primiparae (mean = 0.92). A post-hoc Newman-Keuls analysis of the main effect of time revealed that there was a significant difference between time 1 (mean = 1.25) and time 3 (mean = 0.95), with scores decreasing over time.

There was a significant culture x parity x time interaction on item 5 ("I have felt scared or panicky for no good reason"). A post-hoc Newman-Keuls analysis identified five significant differences, of which three were cultural differences. A significant difference at time 1 identified cultural differences in multiparous mothers ( $p < 0.01$ ). The Scottish multiparae mean (1.55) was higher than the Pakistani multiparae mean (0.50). At time 2 another cultural difference was found in the primiparous group ( $p < 0.05$ ), with Scottish primiparae scoring higher (mean = 1.44) compared to Pakistani primiparae (mean = 0.65). The third cultural difference was between Scottish and Pakistani multiparae at

time 3 ( $p < 0.01$ ). Again the Scottish multiparae mean was higher (1.18) compared to the Pakistani mean (0.23).

In addition to these results, there was also a significant difference among the Pakistani primiparous and multiparous mothers' scores at time 3 ( $p < 0.01$ ). In this case, the primiparous mean score (1.12) was higher than the multiparous mean (0.23). The final difference was between Pakistani multiparous mothers at time 2 and time 3 ( $p < 0.05$ ). The score at time 2 (mean = 0.91) was significantly higher than the score at time 3 (mean = 0.23).

The analysis results for item 6 ("Things have been getting on top of me"), revealed a significant parity x time interaction. A post-hoc Newman-Keuls analysis revealed three significant differences. There was one significant difference between primiparous and multiparous mothers at time 1 ( $p < 0.05$ ). The primiparous mothers' scores were lower (mean = 1.15) compared to multiparous mothers (mean = 1.66). The other two differences were found in the multiparous group across time. Multiparous mothers' mean scores were significantly higher at time 1 (1.66) compared to both time 2 (1.16) and time 3 (1.02).

Chapter Seven

Results: Analyses of Perceived Support (SPS; Social Provisions Scale)

7.1 Analyses of SPS Global Scores

Descriptive statistics for the SPS are summarised in table 7.1. The table summarises means and standard deviations of global scores on the SPS for both cultural groups. Data was collapsed across parity as the primary area of interest is the examination of cultural differences in social support and their relationship to depression. Scores on the SPS can range from 0-96.

Table 7.1 Group means and standard deviations on SPS global scores for each time assessment.

	Time 1		Time 2		Time 3	
group	mean	s.d	mean	s.d	mean	s.d
Scottish	84.08	6.02	86.19	6.30	87.78	6.24
Pakistani	87.10	6.13	85.74	7.52	85.05	8.58

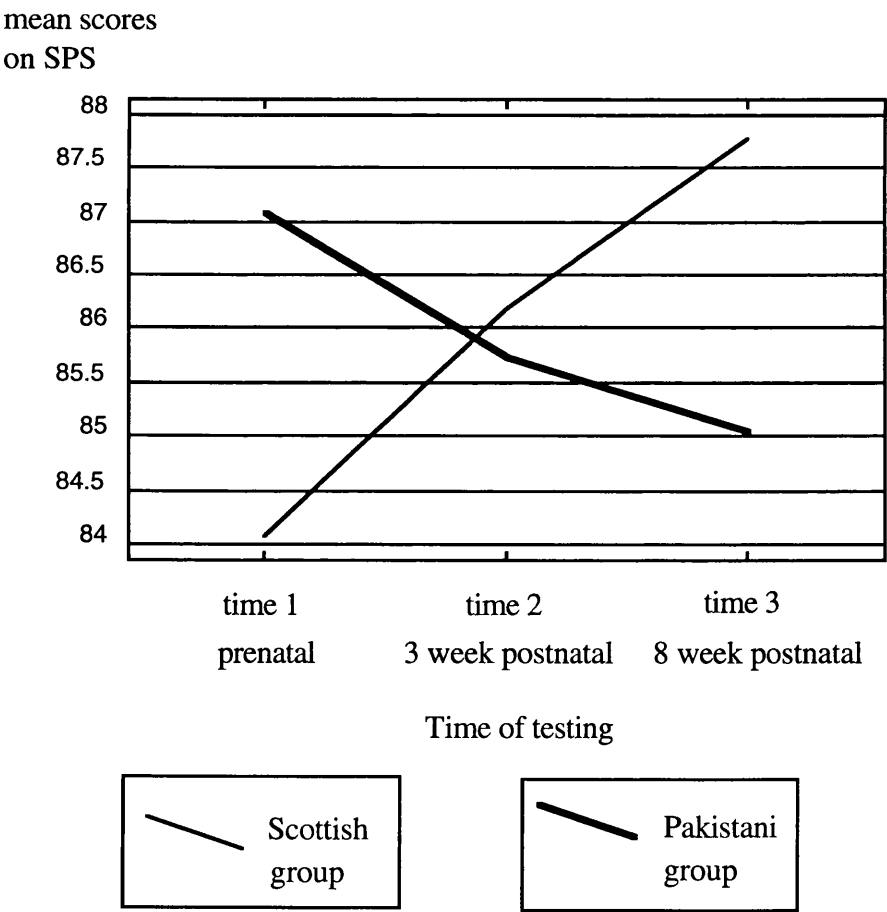
A 2 way repeated measures analysis of variance was conducted. Between subjects variable was culture and the within subjects measure was time of testing. The dependent variable was total scores on the SPS. Anova results are summarised in table 7.2.

**Table 7.2 Analysis of variance results: global scores on SPS**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	.16	73	97.62	.00	n.s
Time (T)	2	12.67	146	22.39	.57	n.s
C x T	2	156.73	146	22.39	6.70	0.05

The results of the analysis of variance show that there were no significant main effects of culture or time. There was a significant culture and time interaction,  $F(2, 146) = 6.70, p < 0.05$ . This result is illustrated in figure 7.1.

**Figure 7.1 Culture and time interaction: global scores of SPS**





From the graph (figure 7.1) it can be seen that Pakistani and Scottish subjects exhibited a different pattern of responding over time on the SPS.

A post-hoc Newman-Keuls analysis investigated this effect in more detail. The results of this analysis are summarised in table 7.3.

**Table 7.3 Newman-Keuls summary: culture and time interaction of global scores on SPS**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	84.08		n.s	0.05	0.05	-----	-----
	2	86.19	n.s		n.s	-----	n.s	-----
	3	87.78	0.05	n.s		-----	-----	n.s
Pakistani	1	87.10	0.05	-----	-----		n.s	n.s
	2	85.74	-----	n.s	-----	n.s		n.s
	3	85.05	-----	-----	n.s	n.s	n.s	

----- comparisons not quoted as they are not relevant

The post-hoc results identify two significant differences. The first difference refers to the Scottish group whose mean score at time 3 (87.78) is significantly higher compared to time 1 (84.08). The second significant result is a cultural difference in mean scores at time 1. At the prenatal (time 1) assessment the Pakistani subjects score higher (mean = 87.10) compared to Scottish subjects (mean = 84.08).

The overall pattern of responses on the SPS is different for each cultural group. The Pakistani women's scores decrease over time, whereas the Scottish women reported increased levels of perceived social support over time.

## 7.2 Analyses of SPS Sub-Scales

Following on from the analysis of global scores, data pertaining to the sub-scales was also analysed. The SPS consists of six sub-scales addressing different aspects of social support: reliable alliance, attachment, guidance, nurturance, social integration and reassurance of worth. Sub-scale scores ranged from 0-16. The sub-scales were examined using 2 way repeated measures analysis of variance. Descriptive statistics for the SPS sub-scales are summarised in table 7.4.

**Table 7.4 Means and standard deviations \* of SPS sub-scale scores for Scottish and Pakistani subjects**

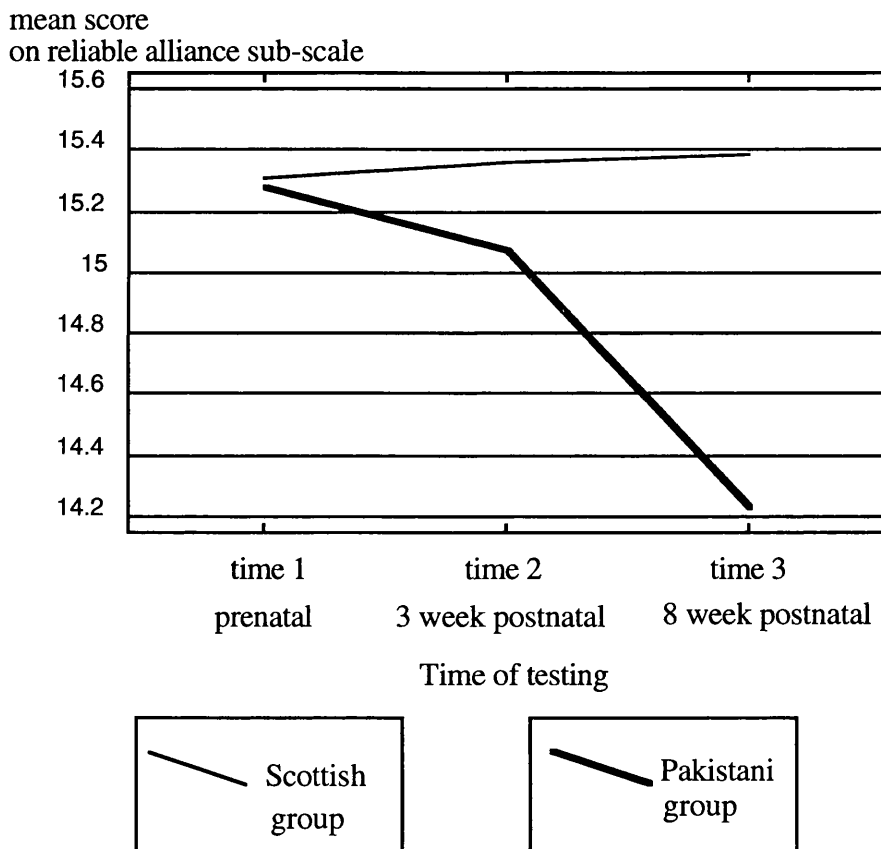
sub-scale scores	Scottish			Pakistani		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
reliable alliance	15.31 (1.24)	15.36 (1.20)	15.39 (1.10)	15.28 (1.30)	15.08 (1.63)	14.23 (2.76)
attachment	14.81 (1.43)	14.97 (1.30)	15.08 (1.36)	15.00 (1.41)	15.18 (1.48)	15.21 (1.15)
guidance	14.92 (1.34)	14.89 (1.35)	15.19 (1.31)	15.18 (1.30)	15.00 (1.62)	14.69 (1.84)
nurturance	12.89 (1.99)	13.97 (1.98)	14.61 (1.57)	15.36 (1.01)	15.64 (1.31)	15.77 (0.54)
social integration	13.53 (1.46)	13.67 (1.69)	14.00 (1.55)	13.72 (2.10)	12.49 (2.50)	13.05 (2.37)
reassurance of worth	12.64 (1.57)	13.33 (1.41)	13.53 (1.70)	12.56 (2.38)	12.15 (2.59)	12.10 (2.16)

\* standard deviations in parentheses

### 7.2.1 Analysis of the Reliable Alliance Sub-Scale

A 2 way repeated measures analysis of variance was conducted on scores from the reliable alliance sub-scale. The between subjects factor was culture and the within subjects factor was time of testing. There were no significant main effects of culture or time. The culture and time interaction approached significance,  $F(2, 146) = 3.03$ ,  $p < 0.052$ . The interaction is graphed in figure 7.2.

**Figure 7.2 Graph of culture and time interaction: reliable alliance sub-scale**



The pattern of scores over time is different, with Scottish mothers showing a steady, slightly increasing pattern and Pakistani mothers' scores decreasing over time. It can be seen that the Pakistani score on the reliable alliance sub scale at time 3 (14.23) was lower

the corresponding Scottish score (15.31). Planned comparisons reveal that the difference between scores at time 3 is significant,  $F(1, 73) = 5.53, p < 0.05$ . The difference between Pakistani means at time 2 (15.07) and time 3 (14.23) was significant,  $F(1, 73) = 5.25, p < 0.05$ . A significant difference was also found between Pakistani scores at time 1 (15.28) and time 3 (14.23),  $F(1, 73) = 8.92, p < 0.01$ . The reliable alliance sub-scale scores were affected by time, only for the Pakistani group.

### 7.2.2 Analysis of the Attachment Sub-Scale

A 2 way repeated measures analysis of variance on attachment scores revealed no significant main effects of culture or time. The culture and time interaction was also non significant. Attachment scores for both groups were very high, the Scottish mean was 14.95 and the Pakistani mean was 15.13.

### 7.2.3 Analysis of the Guidance Sub-Scale

The 2 way repeated measures analysis of variance of guidance scores revealed no significant main effects of culture or time. The interaction of culture and time was also non significant. Again, both groups had very high sub-scale scores, the Scottish mean was 15.00 and the Pakistani mean was 14.96.

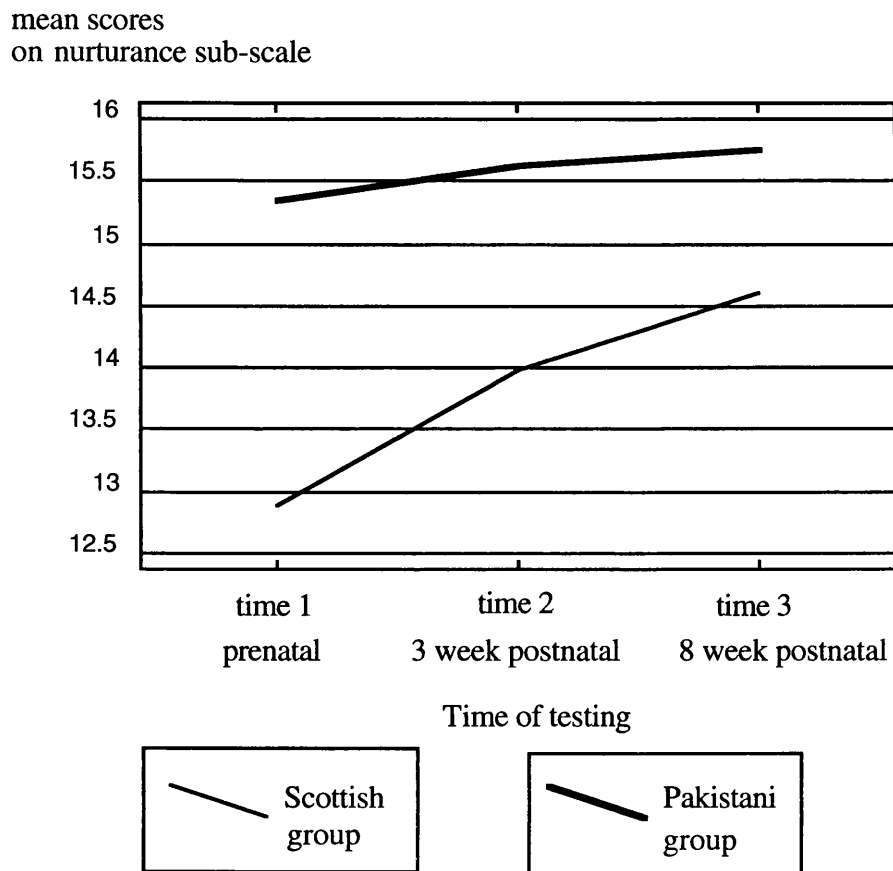
7.2.4 Analysis of the Nurturance Sub-Scale

Results of the 2 way repeated measures analysis of variance are summarised in table 7.5.

**Table 7.5 Analysis of variance results: nurturance sub-scale**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	175.08	73	3.37	51.96	0.001
Time (T)	2	21.84	146	1.59	13.74	0.001
C x T	2	8.19	146	1.59	5.15	0.01

From table 7.5 it can be seen that there were significant main effects of culture and time. Also, the culture and time interaction was significant,  $F(2, 146) = 5.15, p < 0.01$ . The interaction is illustrated graphically in figure 7.3.

**Figure 7.3 Graph of culture and time interaction: nurturance sub-scale**

From the graph it can be seen that the Pakistani group scored higher on the nurturance sub-scale compared to Scottish mothers. In both cultural groups, scores increased over time, with more pronounced increases in the Scottish group means.

To investigate these findings further, the interaction was examined using a post-hoc Newman-Keuls test. Results of the post-hoc analysis are summarised in table 7.6.

**Table 7.6 Newman-Keuls summary: culture and time interaction of nurturance sub-scale scores on SPS**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	12.89		0.001	0.001	0.001	-----	-----
	2	13.97	0.001		0.05	-----	0.001	-----
	3	14.61	0.001	0.05		-----	-----	0.001
Pakistani	1	15.36	0.001	-----	-----		n.s	n.s
	2	15.64	-----	0.001	-----	n.s		n.s
	3	15.77	-----	-----	0.001	n.s	n.s	

----- comparisons not quoted as they are not relevant

The results of the post-hoc analysis show that only the Scottish mothers scores on the nurturance sub-scale were affected by time. Scottish scores increased over time (means = 12.89, 13.97, 14.61), with differences between each time assessment being significant. The Pakistani scores were unaffected by time of assessment (means = 15.36, 15.64, 15.77). At each time assessment Pakistani mothers' scores were significantly higher than Scottish mothers on nurturance.

### 7.2.5 Analysis of the Social Integration Sub-Scale

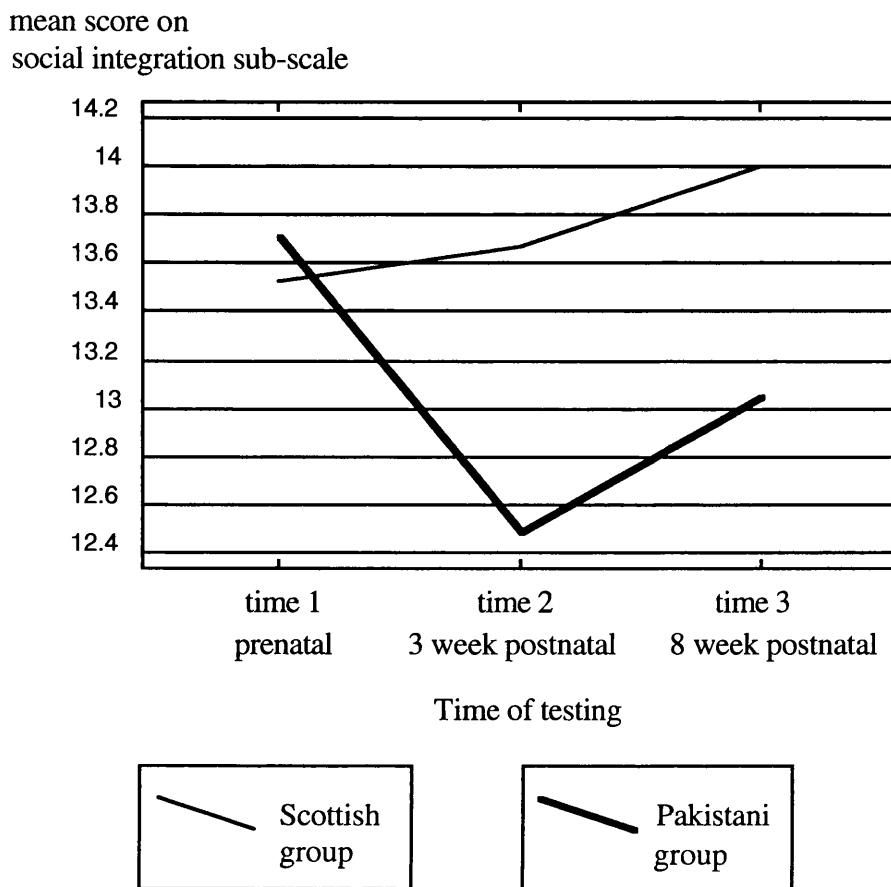
Results of the 2 way repeated measures analysis of variance on social integration scores are summarised in table 7.7.

**Table 7.7 Analysis of variance results: social integration sub-scale**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	23.44	73	7.58	3.09	n.s
Time (T)	2	6.35	146	2.23	2.85	n.s
C x T	2	10.07	146	2.23	4.52	0.05

The analysis of variance results revealed that there were no significant main effects of culture or time. The culture and time interaction was significant,  $F(2, 146) = 4.52$ ,  $p < 0.05$ . The significant interaction result is graphed in figure 7.4.



**Figure 7.4 Graph of culture and time interaction: social integration sub-scale**

From the graph (figure 7.4) it can be seen that the pattern of scores on social integration was markedly different for both cultures. The Scottish sample's scores increase over time indicating increasing amounts of perceived support related to social activities. The Pakistani group showed a very different pattern, with scores decreasing to their lowest point at time 2 and then increasing slightly at time 3. The Pakistani group's score at time 3 was lower than at time 1.

A post-hoc Newman-Keuls analysis was conducted to investigate the significant interaction in more detail. The results of this analysis are summarised in table 7.8.

**Table 7.8 Newman-Keuls summary: culture and time interaction of social integration sub-scale scores on SPS**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	13.53		n.s	n.s	n.s	-----	-----
	2	13.67	n.s		n.s	-----	0.01	-----
	3	14.00	n.s	n.s		-----	-----	0.05
Pakistani	1	13.72	n.s	-----	-----		0.01	n.s
	2	12.49	-----	0.01	-----	0.01		n.s
	3	13.05	-----	-----	0.05	n.s	n.s	

----- comparisons not quoted as they are not relevant

From the post-hoc analysis it can be seen that there were no significant differences across time on social integration support for the Scottish group. For the Pakistani group there was one significant difference, a decrease in mean scores between time 1 (13.72) and time 2 (12.49). Between cultures, there were two significant differences at time 2 and time 3. The Scottish social integration support mean was significantly higher (13.67) compared to the Pakistani mean at time 2 (12.49). At time 3 the same pattern of results distinguished the two groups with the Scottish social integration mean (14.00) being higher than the Pakistani score at time 3 (13.05).

Overall these results indicate higher social integration scores for the Scottish group which increase over time. The Pakistani group's scores are highest prenatally (time 1) and then

decrease to their lowest point at 3 weeks after birth (time 2), increasing slightly at the final 8 week assessment (time 3).

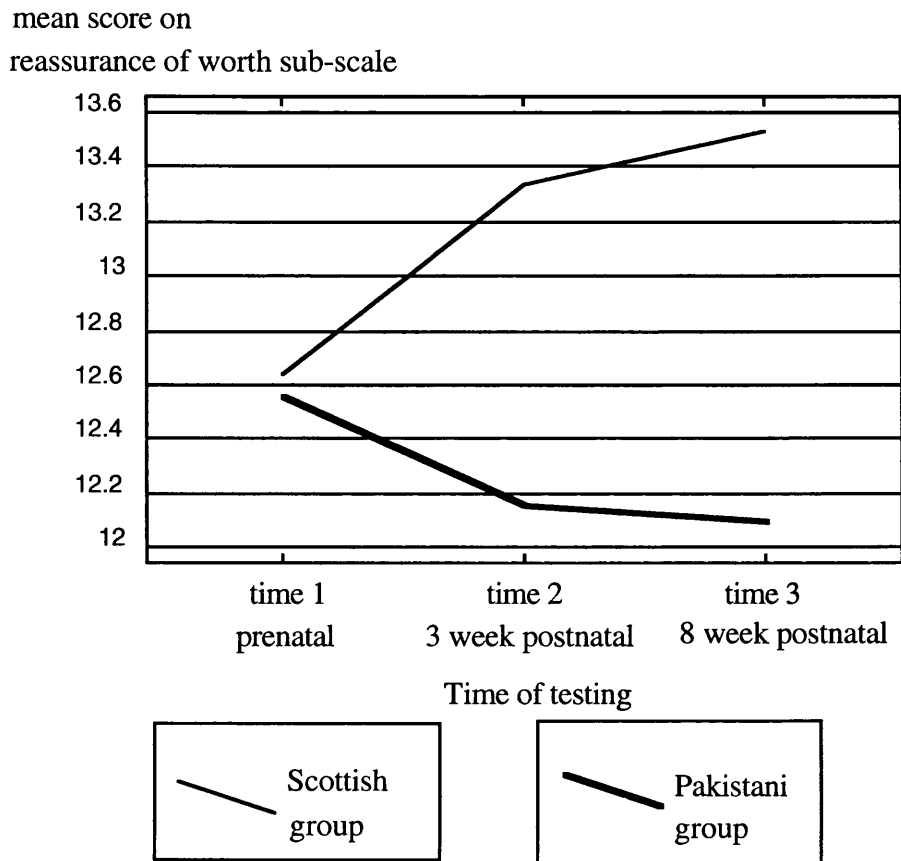
7.2.6 Analysis of the Reassurance of Worth Sub-Scale

Results of the 2 way repeated measures analysis of variance on reassurance of worth scores are summarised in table 7.9.

**Table 7.9 Analysis of variance results: reassurance of worth sub-scale**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	44.80	73	8.77	5.11	0.05
Time (T)	2	.89	146	1.82	.49	n.s
C x T	2	9.69	146	1.82	5.33	0.01

Analysis of variance results revealed a significant main effect of culture,  $F(1, 73) = 5.11$ ,  $p < 0.05$ . There was also a significant culture and time interaction,  $F(2, 146) = 5.33$ ,  $p < 0.01$ . Results were further investigated by examining the interaction in more detail. This result is illustrated graphically in figure 7.5.

**Figure 7.5** Graph of culture and time interaction: reassurance of worth sub-scale

Again both groups display a different pattern of scores over time. The Scottish group scores on reassurance of worth increase over time. The Pakistani group scores show the opposite pattern with scores decreasing over time. This result was investigated further by a post-hoc Newman-Keuls analysis. Results are summarised in table 7.10.

**Table 7.10 Newman-Keuls summary: culture and time interaction of reassurance of worth sub-scale scores on SPS**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	12.64		0.05	0.05	n.s	-----	-----
	2	13.33	0.05		n.s	-----	0.001	-----
	3	13.53	0.05	n.s		-----	-----	0.001
Pakistani	1	12.56	n.s	-----	-----		n.s	n.s
	2	12.15	-----	0.001	-----	n.s		n.s
	3	12.10	-----	-----	0.001	n.s	n.s	

----- comparisons not quoted as they are not relevant

From table 7.10 it can be seen that there were significant differences within the Scottish group scores over time. Scottish means on reassurance of worth at time 2 (13.33) and time 3 (13.53) were significantly higher than the time 1 score (12.64). The increase in Scottish scores between time 2 and time 3 was non significant. In the Pakistani group, scores on reassurance of worth were not affected by time of assessment. Between the groups there were two significant differences. The Scottish group mean was higher at time 2 (13.33) compared to the corresponding Pakistani mean (12.15). The same pattern was observed at time 3, the Scottish mean was significantly higher (13.53) than the Pakistani mean (12.10).

## **Chapter Eight**

### **Results: Analyses of Received Support (ISSB; Inventory of Socially Supportive Behaviours)**

Several aspects of support were measured using the ISSB, developed for use in this study, at all three times of testing. The ISSB addressed support issues at the prenatal stage (time 1), the 6 week period after birth (time 2) and the 6 to 8 week postnatal period (time 3). The ISSB addressed each of the areas of social support specified by the SPS scale: reliable alliance, attachment, guidance, nurturance, social integration and reassurance of worth. Analyses investigated the frequency of each type of support, support network size and network members, and also satisfaction ratings for each type of support.

#### **8.1 Analyses of Received Support Frequency**

For all six types of support, mothers were asked how often they received each type of support. Mothers had the option of choosing from a range of five frequency options: not at all, once or twice, about once a week, several times a week, or, about every day. For the purposes of analysing the frequency of support across time, the frequency options were assigned values from 1 (not at all) to 5 (about every day). These values were then used to conduct 2 way repeated measures analyses of variance on each type of support. Descriptive statistics for frequency of support are summarised in table 8.1, higher means indicate more frequent support.

**Table 8.1 Means and standard deviations\* of support frequency for six support types**

	Scottish			Pakistani		
frequency	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
reliable alliance	4.06 (1.09)	4.19 (0.82)	3.69 (1.21)	4.46 (1.29)	4.97 (0.76)	3.41 (1.86)
attachment	4.03 (1.11)	3.97 (0.94)	3.64 (1.17)	4.54 (0.91)	4.46 (1.05)	3.54 (1.14)
guidance	2.92 (1.05)	3.00 (0.96)	2.67 (1.04)	2.46 (1.21)	2.15 (1.33)	2.26 (1.11)
nurturance	3.11 (1.80)	5.00 (0.00)	5.00 (0.00)	4.69 (0.86)	4.95 (0.22)	4.97 (0.16)
social integration	3.89 (0.78)	3.86 (0.83)	3.72 (1.06)	2.95 (1.50)	1.67 (1.20)	2.79 (1.34)
reassurance of worth	3.22 (1.20)	3.25 (1.18)	3.17 (1.21)	3.59 (1.71)	3.59 (1.80)	3.00 (1.67)

\* standard deviations in parentheses

A series of two way repeated measures analysis of variance were conducted for each of the six support types. The between subjects variable was culture and the within subjects factor was time of testing. The dependent variable was the frequency of support .

#### 8.1.1 Frequency of Reliable Alliance Support

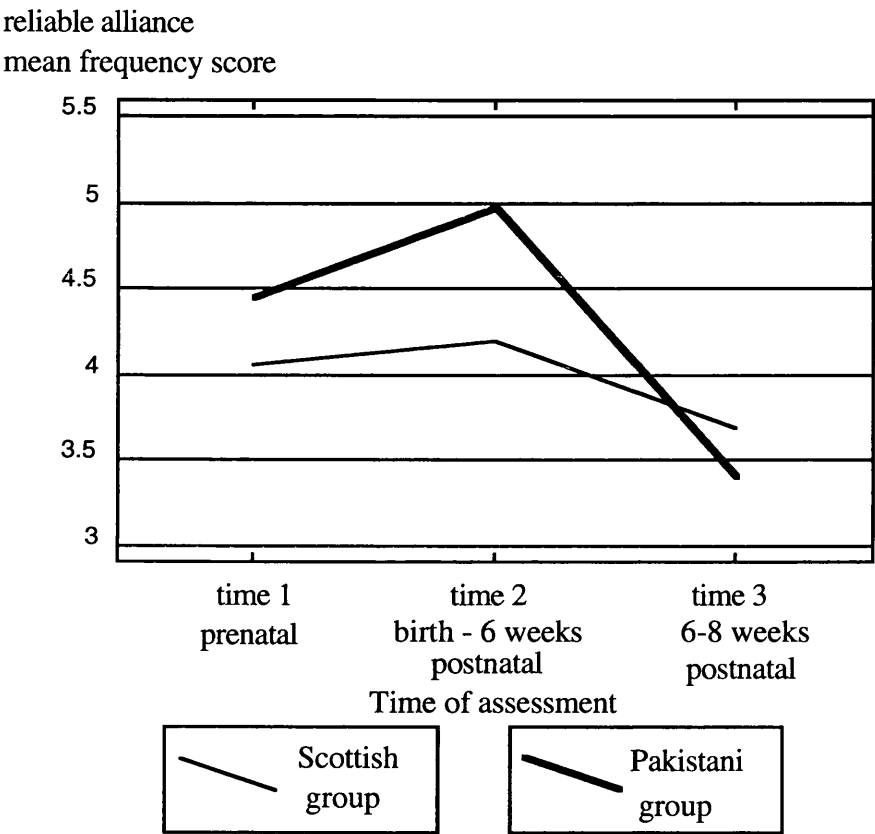
Anova results for frequency of reliable alliance support are summarised in table 8.2.

**Table 8.2 Analysis of variance results: frequency of reliable alliance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	5.07	73	1.72	2.95	n.s
Time (T)	2	20.84	146	1.29	16.22	.001
C x T	2	5.46	146	1.29	4.25	.05

The analysis of variance revealed no significant main effect of culture and a significant main effect of time ( $F(2, 146) = 16.22, p < 0.001$ ). There was also a significant culture and time interaction,  $F(2, 146) = 4.25, p < 0.05$ . The significant interaction is illustrated graphically in figure 8.1.

**Figure 8.1 Culture and time interaction of reliable alliance support frequency**



From the graph (figure 8.1) it is apparent that the Pakistani mothers' scores indicate more frequent support at times 1 and 2, but not at time 3 for reliable alliance. Mean scores for frequency peak at time 2 (birth to 6 weeks postnatal) for both Pakistani and Scottish mothers. A post-hoc Newman-Keuls analysis examined the interaction in more detail (table 8.3).



**Table 8.3 Newman-Keuls summary: culture and time interaction of reliable alliance support frequency**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	4.06		n.s	n.s	n.s	-----	-----
	2	4.19	n.s		n.s	-----	0.01	-----
	3	3.69	n.s	n.s		-----	-----	n.s
Pakistani	1	4.46	n.s	-----	-----		0.05	0.001
	2	4.97	-----	0.01	-----	0.05		0.001
	3	3.41	-----	-----	n.s	0.001	0.001	

----- comparisons not quoted as they are not relevant

Within the Scottish group, frequency scores remain steady across time. The post-hoc analysis reveals no significant differences in frequency of reliable alliance support across time for Scottish mothers. In the Pakistani group, frequency of reliable alliance support increases significantly during the 6 week period after the birth (time 2), as compared to the prenatal stage (time 1) . From time 2 to time 3 there is a significant decrease in frequency of support in the Pakistani group. The difference between time 1 and time 3 is also significant, with Pakistani mothers receiving reliable alliance support more frequently at time 1.

Comparing frequency of support between the two cultures reveals one significant difference at time 2. At time 2 (birth - 6 weeks postnatal) Pakistani mothers report more frequent reliable alliance support compared to Scottish mothers.

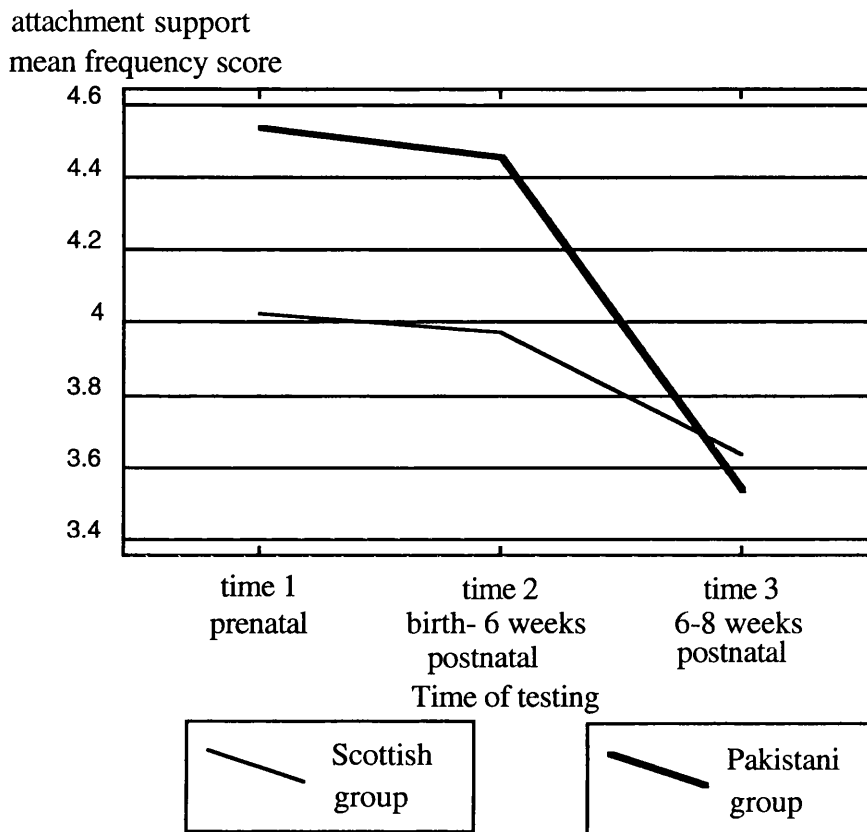
8.1.2 Frequency of Attachment Support

Anova results for frequency of attachment support are summarised in table 8.4.

**Table 8.4 Analysis of variance results: frequency of attachment support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	5.05	73	2.37	2.13	n.s
Time (T)	2	10.99	146	.68	16.28	.001
C x T	2	2.25	146	.68	3.33	.05

The analysis of variance results indicate that there was no significant main effect of culture and a significant main effect of time,  $F(2, 146) = 16.28, p < 0.001$ . There was also a significant culture and time interaction,  $F(2, 146) = 3.33, p < 0.05$ . Attachment support frequency for both cultures was differentially affected by time. The significant interaction is illustrated in figure 8.2.

**Figure 8.2 Culture and time interaction of attachment support frequency**

From the graph (figure 8.2) it is apparent that both Scottish and Pakistani mothers' frequency scores for attachment support display the same pattern. There is a very slight decrease in frequency from time 1 to time 2, and then a larger decrease in frequency from time 2 to time 3. Pakistani mothers' mean frequency scores are higher than Scottish scores at times 1 and 2, but not at time 3. A post-hoc Newman-Keuls test examined this result in more detail (table 8.5).

**Table 8.5 Newman-Keuls summary: culture and time interaction of attachment support frequency**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	4.03		n.s	n.s	0.05	-----	-----
	2	3.97	n.s		n.s	-----	0.05	-----
	3	3.64	n.s	n.s		-----	-----	n.s
Pakistani	1	4.54	0.05	-----	-----		n.s	0.001
	2	4.46	-----	0.05	-----	n.s		0.001
	3	3.54	-----	-----	n.s	0.001	0.001	

----- comparisons not quoted as they are not relevant

Within the Scottish group there were no significant differences across time in frequency of attachment support. However, there were significant differences across time for the Pakistani group. The frequency of attachment support for Pakistani mothers was significantly higher prenatally and during the 6 weeks after birth (times 1 and 2) compared to time 3 (6-8 week postnatal). There was no significant difference in frequency of support between times 1 and 2. For the Pakistani mothers, attachment support frequency decreased significantly in the 6-8 week postnatal period compared to previous assessments.

Between cultures, at each time of assessment, there were two significant differences. At times 1 and 2, Pakistani mothers reported a higher frequency of attachment support compared to Scottish mothers. There was no significant difference between frequency of attachment support at time 3. Results support the conclusion that Pakistani mothers received more frequent attachment support at the prenatal stage and also during the 6 weeks after birth.

8.1.3 Frequency of Guidance Support

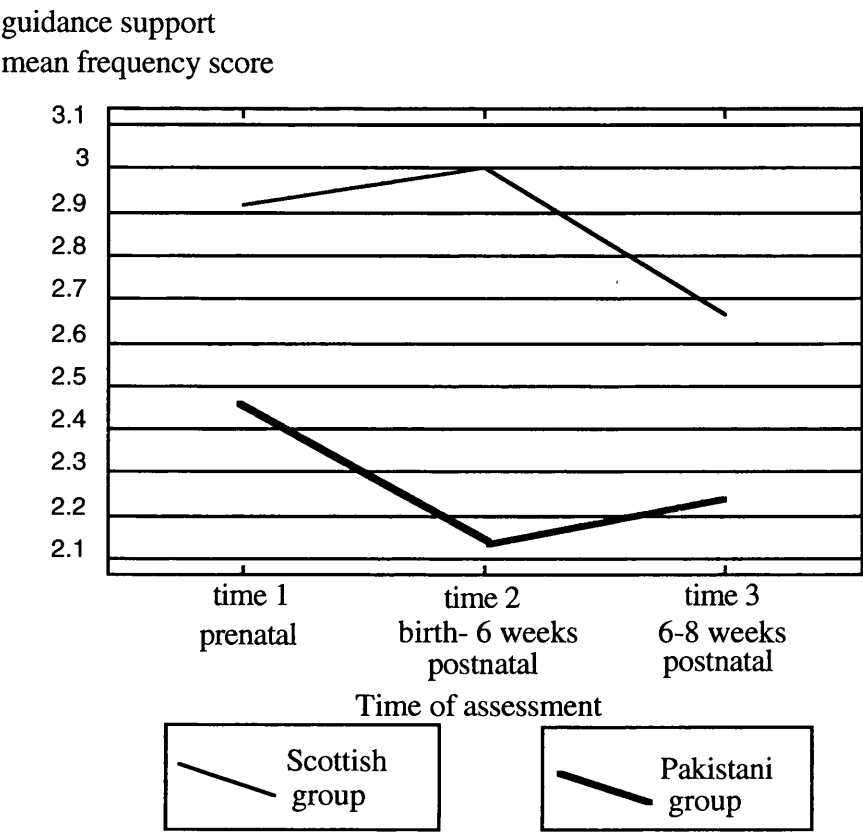
Anova results for frequency of guidance support are summarised in table 8.6.

**Table 8.6 Analysis of variance results: frequency of guidance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	18.28	73	1.60	11.40	.01
Time (T)	2	.97	146	1.11	.87	n.s
C x T	2	1.08	146	1.11	.97	n.s

The analysis of variance results reveal a significant main effect of culture,  $F(1, 73) = 11.40, p < 0.01$ . There was no significant main effect of time, the interaction was also non significant. The results can be seen more clearly in figure 8.3.

**Figure 8.3** Culture and time interaction of guidance support frequency



From the graph (figure 8.3) it can be seen that the Pakistani mothers' scores on frequency of guidance support are lower than Scottish mothers at each time assessment. Results indicate that Pakistani mothers were less likely to seek guidance support from others compared to Scottish mothers.

#### 8.1.4 Frequency of Nurturance Support

In the nurturance support question the majority of mothers (98%) answered "about every day" at times 2 and 3. For this reason the analysis of variance was only conducted on time 1 frequency scores. One way anova results for frequency of nurturance support are summarised in table 8.7.

**Table 8.7 Analysis of variance results: frequency of nurturance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	46.80	73	1.94	24.08	.001

The one way analysis of variance reveals a significant main effect of culture,  $F(1, 73) = 24.08, p < 0.001$ . Pakistani mothers reported a higher mean frequency of nurturance support (4.69) compared to Scottish mothers (3.11). It can be concluded that Pakistani mothers provided more nurturance support to others at the prenatal stage (time 1). At times 2 and 3 the majority of mothers reported providing daily nurturance support as they had included their new-born babies as support receivers.

Differences in frequency across time were analysed using Friedman anova by ranks, as opposed to analysis of variance. Frequency of providing nurturance support was significantly higher for Scottish mothers during the first 6 weeks after birth (time 2) compared to the prenatal stage (time 1),  $F(1) = 21.00, p < 0.001$ . No significant differences were found between time 1 and time 2 for nurturance support frequency in the Pakistani group. As would be expected from the overwhelming choice of the response "about every day", differences between times 2 and 3 were non significant for both groups. Results suggest that the frequency of providing nurturance to others only changed for Scottish mothers in the period after the birth. For this group, support provision to others increased at time 2 and remained unchanged thereafter.

8.1.5 Frequency of Social Integration Support

Anova results for frequency of social integration support are summarised in table 8.8.

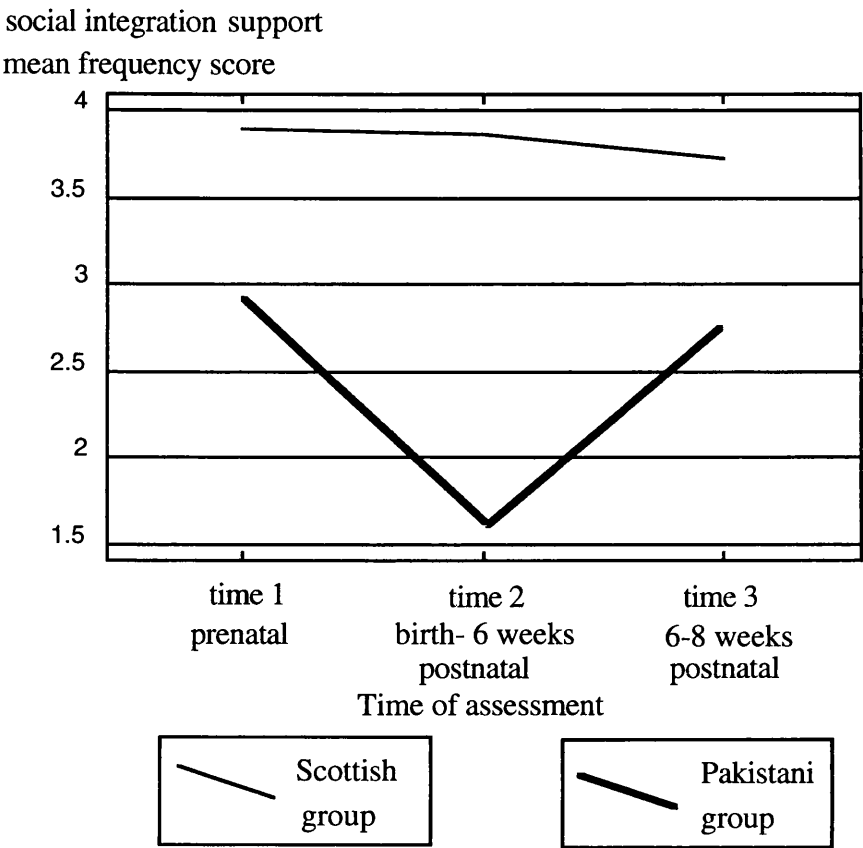
**Table 8.8 Analysis of variance results: frequency of social integration support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	102.96	73	2.26	45.61	.001
Time (T)	2	8.73	146	.88	9.86	.001
C x T	2	9.92	146	.88	11.21	.001

Results of the analysis of variance indicate that there were significant main effects of culture ( $F(1, 73) = 45.61, p < 0.001$ ) and time ( $F(2, 146) = 9.86, p < 0.001$ ). The culture and time interaction was also significant,  $F(2, 146) = 11.21, p < 0.001$ . Results demonstrate that frequency of social integration support in each culture is differentially affected by time. This significant interaction is illustrated graphically in figure 8.4.



**Figure 8.4** Culture and time interaction of social integration support frequency



From the graph (figure 8.4) it can be seen that the two groups exhibited very different patterns across time. The Scottish mothers' frequency scores remained steady, decreasing only very slightly, indicating that they experienced similar amounts of social integration support across time. The Pakistani mothers' frequency scores displayed a marked pattern of change across time. Social integration support decreased from time 1 (prenatal) to time 2 (birth to 6 weeks), and then increased from time 2 to time 3 (6-8 weeks postnatal). Scottish mothers reported higher frequencies of social integration support at each time of assessment. These observations were examined in more detail using a post-hoc Newman-Keuls analysis (table 8.9).

**Table 8.9 Newman-Keuls summary: culture and time interaction of social integration support frequency**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	3.89		n.s	n.s	0.001	-----	-----
	2	3.86	n.s		n.s	-----	0.001	-----
	3	3.72	n.s	n.s		-----	-----	0.001
Pakistani	1	2.95	0.001	-----	-----		0.001	n.s
	2	1.67	-----	0.001	-----	0.001		0.001
	3	2.79	-----	-----	0.001	n.s	0.001	

----- comparisons not quoted as they are not relevant

Within the Scottish group there were no significant differences in frequency of social integration support across time. The Pakistani mothers showed a different pattern, with time 2 frequency significantly lower than time 1. There was also a significant increase in frequency of support from time 2 to time 3. The difference between frequency of social integration support at time 1 and time 3 was non significant. Results indicate that Pakistani mothers' frequency of social integration support was significantly less during the 6 week period after the birth as compared to prenatal levels and the 2 week period after time 2.

A comparison of frequency of support between cultures also revealed significant differences. At each time of assessment, Scottish mothers received significantly more frequent social integration support compared to Pakistani mothers.

### 8.1.6 Frequency of Reassurance of Worth Support

Anova results for frequency of reassurance of worth revealed no significant main effects of culture or time. The culture and time interaction was also non significant. Results support the conclusion that Scottish and Pakistani mothers received a similar frequency of reassurance of worth support across time.

## 8.2 Analyses of Total Network Size

Descriptive statistics for network size for all of the support types are given in table 8.10

**Table 8.10 Means and standard deviations\* of network size for six support types**

	Scottish			Pakistani		
network size	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
reliable alliance	3.25 (2.02)	2.92 (1.52)	2.39 (1.23)	2.44 (1.93)	2.00 (1.12)	1.44 (1.85)
attachment	3.67 (2.08)	3.28 (1.60)	2.72 (1.61)	3.26 (2.14)	2.79 (1.85)	2.08 (2.09)
guidance	3.00 (1.49)	3.06 (1.39)	2.39 (1.18)	1.79 (1.47)	0.95 (1.15)	1.21 (1.08)
nurturance	1.22 (1.27)	2.44 (1.40)	2.61 (1.34)	4.51 (2.65)	3.18 (2.02)	4.41 (2.03)
social integration	5.28 (1.60)	5.75 (2.18)	4.56 (2.16)	3.05 (2.73)	1.56 (2.99)	3.67 (2.68)
reassurance of worth	2.53 (1.28)	3.17 (1.99)	2.64 (1.38)	2.67 (2.61)	2.28 (2.14)	1.90 (2.06)

\* standard deviations in parentheses

A series of two way repeated measures analysis of variance were conducted for each of the support types. The between subjects variable was culture and the within subjects factor was time of testing. The dependent variable was the number of support persons.

### 8.2.1 Reliable Alliance Network Size

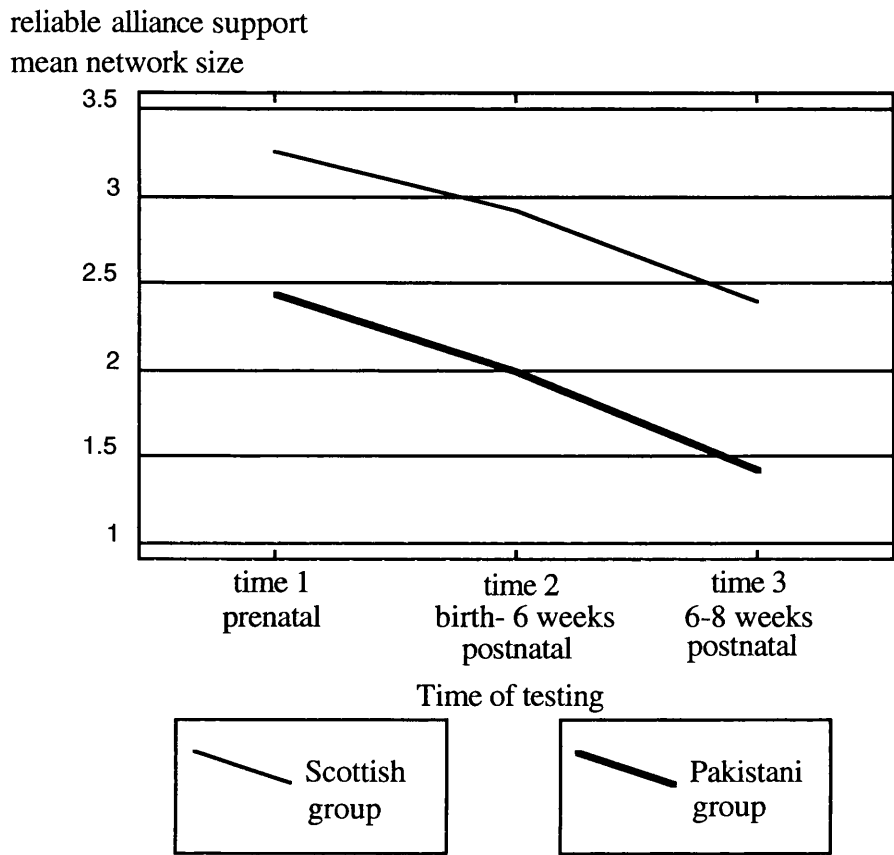
Anova results of the network size of reliable alliance support are summarised in table 8.11.

**Table 8.11 Analysis of variance results: network size of reliable alliance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	44.94	73	3.54	12.70	.001
Time (T)	2	16.37	146	2.31	7.10	.01
C x T	2	.10	146	2.31	.04	n.s

The results show that there was a significant main effect of culture,  $F(1, 73) = 12.70$ ,  $p < 0.001$ . Scottish subjects reported a higher overall mean number of support persons for reliable alliance (2.85) as compared to Pakistani subjects (1.96). There was also a significant main effect of time,  $F(2, 146) = 7.10$ ,  $p < 0.01$ . The culture and time interaction was non significant. These results are illustrated graphically in figure 8.5.

**Figure 8.5 Culture and time interaction: reliable alliance network size**



From the graph (figure 8.5) it can be seen that the Scottish mothers reported more support persons for reliable alliance at each time of testing. The main effect of time is also apparent from the graph, showing that number of support persons decreased across time in both groups. The significant main effect of time was further investigated by a post-hoc Newman-Keuls analysis (table 8.12).

**Table 8.12 Newman-Keuls summary: main effect of time on network size scores for reliable alliance support**

			Probability levels *		
main effect	Scottish	Pakistani			
Time	means	means	Time 1	Time 2	Time 3
1	3.25	2.44		n.s (S)	.001 (S)
2	2.92	2.00	n.s (P)		.05 (S)
3	2.39	1.44	.001 (P)	.05 (P)	

\* S = Scottish group      P = Pakistani group

The post-hoc Newman-Keuls analysis reveals that there were significant differences between time 2 and time 3, with time 3 scores lower than time 2. There was also a significant difference between scores at time 1 and time 3, again scores at time 3 were lower than at time 1. The difference between time 1 and time 2 was non significant. From the analyses it can be concluded that number of support persons for reliable alliance decreases significantly at 6-8 weeks postnatal (time 3) and that Scottish mothers report significantly more support persons than Pakistani mothers at each time assessment.

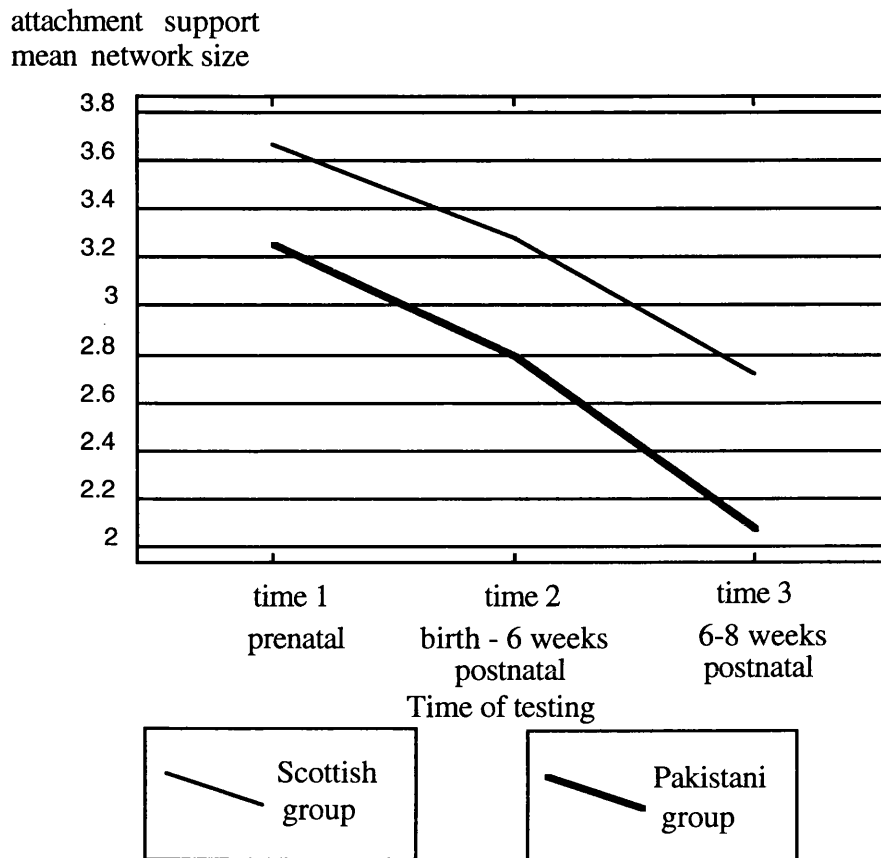
8.2.2 Attachment Support Network Size

Analysis of variance results for attachment support network size are summarised in table 8.13

**Table 8.13 Analysis of variance results: network size of attachment support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	14.77	73	6.08	2.43	n.s
Time (T)	2	21.39	146	2.46	8.70	.001
C x T	2	.27	146	2.46	.11	n.s

The analysis of variance revealed a significant main effect of time,  $F(2, 146) = 8.70$ ,  $P < 0.001$ . The main effect of culture and the interaction were both non significant. Both Scottish and Pakistani mothers did not differ in number of support persons for attachment support. These results are illustrated graphically in figure 8.6.

**Figure 8.6 Culture and time interaction: attachment support network size**

From the graph (figure 8.6) it can be seen that the pattern of network size scores decreased over time. There were no significant differences between cultures indicating that there were similar sizes of network support for attachment support. The significant main effect of time was investigated in more detail by a Newman-Keuls post-hoc test (table 8.14).



**Table 8.14 Newman-Keuls summary: main effect of time on network size scores for attachment support**

			Probability levels *		
main effect Time	Scottish means	Pakistani means	Time 1	Time 2	Time 3
1	3.67	3.26		n.s (S)	.001 (S)
2	3.28	2.79	n.s (P)		.05 (S)
3	2.72	2.08	.001 (P)	.05 (P)	

\* S = Scottish group      P = Pakistani group

The post-hoc analysis reveals that there were significant differences between time 1 and time 3, with time 3 means lower than time 1. The difference between means at time 2 and time 3 was also significant, again time 3 means were lower than time 2. Differences between means at time 1 and time 2 were non significant. The results of the analyses conclude that mothers in both cultures had networks of similar size for attachment support. Over time, there was a significant decrease in network size at the final assessment for 6- 8 weeks postnatal (time 3) for both groups.

8.2.3 Guidance Support Network Size

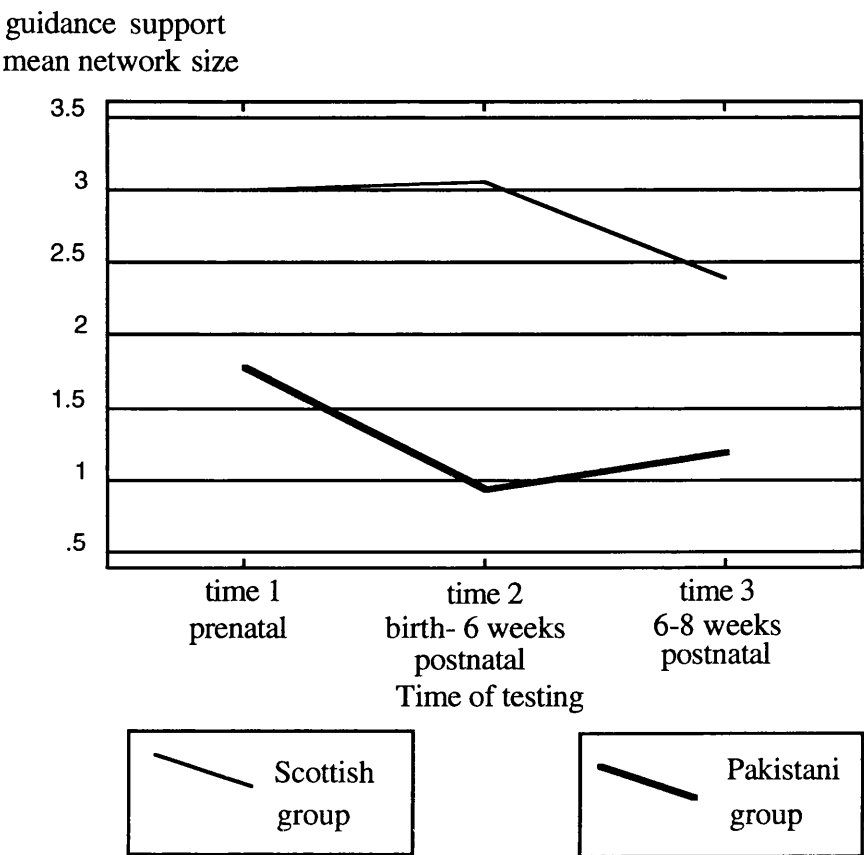
The analysis of variance results for guidance support network size are summarised in table 8.15.

**Table 8.15 Analysis of variance results: network size of guidance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	126.12	73	2.46	51.26	.001
Time (T)	2	6.97	146	1.31	5.32	.01
C x T	2	5.20	146	1.31	3.96	.05

The analysis of variance results revealed a significant main effect of culture,  $F(1, 73) = 51.26, p < 0.001$ . There was also a significant main effect of time,  $F(2, 146) = 5.32, p < 0.01$ . The culture and time interaction was also significant,  $F(2, 146) = 3.96, p < 0.05$ . The significant interaction shows that the network size for guidance support in the two groups was differentially affected by time. This result is illustrated graphically by figure 8.7.

**Figure 8.7 Culture and time interaction: guidance support network size**



From the graph (figure 8.7) it can be seen that the Scottish and Pakistani mothers' scores displayed different patterns over time. The Scottish group network size remains steady from time 1 to time 2 and then decreases at time 3. In the Pakistani group, network size for guidance support decreases from time 1 to time 2 and then increases slightly at time 3. The interaction was investigated in more detail by a Newman-Keuls post-hoc test (table 8.16).

**Table 8.16 Newman-Keuls summary: culture and time interaction of network size scores on guidance support**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	3.00		n.s	0.05	0.001	-----	-----
	2	3.06	n.s		0.05	-----	0.001	-----
	3	2.39	0.05	0.05		-----	-----	0.001
Pakistani	1	1.79	0.001	-----	-----		0.01	0.05
	2	0.95	-----	0.001	-----	0.01		n.s
	3	1.21	-----	-----	0.001	0.05	n.s	

----- comparisons not quoted as they are not relevant

The post-hoc results show that the Scottish group's network size decreased significantly at 6-8 weeks postnatal (time 3), compared to both time 1 and time 2. There was no significant difference in network size between time 1 and time 2. In the Pakistani group, network size at both postnatal assessments (times 2 and 3) was significantly smaller than network size at the prenatal stage (time 1). There was no significant difference in network size between time 2 and time 3.

Between cultures there were significant differences in network size. Post-hoc results reveal that Scottish network size for guidance support was significantly larger at all three times compared to the Pakistani group. The main difference that distinguishes the groups is network size in the 6 weeks following birth (time 2). While the Scottish mothers have a similar network size at time 1 and time 2, the Pakistani mothers' network size decreases at time 2.

8.2.4 Nurturance Support Network Size

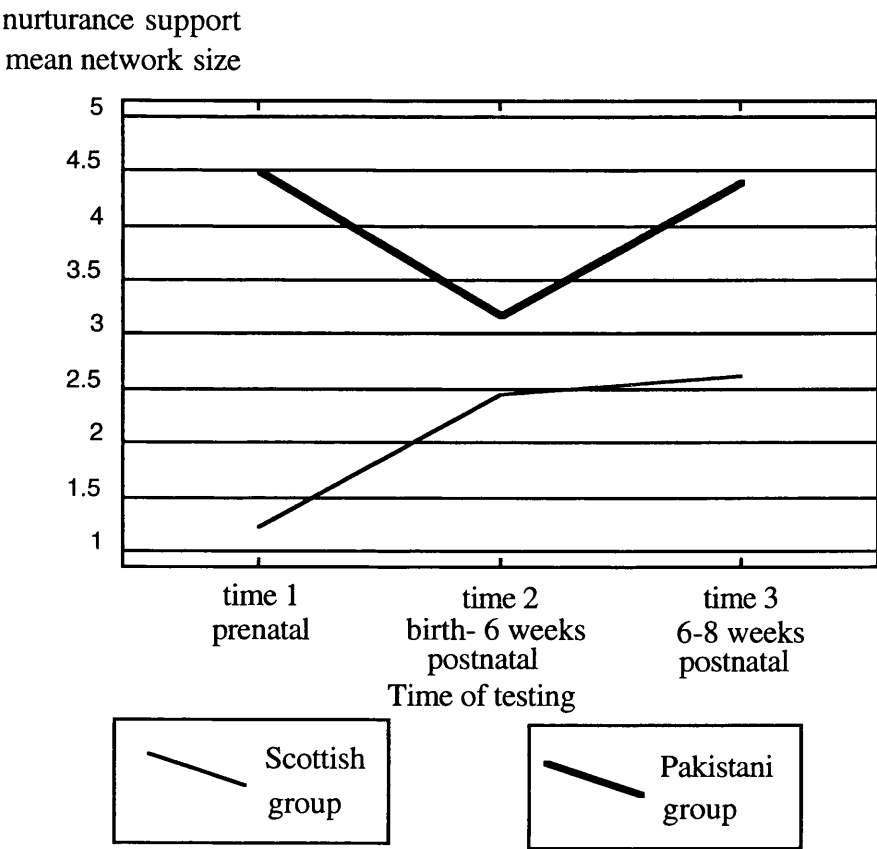
The analysis of variance results for network size of nurturance support are summarised in table 8.17.

**Table 8.17 Analysis of variance results: network size of nurturance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	211.71	73	5.72	37.01	.001
Time (T)	2	11.29	146	2.40	4.70	.05
C x T	2	30.85	146	2.40	12.83	.001

Analysis of variance results reveal that there was a significant main effect of culture ( $F(1, 73) = 37.01, p < 0.001$ ) and time ( $F(2, 146) = 4.70, p < 0.05$ ). The culture and time interaction was also significant,  $F(2, 146) = 12.83, p < 0.001$ . The significant interaction is illustrated graphically in figure 8.8.

**Figure 8.8 Culture and time interaction : nurturance support network size**



The graph (figure 8.8) illustrates two different patterns of network size across time for the two groups. The Scottish mothers' network size increases from the prenatal stage (time 1) to the time 2 (birth to 6 weeks postnatal), with a smaller increase from time 2 to time 3. In the Pakistani group network size decreased from time 1 to time 2, with an increase from time 2 to time 3. Overall, from the graph it can be seen that the Pakistani mothers reported a larger number of nurturance support persons. The significant interaction was further investigated by a post-hoc Newman-Keuls analysis (table 8.18).

**Table 8.18 Newman-Keuls summary: culture and time interaction of network size scores on nurturance support**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	1.22		0.001	0.001	0.001	-----	-----
	2	2.44	0.001		n.s	-----	n.s	-----
	3	2.61	0.001	n.s		-----	-----	0.001
Pakistani	1	4.51	0.001	-----	-----		0.001	n.s
	2	3.18	-----	n.s	-----	0.001		0.001
	3	4.14	-----	-----	0.001	n.s	0.001	

----- comparisons not quoted as they are not relevant

From the post-hoc results, it can be seen that Scottish group network size at the postnatal assessments (times 2 and 3) is significantly larger than prenatal network size (time 1). There was a non significant increase in network size from time 2 to time 3. In the Pakistani group, network size was significantly smaller in the 6 week period after birth (time 2) compared to the prenatal stage (time 1). There was also a significant increase in network size from time 2 to time 3 (6-8 weeks postnatal).

Between cultures, there were two significant differences. At time 1 and time 3, the Pakistani mothers' network size was significantly larger than Scottish mothers'. There was no significant difference between the two groups' network size at time 2. Results suggest that Pakistani mothers provide nurturance support to a larger network than Scottish mothers, except during the 6 weeks after birth, at which point network size is similar.

8.2.5 Social Integration Support Network Size

The analysis of variance results for network size of social integration support are summarised in table 8.19.

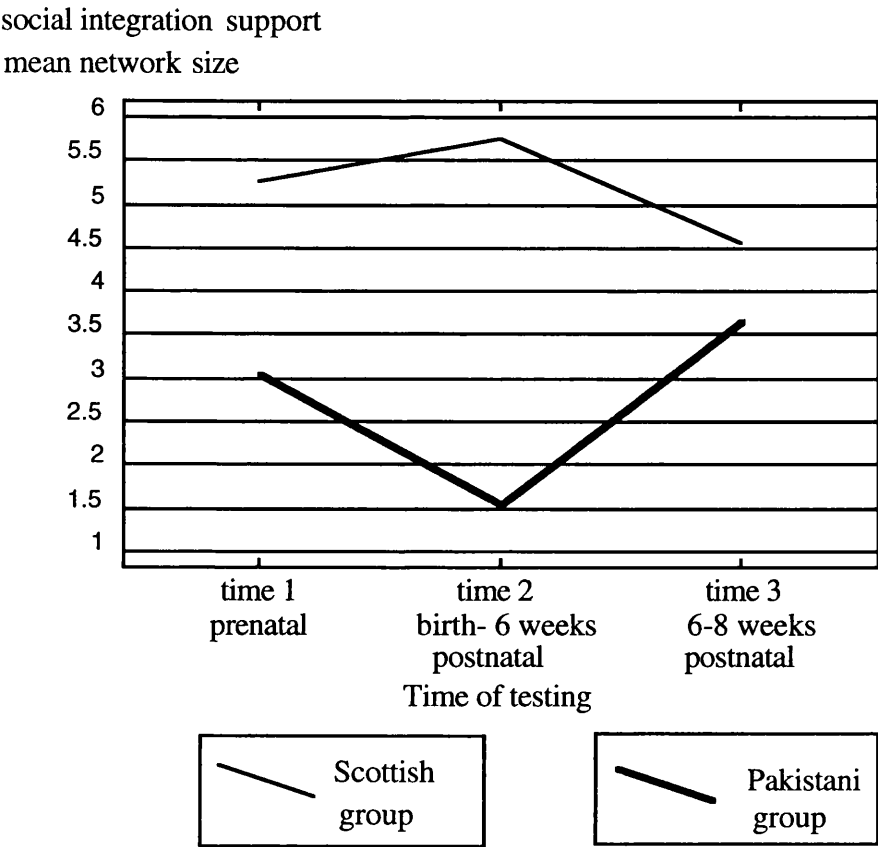
**Table 8.19 Analysis of variance results: network size of social integration support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	332.65	73	8.27	40.24	.001
Time (T)	2	5.82	146	4.87	1.19	n.s
C x T	2	51.48	146	4.87	10.56	.001

The analysis of variance results revealed a significant main effect of culture,  $F(1, 73) = 40.24, p < 0.001$ . The main effect of time was non significant. The culture and time interaction was also significant,  $F(2, 146) = 10.56, p < 0.001$ . The interaction result is illustrated graphically in figure 8.9.



**Figure 8.9 Culture and time interaction: social integration support network size**



From the graph (figure 8.9) it is evident that there is a different pattern of network support in social integration for the two groups of mothers. In the Scottish group there is a slight increase in network size from time 1 to time 2 and then a drop to the lowest network size at time 3. The Pakistani mothers show a different pattern with a decrease in network size from time 1 to time 2 and then an increase to the largest network size at time 3. From the graph it can be seen that at each time of assessment, the Scottish mothers have a larger network size for social integration support. This interaction is investigated in more detail by a post-hoc Newman-Keuls analysis (table 8.20).

**Table 8.20 Newman-Keuls summary: culture and time interaction of network size scores on social integration support**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	5.28		n.s	n.s	0.001	-----	-----
	2	5.75	n.s		n.s	-----	0.001	-----
	3	4.56	n.s	n.s		-----	-----	n.s
Pakistani	1	3.05	0.001	-----	-----		0.01	n.s
	2	1.56	-----	0.001	-----	0.01		0.001
	3	3.67	-----	-----	n.s	n.s	0.001	

----- comparisons not quoted as they are not relevant

In the Scottish group, there was no significant difference in network size across time. The Scottish mothers maintained a larger social network consistently from the prenatal assessment to the final 6-8 weeks postnatal period (time 3). The pattern in the Pakistani mothers differs in that there was a significant decrease in social network size from the prenatal stage (time 1) to time 2 (birth to 6 weeks postnatal). There was a significant increase in social network size from time 2 to time 3 (6-8 weeks postnatal). The difference in network size at time 1 and time 3 is non significant.

Between cultures there are two significant differences at time 1 and time 2. At the prenatal stage and during the first 6 weeks after birth, Scottish mothers have a significantly larger social support network compared to Pakistani mothers. By 6-8 weeks postnatal (time 3), there is no significant difference in network size.

8.2.6 Reassurance of Worth Support Network Size

The analysis of variance results for network size of reassurance of worth support are summarised in table 8.21.

**Table 8.21 Analysis of variance results: network size of reassurance of worth support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	13.80	73	6.51	2.12	n.s
Time (T)	2	4.15	146	2.61	1.59	n.s
C x T	2	5.75	146	2.61	2.20	n.s

There was no significant main effect of culture or time. The interaction of culture and time was also non significant. The network size for reassurance of worth is comparable for both groups across time.

### 8.3 Role of the Husband in Social Support Networks

The role of husbands in social support was evaluated by examining network support members specified by mothers. Cochran Q tests of each support type examined the presence of husbands across time. The Cochran Q test and Chi-square analyses were conducted at each time of assessment to compare the role of husbands in the support networks of Scottish and Pakistani mothers. Table 8.22 summarises the percentage of husbands cited as support network members for each sub-type of social support.

**Table 8.22 Percentages of husbands as support network members**

presence of husband	Scottish			Pakistani		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
reliable alliance	89%	92%	92%	26%	3%	0%
attachment	94%	94%	89%	59%	38%	21%
guidance	42%	44%	50%	36%	21%	41%
nurturance	47%	72%	83%	77%	49%	69%
social integration	72%	64%	56%	5%	5%	3%
reassurance of worth	75%	78%	75%	38%	10%	15%

### 8.3.1 Role of Husbands in Reliable Alliance Support

A Cochran Q test of the presence of Scottish husbands' support in reliable alliance across time, revealed a non significant result,  $Q(2) = 0.25, p=0.89$ . At each time of assessment, approximately 90% of Scottish mothers included their husband as a support provider. This result supports the conclusion that husbands were a constant part of the reliable alliance network of Scottish mothers across time.

The role of husbands in reliable alliance support across time for Pakistani mothers was also examined using a Cochran Q test. The result in this case revealed a significant difference across time,  $Q(2) = 18.20, p<0.001$ . The percentage of husbands who were included as part of the reliable alliance network decreased across time. At time 1, approximately one quarter of husbands were included in the support network. The proportion of husbands decreased markedly to 3% during the 6 weeks after birth (time 2). At time 3 (6-8 weeks postnatal) no husbands were included as network supporters.

Comparisons between the two groups of mothers at each time of testing were made using 2 x 2 chi-square analyses.

#### Time 1

There was a significant difference in presence of husband as support network member between the two groups of mothers,  $\chi^2(1) = 30.39, p<0.001$ . Scottish mothers had significantly more support from husbands (89%) compared to Pakistani mothers (26%).

#### Time 2

Again a significant difference was found between the groups regarding support from husbands in reliable alliance,  $\chi^2(1) = 59.97, p<0.001$ . Scottish mothers received significantly more support from husbands (92%) compared to Pakistani mothers (3%).

### Time 3

At time 3 a significant difference was found,  $\chi^2(1) = 63.84, p < 0.001$ . As before, Scottish mothers received significantly more support from husbands (93%) compared to Pakistani mothers (0%) at 6-8 weeks postnatal.

#### 8.3.2 Role of Husbands in Attachment Support

The role of husbands in attachment support across time for Scottish mothers was examined using a Cochran Q test. Results revealed that there was no significant difference in support from husbands across time,  $Q(2) = 1.33, p = 0.51$ . At times 1 and 2, 94% of Scottish mothers reported that husbands were part of the attachment support network. At time 3 there was a slight decrease, with 89% of mothers receiving attachment support from husbands.

A Cochran Q test was also used to examine the role of husbands in attachment support for Pakistani mothers. Results revealed that there was a significant difference in husband support across time,  $Q(2) = 14.08, p < 0.001$ . Pakistani mothers reported decreasing support from husbands across time. The highest attachment support came at time 1 (59%), decreasing to 38% at time 2 and then 21% at time 3.

Comparisons between the two groups of mothers at each time of testing were made using 2 x 2 chi-square analyses.

### Time 1

There was a significant difference in presence of husband as support network member between the two groups of mothers,  $\chi^2(1) = 12.391, p < 0.001$ . Scottish mothers received significantly more support from husbands at the prenatal stage (94%) compared to Pakistani mothers (59%).

### Time 2

Again at time 2 there was a significant difference in husbands' attachment support between the two groups,  $X^2(1) = 25.90$   $p < 0.001$ . Scottish mothers received more support from husbands (94%) during the first 6 weeks after birth compared to Pakistani mothers (38%).

### Time 3

Time 3 results revealed the same significant result,  $X^2(1) = 35.16$   $p < 0.001$ . Again, Scottish mothers received significantly more attachment support from husbands (89%) compared to Pakistani mothers (21%).

### 8.3.3 Role of Husbands in Guidance Support

The role of husbands in providing guidance support was evaluated across time using a Cochran Q test. Results were non significant for the Scottish group,  $Q(2) = 0.88$ ,  $p = 0.65$ . Results indicated that guidance support from husbands in the Scottish group remained consistent across time. The percentage of husbands involved was less than that for reliable alliance and attachment support; with 42% at time 1, 44% at time 2, and 50% at time 3.

For the Pakistani group, results were also non significant,  $Q(2) = 3.71$ ,  $p = 0.16$ . Results indicate that guidance support from husbands did not change across time for the Pakistani group. Percentage of husband support was 36% at time 1, 21% at time 2 and the highest value at time 3 with 41%.

Comparisons between the two groups of mothers at each time of testing were made using 2 x 2 chi-square analyses.

Time 1

Results revealed a non significant difference between husband support at the prenatal stage for the two groups,  $X^2(1) = 0.26$ ,  $p=0.61$ . Amount of husband support for guidance was comparable, with 42% of Scottish mothers receiving husband support as compared to 36% of Pakistani mothers.

Time 2

Chi-square results for time 2 revealed a significant difference between the groups' husband support,  $X^2(1) = 4.93$ ,  $p<0.05$ . The Scottish mothers received more husband support (44%) as compared to Pakistani mothers (21%) during the first 6 weeks after birth.

Time 3

Results revealed a non significant difference between husband support for the two groups,  $X^2(1) = 0.61$ ,  $p=0.43$ . Amount of support from husbands was comparable for the two cultures, with 50% of Scottish mothers receiving support as compared to 41% of Pakistani mothers.

8.3.4 Role of Husbands in Nurturance Support

The role of husbands in receiving nurturance support was evaluated across time using a Cochran Q test. Results for the Scottish mothers reveal a significant difference across time,  $Q(2) = 19.00$ ,  $p<0.001$ . The percentage of husbands receiving nurturance support from mothers increased across time. At time 1, 47% of husbands received support, this increased sharply to 72% at time 2 and increased slightly again to 83% at time 3.

A Cochran Q test was used to evaluate the role of husbands across time in the Pakistani group. Results were significant,  $Q(2) = 9.70$ ,  $p<0.01$ , indicating that the role of husbands in nurturance support changed across time. Husbands in this group received the most



nurturance support at time 1 (77%), support decreased to 49% at 3 weeks postnatal, and then increased to 69% at time 3.

Comparisons between the two cultural groups were conducted using 2 x 2 chi-squares at each time of assessment.

### Time 1

The chi-square result revealed a significant difference at time 1,  $X^2(1) = 7.06$ ,  $p < 0.05$ . In this case Pakistani mothers provided more nurturance support to husbands (77%) as compared to Scottish mothers (47%) at the prenatal stage.

### Time 2

The analysis revealed a significant difference between groups,  $X^2(1) = 4.31$ ,  $p < 0.05$ . Unlike time 1, Scottish mothers provided significantly more nurturance support to husbands (72%) compared to Pakistani mothers (49%) during the first 6 weeks after birth.

### Time 3

At time 3 there was a non significant difference between the number of husbands receiving nurturance support from mothers,  $X^2(1) = 2.04$ ,  $p = 0.15$ . Of both groups, 76% of mothers provided nurturance support to husbands. The proportion of mothers in each group was statistically similar, with 83% of Scottish mothers and 69% of Pakistani mothers providing nurturance support.

### 8.3.5 Role of Husbands in Social Integration Support

The role of husbands in providing social integration support was evaluated across time using Cochran Q tests. In the Scottish group, the result approached significance,  $Q(2) = 5.40$ ,  $p = 0.07$ . Percentages of husbands participating in social integration support decreased across time. At time 1 72% of husbands provided social integration support, this decreased to 64% at time 2 and 56% at time 3.

The Cochran Q test of husband support across time for the Pakistani group also provided a non significant result,  $Q(2) = 0.50$ ,  $p = 0.78$ . Results indicate that social integration support from husbands remained constant across time. A small proportion of husbands in the Pakistani group provided social integration support. At times 1 and 2, 5% of husbands provided support compared to 3% at time 3.

Comparisons between the two cultural groups were conducted using 2 x 2 chi-squares at each time of assessment.

#### Time 1

Results revealed a significant difference between the two groups at the prenatal assessment,  $X^2(1) = 36.02$ ,  $p < 0.001$ . The Scottish mothers received significantly more social integration support from husbands (72%) compared to Pakistani mothers (5%).

#### Time 2

A significant difference was found between the groups at time 2,  $X^2(1) = 29.09$ ,  $p < 0.001$ . Again the Scottish mothers received significantly more social integration support from husbands (64%) compared to Pakistani mothers (5%) during the first 6 weeks after birth.

### Time 3

The results for time 3 followed the same pattern as the previous assessments. There was a significant difference between the groups on social integration support from husbands,  $X^2(1) = 26.08, p < 0.001$ . Again, Scottish mothers received more husband support on this dimension (56%) compared to Pakistani mothers (3%) at 6-8 weeks postnatal.

#### 8.3.6 Role of Husbands in Reassurance of Worth Support

The role of husbands in providing reassurance of worth support was evaluated across time using Cochran Q tests. In the Scottish group, the results revealed a non significant difference,  $Q(2) = 0.22, p = 0.89$ . Results indicate that the proportion of husbands providing reassurance of worth support remained constant. A consistently large proportion, approximately 75%, of husbands provided this support across time in the Scottish group.

A Cochran Q test for the Pakistani group revealed a significant result,  $Q(2) = 11.44, p < 0.01$ . The proportion of husbands who provided reassurance of worth support decreased markedly from time 1 (38%) to time 2 (10%). At time 3, 15% of husbands provided reassurance of worth support.

Comparisons between the two groups of mothers were made using 2 x 2 chi-square analyses at each time of testing.

### Time 1

The chi-square result revealed a significant difference between groups at the prenatal stage,  $X^2(1) = 10.14, p < 0.01$ . Scottish mothers received more husband support (75%) compared to Pakistani mothers (38%).

Time 2

At 3 weeks postnatal there was a significant difference between the groups,  $\chi^2(1) = 34.89$ ,  $p < 0.001$ . Again, Scottish mothers received significantly more reassurance of worth support from husbands (78%) compared to Pakistani mothers (10%) during the 6 weeks after birth.

Time 3

At 6-8 weeks postnatal the difference between groups was significant,  $\chi^2(1) = 27.00$ ,  $p < 0.001$ . Again, Scottish mothers received more support from husbands in reassurance of worth (75%) as compared to Pakistani mothers (15%).

## 8.4 Analyses of Family Network Size

Members of the support network for each type of support were classified as family and non family support persons. The pattern of family support between cultures and across time was analysed using 2 way analyses of variance. The between subjects variable was culture and the within subjects factor was time of testing. The dependent variable was number of family support members in each network. Descriptive statistics of family network members are summarised in table 8.23.

**Table 8.23 Means and standard deviations\* for network size of family members**

	Scottish			Pakistani		
<b>family network size</b>	<b>Time 1</b>	<b>Time 2</b>	<b>Time 3</b>	<b>Time 1</b>	<b>Time 2</b>	<b>Time 3</b>
<b>reliable alliance</b>	2.72 (1.61)	2.58 (1.29)	2.25 (1.08)	2.38 (1.94)	1.97 (1.14)	1.41 (1.86)
<b>attachment</b>	2.75 (1.57)	2.44 (1.08)	2.17 (1.11)	2.92 (2.25)	2.49 (1.82)	1.97 (2.09)
<b>guidance</b>	1.78 (1.36)	1.75 (1.20)	1.58 (1.18)	1.31 (1.36)	0.87 (1.13)	1.10 (0.99)
<b>nurturance</b>	1.19 (1.26)	2.44 (1.40)	2.61 (1.34)	4.54 (2.60)	3.18 (2.02)	4.36 (2.07)
<b>social integration</b>	2.92 (1.50)	3.22 (1.84)	2.69 (1.70)	2.59 (2.76)	1.26 (2.78)	3.08 (2.78)
<b>reassurance of worth</b>	1.89 (1.01)	2.36 (1.38)	2.17 (1.18)	2.41 (2.53)	2.21 (2.09)	1.74 (1.97)

\* standard deviations in parentheses

8.4.1 Reliable Alliance Support: Family Network Size

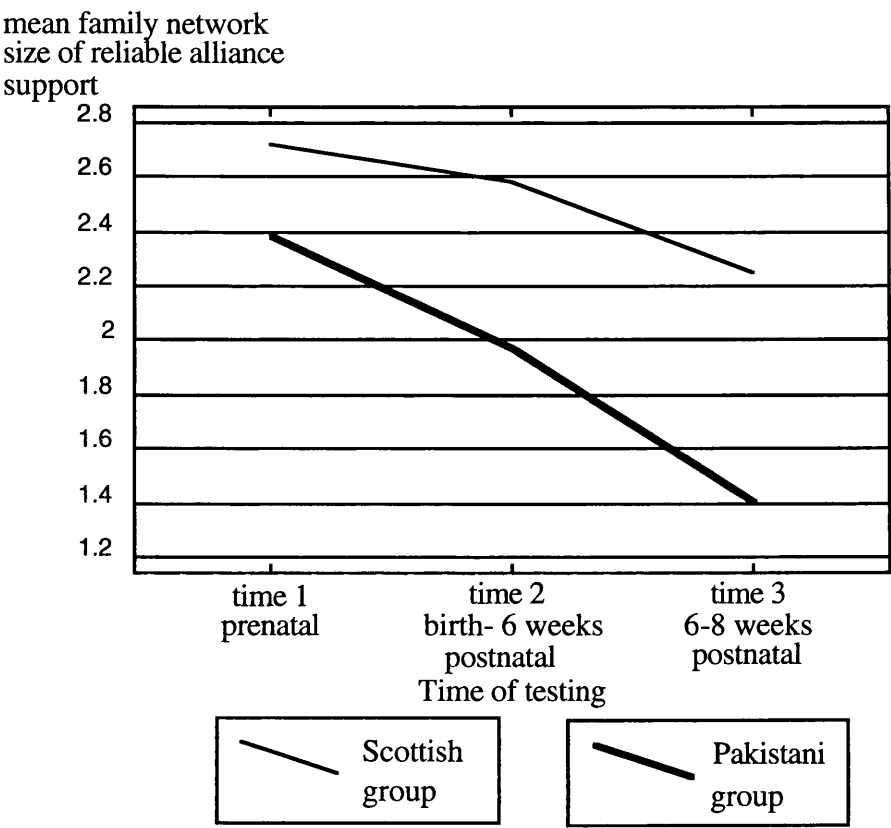
Anova results of the family network size of reliable alliance support are summarised in table 8.24.

**Table 8.24 Analysis of variance results: family network size of reliable alliance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	19.91	73	3.52	5.66	0.05
Time (T)	2	9.98	146	1.77	5.65	0.01
C x T	2	1.18	146	1.77	.67	n.s

There was a significant main effect of culture ( $F(1, 73) = 5.66, p < 0.05$ ) and time ( $F(2, 146) = 5.65, p < 0.01$ ). The significant main effect of culture indicated that Scottish mothers had more supporters for reliable alliance (mean = 2.52) compared to Pakistani mothers (mean = 1.92). The culture and time interaction was non significant. The results are illustrated in figure 8.10.

**Figure 8.10 Culture and time interaction : family network size of reliable alliance support**



From the graph (figure 8.10) it can be seen that the number of family network members for reliable alliance decreases across time. The main effect of culture is also apparent, with Scottish mothers having more family supporters. The significant main effect of time was examined in more detail using a post-hoc Newman-Keuls test (table 8.25).

**Table 8.25 Newman-Keuls summary: main effect of time for family network size for reliable alliance support**

			Probability levels *		
main effect	Scottish means	Pakistani means			
Time			Time 1	Time 2	Time 3
1	2.72	2.38		n.s (S)	.01 (S)
2	2.58	1.97	n.s (P)		.05 (S)
3	2.25	1.41	.01 (P)	.05 (P)	

\* S = Scottish group      P = Pakistani group

The post-hoc test reveals that there was a significant difference between time 1 and time 3, with time 3 scores lower than time 1. The difference between time 2 and time 3 was also significant, with time 3 scores lower than time 2. The difference between times 1 and 2 was non significant. For both groups, the drop in reliable alliance support from family members comes at 6-8 weeks postnatal (time 3).

8.4.2 Attachment Support: Family Network Size

Anova results of the family network size of attachment support are summarised in table 8.26.

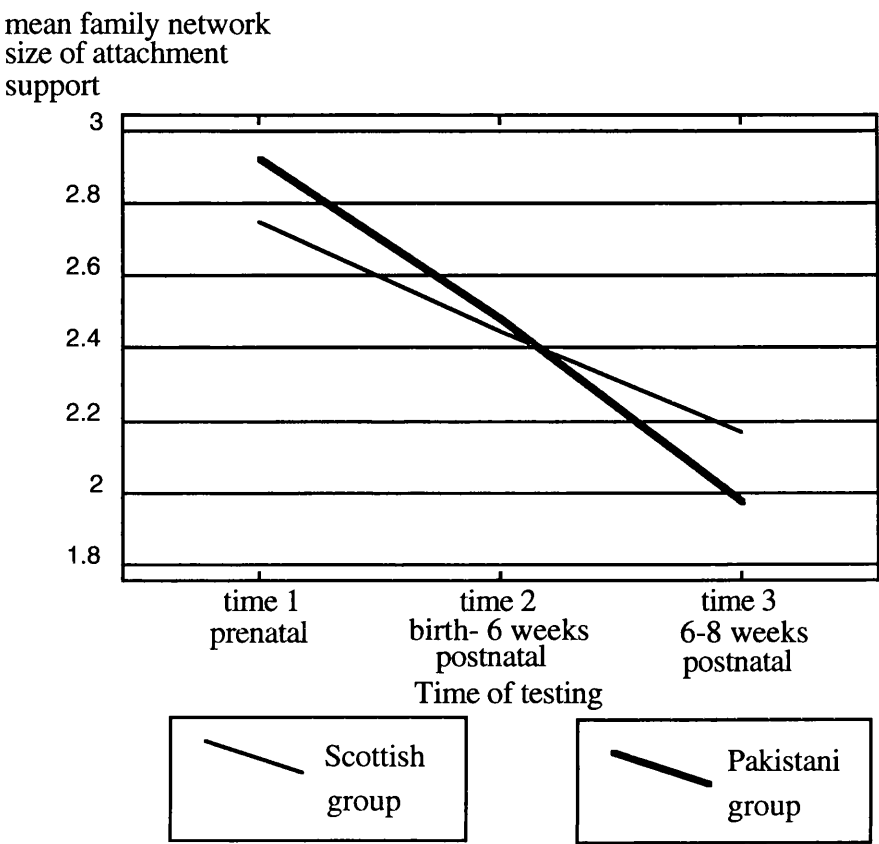
**Table 8.26 Analysis of variance results: family network size of attachment support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	.00	73	4.66	.00	n.s
Time (T)	2	10.99	146	2.17	5.07	.01
C x T	2	.64	146	2.17	.30	n.s

Analysis of variance results reveal that there was a non significant main effect of culture, indicating that Scottish and Pakistani mothers had similar numbers of family supporters for attachment support. The main effect of time is significant (  $F(2, 146) = 5.07$ ,  $p < 0.01$ ), indicating differences in number of family supporters across time. The culture and time interaction is non significant. Results are illustrated graphically in figure 8.11.



**Figure 8.11 Culture and time interaction: family network size of attachment support**



From the graph (figure 8.11) it can be seen that both Scottish and Pakistani mothers received similar amounts of family attachment support. The significant main effect of time shows a decrease in attachment support from family members across time. This result was analysed in more detail using a post-hoc Newman-Keuls test (table 8.27).

**Table 8.27 Newman-Keuls summary: main effect of time for family network size of attachment support**

main effect Time	Scottish means	Pakistani means	Probability levels *		
			Time 1	Time 2	Time 3
1	2.75	2.92		n.s (S)	.01 (S)
2	2.44	2.49	n.s (P)		n.s (S)
3	2.17	1.97	.01 (P)	n.s (P)	

\* S = Scottish group      P = Pakistani group

The post-hoc test reveals one significant difference between time 1 and time 3 scores. Time 3 scores are significantly lower than time 1, indicating that family attachment support drops significantly at 6-8 weeks postnatal as compared to prenatal levels of support. The difference between time 2 and the other times of assessment is non significant.

8.4.3 Guidance Support: Family Network Size

Anova results of the family network size of guidance support are summarised in table 8.28.

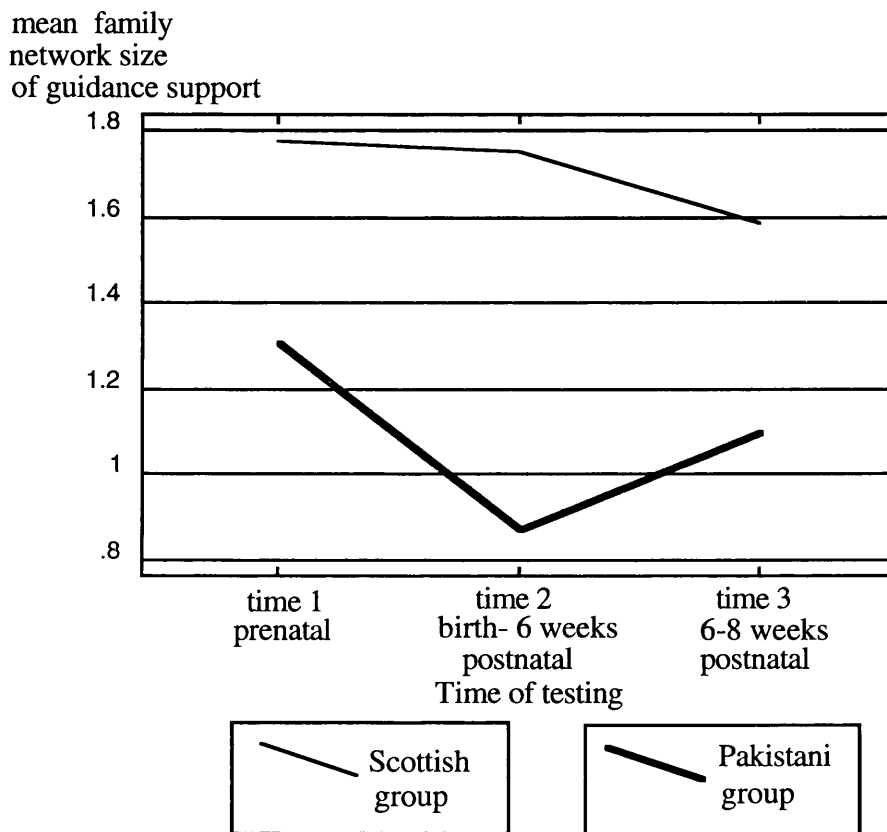
**Table 8.28 Analysis of variance results: family network size of guidance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	20.88	73	2.32	9.01	.01
Time (T)	2	1.18	146	1.03	1.14	n.s
C x T	2	1.01	146	1.03	.98	n.s

The analysis of variance results reveal that there is a significant main effect of culture,

$F(1, 73) = 9.01, p < 0.01$ . The main effect of time and the culture and time interaction are non significant. The means for the main effect of culture reveal that Scottish mothers had more family guidance supporters (1.70) compared to Pakistani mothers (1.09). The results of the analysis can be seen in figure 8.12.

**Figure 8.12 Culture and time interaction: family network size of guidance support**



The main effect of culture is apparent from the graph (figure 8.12), with Pakistani mothers receiving less support from family on guidance support.

8.4.4 Nurturance Support: Family Network Size

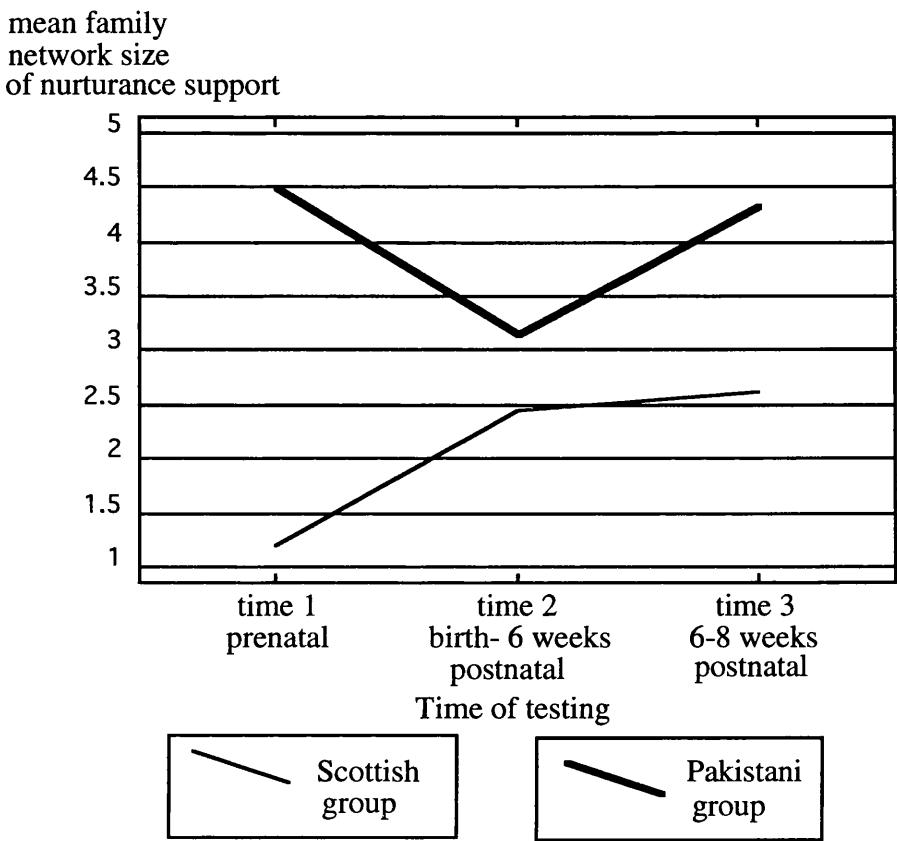
Anova results of the family network size of nurturance support are summarised in table 8.29.

**Table 8.29 Analysis of variance results: family network size of nurturance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	211.87	73	5.84	36.26	.001
Time (T)	2	10.47	146	2.31	4.53	.05
C x T	2	32.39	146	2.31	14.03	.001

According to the analysis of variance results there is a significant main effect of culture and time. The culture and time interaction is also significant,  $F(2, 146) = 14.03$ ,  $p < 0.001$ . From the significant interaction result, it can be concluded that the cultures are differentially affected by time of testing. This result is illustrated graphically in figure 8.13.

**Figure 8.13 Culture and time interaction: family network size of nurturance support**



From the graph (figure 8.13) it can be seen that Pakistani mothers provided the least nurturance support to others at time 2. In the Scottish group, the pattern indicates an increasing provision of nurturance support to others. In terms of overall network size it seems that the Pakistani mothers provide nurturance support to more people than Scottish mothers. This result was investigated in more detail using a post-hoc Newman-Keuls analysis (table 8.30).

**Table 8.30 Newman-Keuls summary: culture and time interaction of family network size for nurturance support**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	1.19		0.001	0.001	0.001	-----	-----
	2	2.44	0.001		n.s	-----	n.s	-----
	3	2.61	0.001	n.s		-----	-----	0.001
Pakistani	1	4.54	0.001	-----	-----		0.001	n.s
	2	3.18	-----	n.s	-----	0.001		0.001
	3	4.36	-----	-----	0.001	n.s	0.001	

----- comparisons not quoted as they are not relevant

In the Scottish group there was a significant increase in family network size between time 1 and time 2. The amount of nurturance support given to others increased in the first 6 weeks after birth for Scottish mothers. The difference between time 1 and time 3 was also significant, with more nurturance support being given at 6-8 weeks postnatal (time 3). The difference between times 2 and 3 was non significant. Results indicate that the increased nurturance support network established at time 2 (birth to 6 weeks postnatal) remained unchanged at 6-8 weeks postnatal (time 3).

In the Pakistani group, there was a significant difference between nurturance support network size at times 1 and 2. For the Pakistani mothers, the difference indicated a significant drop in the number of family members that were given support during the first 6 weeks after birth (time 2). The difference between times 2 and 3 was significant, while the difference between times 1 and 3 was non significant. From this, it can be concluded that there was a significant increase in the number of family members given nurturance support by Pakistani mothers from time 2 to time 3. The number of family members

receiving nurturance support from Pakistani mothers at 6-8 weeks postnatal (time 3) was similar to prenatal levels (time 1) .

There were two significant differences between the cultures at time 1 and time 3. The Scottish mothers provided support to smaller family networks at the prenatal stage (time 1) and at 6-8 weeks postnatal (time 3). The non significant difference during the first 6 weeks after birth (time 2), suggests that both groups of mothers provided nurturance to similarly sized family networks.

8.4.5 Social Integration Support: Family Network Size

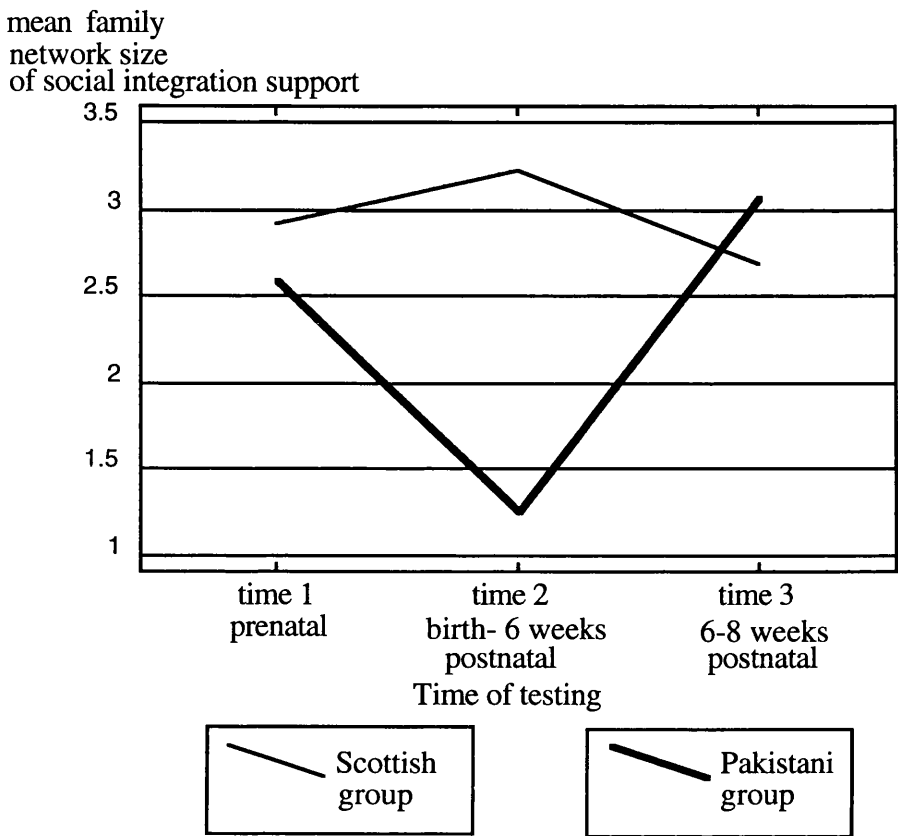
Anova results of the family network size of social integration support are summarised in table 8.31.

**Table 8.31 Analysis of variance results: family network size of social integration support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	22.77	73	7.15	3.18	n.s
Time (T)	2	8.73	146	4.47	1.95	n.s
C x T	2	27.16	146	4.47	6.08	.01

Analysis of variance results indicate that there were no significant main effects of culture or time. The culture and time interaction was significant,  $F(2, 146) = 6.08, p < 0.01$ . From this it can be concluded that both groups were differentially affected by time of testing. This result is illustrated graphically in figure 8.14. .

**Figure 8.14 Culture and time interaction: family network size of social integration support**



From the graph (figure 8.14) it can be seen that both groups of mothers have different patterns of family support for social integration. In general the Pakistani mothers have smaller family networks compared to Scottish mothers. The Pakistani mothers' family network for social integration is smallest during the period from birth to 6 weeks postnatal (time 2). In the Scottish group, the family network for social integration is highest at time 2. These observations were further scrutinised by means of a post-hoc Newman-Keuls analysis (table 8.32).



**Table 8.32 Newman-Keuls summary: culture and time interaction of family network size for social integration support**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	2.92		n.s	n.s	n.s	-----	-----
	2	3.22	n.s		n.s	-----	0.001	-----
	3	2.69	n.s	n.s		-----	-----	n.s
Pakistani	1	2.59	n.s	-----	-----		0.01	n.s
	2	1.26	-----	0.001	-----	0.01		0.01
	3	3.08	-----	-----	n.s	n.s	0.01	

----- comparisons not quoted as they are not relevant

In the Scottish group, there were no significant differences across time. The size of the family network for social integration remains consistent across time.

In the Pakistani group there is a significant drop in the size of family network for social integration from time 1 to time 2. From time 2 to time 3, the family network size increases significantly to a similar size as the prenatal (time 1) network for social integration.

Comparisons between cultures reveal one significant difference at time 2. Scottish family network size during the 6 weeks following birth is larger than the Pakistani group's network for social integration. At times 1 and 3, the family networks are of a comparable size.

#### 8.4.6 Reassurance of Worth Support: Family Network Size

Anova results of the family network size of reassurance of worth support indicate no significant findings. There were no significant main effects of culture or time. The culture and time interaction was also non significant. Results suggest that Scottish and Pakistani mothers had similarly sized family networks for reassurance of worth, which remained stable across time.

### 8.5 Analyses of Non-Family Network Size

The previous analyses (8.4) examined the networks of family support for each sub-scale. This section examines the network support persons who were classified as non-family. The pattern of non-family support between cultures and across time was analysed using 2 way analyses of variance. The between subjects variable was culture and the within subjects factor was time of testing. The dependent variable was number of non-family support members in each network. Descriptive statistics of non-family network members are summarised in table 8.33.

**Table 8.33 Means and standard deviations\* for network size of non-family members**

non-family network size	Scottish			Pakistani		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
reliable alliance	0.53 (1.06)	0.33 (0.63)	0.14 (0.35)	0.05 (0.32)	0.03 (0.16)	0.03 (0.16)
attachment	0.92 (1.18)	0.83 (1.06)	0.56 (0.88)	0.33 (0.77)	0.18 (0.56)	0.10 (0.50)
guidance	1.22 (1.19)	1.36 (1.32)	0.81 (0.82)	0.49 (0.85)	0.08 (0.27)	0.10 (0.38)
nurturance	0.03 (0.17)	0.00 (0.00)	0.00 (0.00)	0.03 (0.16)	0.00 (0.00)	0.05 (0.32)
social integration	2.36 (1.61)	2.53 (1.72)	1.97 (1.38)	0.46 (0.94)	0.31 (0.73)	0.56 (0.94)
reassurance of worth	0.64 (0.96)	0.81 (1.06)	0.47 (0.77)	0.26 (0.72)	0.08 (0.35)	0.15 (0.71)

\* standard deviations in parentheses

8.5.1 Reliable Alliance Support: Non-Family Network Size

Anova results of the non-family network size of reliable alliance support are summarised in table 8.34.

**Table 8.34 Analysis of variance results: non-family network size of reliable alliance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	5.03	73	.34	14.96	.001
Time (T)	2	.81	146	.26	3.05	n.s
C x T	2	.62	146	.26	2.34	n.s

The analysis of variance reveals a significant main effect of culture,  $F(1, 73) = 14.96$ ,  $p < 0.001$ . Scottish mothers have a significantly larger network of non-family support for reliable alliance compared to Pakistani mothers.

8.5.2 Attachment Support: Non-Family Network Size

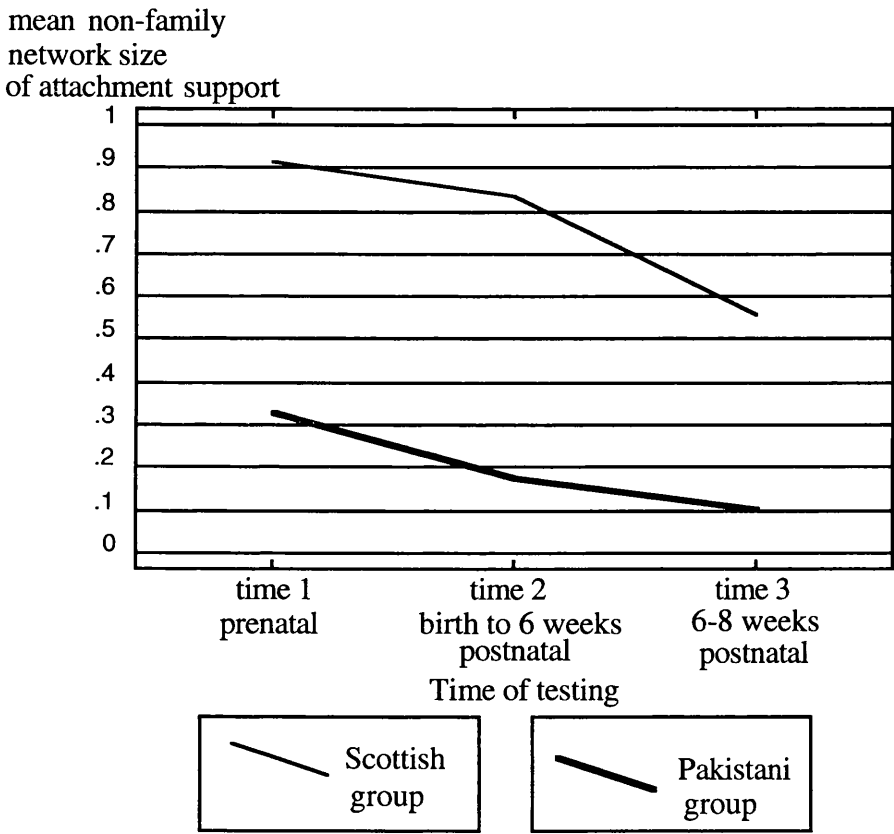
Anova results of the non-family network size of attachment support are summarised in table 8.35.

**Table 8.35 Analysis of variance results: non-family network size of attachment support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	17.83	73	1.36	13.06	.001
Time (T)	2	1.66	146	.40	4.11	.05
C x T	2	.19	146	.40	.48	n.s

Analysis of variance results revealed a significant main effect of culture,  $F(1, 75) = 13.06, p < 0.001$ . The Scottish mothers had a larger non-family network for attachment support compared to Pakistani mothers. There was a significant main effect of time,  $F(2, 146) = 4.11, p < 0.05$ . The culture and time interaction was non significant. Results are illustrated graphically in figure 8.15.

**Figure 8.15 Culture and time interaction: non-family network size for attachment support**



From the graph (figure 8.15) the main effect of culture is apparent, with Scottish mothers receiving more attachment support from non-family compared to Pakistani mothers. The significant main effect of time is illustrated by decreasing network size across time. This was further investigated using a post-hoc Newman-Keuls analysis (table 8.36).

**Table 8.36 Newman-Keuls summary: main effect of time for non-family network size of attachment support**

			Probability levels *		
main effect Time	Scottish means	Pakistani means	Time 1	Time 2	Time 3
1	0.92	0.33		n.s (S)	0.05 (S)
2	0.83	0.18	n.s (P)		n.s (S)
3	0.56	0.10	0.05 (P)	n.s (P)	

\* S = Scottish group      P = Pakistani group

From the post-hoc results (table 8.36) it can be seen that there was a significant difference in network size at times 1 and 3. For both groups, network size of non-family support was significantly smaller at 6-8 weeks postnatal compared to prenatal levels.

8.5.3 Guidance Support: Non-Family Network Size

Anova results of the non-family network size of guidance support are summarised in table 8.37.

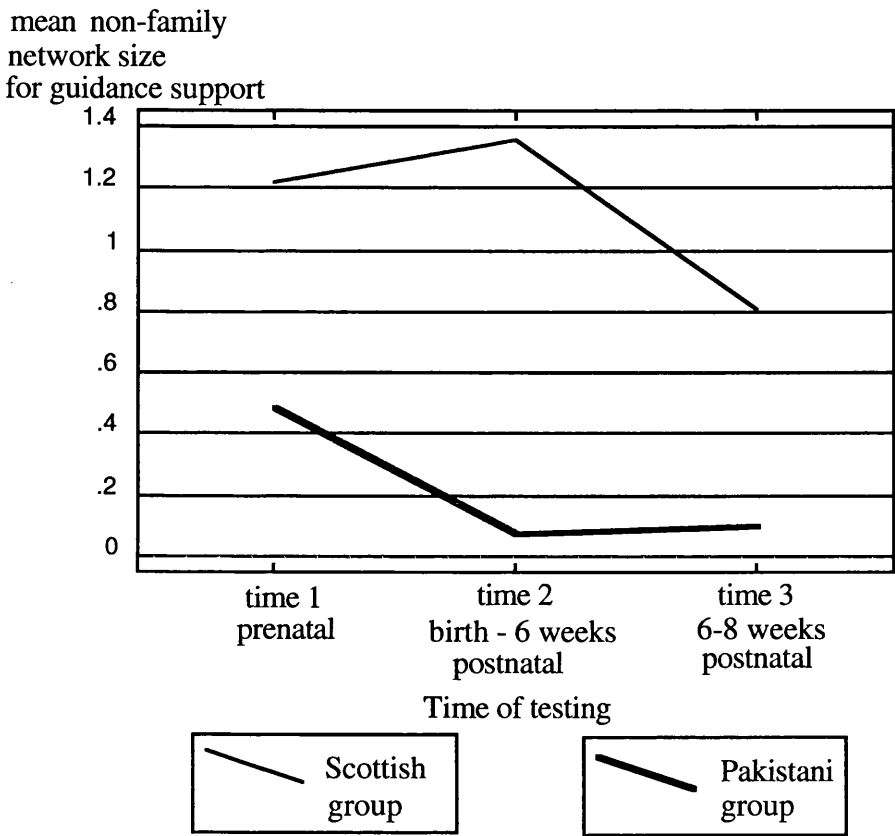
**Table 8.37 Analysis of variance results: non-family network size of guidance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	46.24	73	1.41	32.75	.001
Time (T)	2	3.11	146	.46	6.76	.01
C x T	2	2.00	146	.46	4.34	.05

The analysis of variance results revealed a significant main effect of culture and time. The culture and time interaction was also significant,  $F(2, 146) = 4.34, p < 0.05$ . The

results indicate that the two groups' non-family network guidance support was differentially affected by time of testing. The results are illustrated graphically in figure 8.16.

**Table 8.16 Culture and time interaction: non-family network size of guidance support**



From the graph (figure 8.16) it can be seen that Scottish mothers had larger non-family network sizes. The overall pattern of network size across time is different for the two cultures. Scottish mothers' network size increases at time 2 and then decreases to the lowest point at time 3. The Pakistani mothers' non-family network size decreases at time 2 and then increases very slightly at time 3. The interaction result was examined in more detail using a post-hoc Newman-Keuls analysis (table 8.38).

**Table 8.38 Newman-Keuls summary: culture and time interaction of non-family network size for guidance support**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	1.22		n.s	0.01	0.001	-----	-----
	2	1.36	n.s		0.01	-----	0.001	-----
	3	0.81	0.01	0.01		-----	-----	0.001
Pakistani	1	0.49	0.001	-----	-----		0.05	0.05
	2	0.08	-----	0.001	-----	0.05		n.s
	3	0.10	-----	-----	0.001	0.05	n.s	

----- comparisons not quoted as they are not relevant

Two significant differences were found in the Scottish group across time. The significant results indicated that network size of non-family guidance support was smaller at time 3 compared to times 1 and 2. The increase in network size between time 1 and time 2 was non significant. Results support the conclusion that the decrease in network size of non-family guidance support occurred at 6-8 weeks postnatal for the Scottish group.

In the Pakistani group, there were also two significant differences across time. The network size at time 1 was found to be significantly larger compared to networks at time 2 and time 3. There was no difference between network size at time 2 and time 3. For the Pakistani group, the drop in non-family network size of guidance support occurred during the 6 weeks after birth and remained unchanged at time 3.

Between the groups, there were three significant differences at each time of assessment. The Scottish mothers' non-family network size was significantly larger at each time compared to the Pakistani group.



#### 8.5.4 Nurturance Support: Non-Family Network Size

Analyses were not conducted for non-family network size of nurturance support. The majority of mothers (96%) did not list non-family persons as receivers of nurturance support. Given the overwhelming absence of non-family persons from this network, no analyses were undertaken.

#### 8.5.5 Social Integration Support: Non-Family Network Size

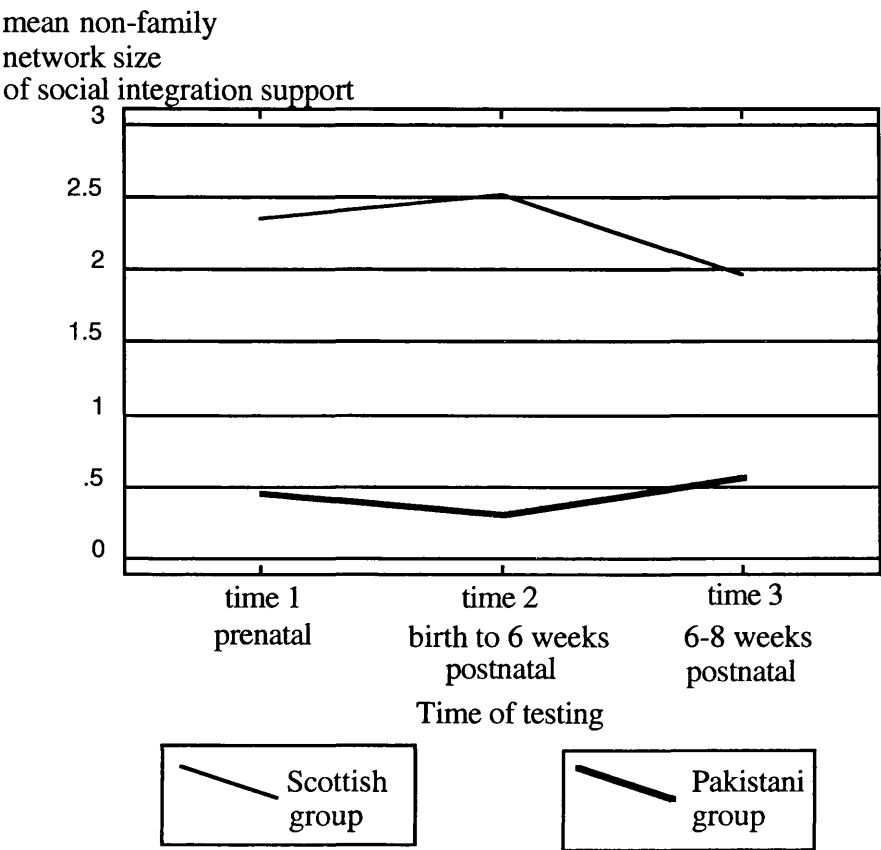
Anova results of the non-family network size of guidance support are summarised in table 8.39.

**Table 8.39 Analysis of variance results: non-family network size of social integration support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	190.67	73	2.80	68.12	0.001
Time (T)	2	.53	146	.98	.54	n.s
C x T	2	3.13	146	.98	3.19	0.05

The analysis of variance results reveal a significant main effect of culture. The culture and time interaction is also significant,  $F(2, 146) = 3.19, p < 0.05$ . Results indicate that each group's network size is differentially affected by time. Figure 8.17 illustrates the significant interaction.

**Figure 8.17 Culture and time interaction: non-family network size of social integration support**



From the graph (figure 8.17) it can be seen that the Scottish mothers had more non-family supporters for social integration support compared to Pakistani mothers. The pattern of network size also appears to differ for each group. The interaction was further investigated by a post-hoc Newman-Keuls analysis (table 8.40).

**Table 8.40 Newman-Keuls summary: culture and time interaction of non-family network size for social integration support**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	2.36		n.s	n.s	0.001	-----	-----
	2	2.53	n.s		0.05	-----	0.001	-----
	3	1.97	n.s	0.05		-----	-----	0.001
Pakistani	1	0.46	0.001	-----	-----		n.s	n.s
	2	0.31	-----	0.001	-----	n.s		n.s
	3	0.56	-----	-----	0.001	n.s	n.s	

----- comparisons not quoted as they are not relevant

In the Scottish group, there was one significant difference in social integration network size across time. The network size of non-family supporters decreased significantly from time 2 to time 3. Non-family support decreased at the 6-8 week postnatal period.

In the Pakistani group, the non-family network size of social integration support remained constant across time.

Between the cultures there were significant differences at each time of testing. The Scottish mothers had significantly larger networks of non-family social integration support at each time.

8.5.6 Reassurance of Worth: Non-Family Network Size

Anova results of the non-family network size of reassurance of worth support are summarised in table 8.41.

**Table 8.41 Analysis of variance results: non-family network size of reassurance of worth support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	12.75	73	.99	12.78	.001
Time (T)	2	.43	146	.43	.99	n.s
C x T	2	.91	146	.43	2.10	n.s

There was a significant main effect of culture,  $F(1, 73) = 12.78, p < 0.001$ . The main effect of time and the culture and time interaction were non significant. The non-family network size for Scottish mothers was larger (mean = 0.64) than that of Pakistani mothers (mean = 0.16).

### 8.6 Satisfaction with Amount of Support

Mothers were asked to rate their amount satisfaction with each support type. There was a 6-point rating scale ranging from very dissatisfied (1) to very satisfied (6). Mothers' rating scores were analysed by means of 2 way repeated measures analyses of variance. The between subjects factor was culture and the within subjects factor was time of testing. The dependent variable was score on rating scale, with higher scores indicating greater amount satisfaction. Descriptive statistics for satisfaction ratings of the amount of support, are summarised in table 8.42.

**Table 8.42 Means and standard deviations\* for satisfaction scores of amount of support**

	Scottish			Pakistani		
amount satisfaction	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
reliable alliance	5.56 (0.61)	5.44 (0.69)	5.33 (0.79)	5.33 (1.06)	5.62 (0.54)	5.21 (0.95)
attachment	5.50 (0.70)	5.25 (0.87)	5.33 (0.79)	5.72 (0.60)	5.36 (1.09)	5.08 (0.98)
guidance	5.36 (0.49)	5.33 (0.76)	5.31 (0.62)	5.59 (0.79)	5.69 (0.57)	5.26 (1.09)
nurturance	5.33 (0.89)	5.06 (1.01)	5.25 (0.91)	4.97 (1.35)	5.03 (1.25)	5.00 (1.00)
social integration	5.14 (0.83)	5.28 (0.81)	5.06 (0.79)	5.41 (0.82)	4.92 (1.26)	4.92 (1.16)
reassurance of worth	4.81 (0.92)	5.03 (0.88)	5.03 (0.84)	5.23 (0.97)	4.54 (1.62)	4.44 (1.67)

\* standard deviations in parentheses

8.6.1 Reliable Alliance Support: Amount Satisfaction

Anova results of amount satisfaction with reliable alliance support are summarised in table 8.43.

**Table 8.43 Analysis of variance results: satisfaction with amount of reliable alliance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	.20	73	1.17	.17	n.s
Time (T)	2	1.32	146	.37	3.55	.05
C x T	2	.79	146	.37	2.12	n.s

Results of the analysis of variance revealed a non significant main effect of culture. The culture and time interaction was also non significant. The main effect of time was significant,  $F(2, 146) = 3.55, p < 0.05$ . A post hoc Newman-Keuls analysis investigated the main effect further (table 8.44).

**Table 8.44 Newman-Keuls summary: main effect of time for amount satisfaction of reliable alliance support**

			Probability levels *		
main effect Time	Scottish means	Pakistani means	Time 1	Time 2	Time 3
1	5.56	5.33		n.s (S)	n.s (S)
2	5.44	5.62	n.s (P)		0.05 (S)
3	5.33	5.21	n.s (P)	0.05 (P)	

\* S = Scottish group      P = Pakistani group

The post-hoc results reveal that there was one significant difference in amount satisfaction. Amount satisfaction was significantly less at time 3 compared to time 2. Satisfaction with the amount of reliable alliance support remained at similar levels during the prenatal stage and the 6 weeks following the birth. The decrease in satisfaction with amounts of reliable alliance occurred during the 6-8 week postnatal period in both groups of mothers.

8.6.2 Attachment Support: Amount Satisfaction

Anova results of amount satisfaction with attachment support are summarised in table 8.45.

**Table 8.45 Analysis of variance results: satisfaction with amount of attachment support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	.03	73	1.27	.02	n.s
Time (T)	2	3.32	146	.47	7.04	.01
C x T	2	1.16	146	.47	2.45	n.s

Analysis of variance results reveal a non significant main effect of culture and non significant culture and time interaction. The main effect of time was significant,  $F(2, 146) = 7.04, p < 0.01$ . A post-hoc Newman-Keuls analysis investigated this effect further (table 8.46).

**Table 8.46 Newman-Keuls summary: main effect of time for amount satisfaction of attachment support**

			Probability levels *		
main effect Time	Scottish means	Pakistani means	Time 1	Time 2	Time 3
1	5.50	5.72		0.01 (S)	0.001 (S)
2	5.25	5.36	0.01(P)		n.s (S)
3	5.33	5.08	0.001 (P)	n.s (P)	

\* S = Scottish group      P = Pakistani group

The results of the post-hoc test reveal that there was a significant decrease in amount satisfaction between time 1 and time 2. The difference in amount satisfaction between time 2 and time 3 was non significant. Amount satisfaction at time 3 was significantly lower than time 1.

The highest satisfaction with amount of attachment support occurred at the prenatal stage for both groups of mothers. Satisfaction ratings dropped after the birth of the baby and remained lower at 6-8 weeks postnatal.

8.6.3 Guidance Support: Amount Satisfaction

Anova results of amount satisfaction with guidance support revealed no significant main effects and a non significant culture and time interaction. Results support the conclusion that both Scottish and Pakistani mothers had similar satisfaction ratings across time.

8.6.4 Nurturance Support: Amount Satisfaction

Analysis of variance results revealed no significant main effects of culture or time. There was a non significant culture and time interaction. Results support the conclusion that

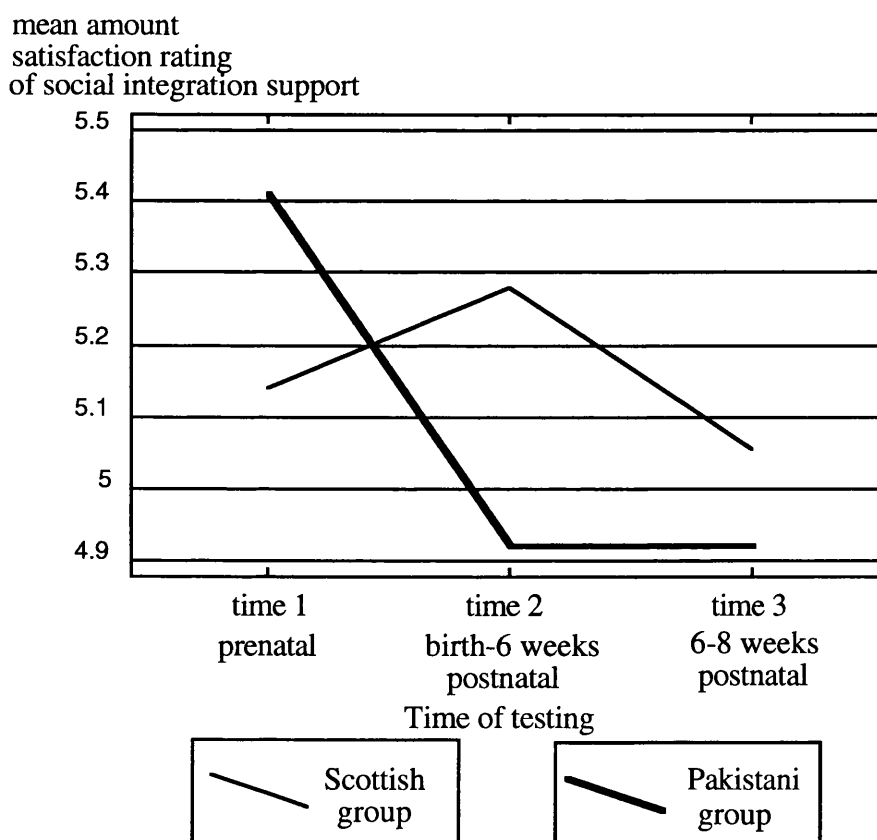


both Scottish and Pakistani mothers had similar ratings of the amount of nurturance support required of them. Ratings of the amount of nurturance support given to others were consistent across time.

#### 8.6.5 Social Integration Support: Amount Satisfaction

Analysis of variance results reveal no significant main effects of culture or time. The culture and time interaction approached significance,  $F(2, 146) = 3.03, p=0.052$ . As the interaction is almost significant, planned comparisons were carried out to investigate the relationship between culture and time further. The interaction is illustrated in figure 8.18.

**Figure 8.18 Culture and time interaction: amount satisfaction of social integration support**



Comparisons between Scottish and Pakistani mothers at each time of assessment revealed no significant differences. At each time, both groups of mothers reported similar satisfaction with the amount of social integration support received.

The Scottish mothers satisfaction ratings remained unchanged across time. Results of the Pakistani mothers' amount satisfaction ratings across time were the only ones to reveal significant differences. There was a significant decrease in amount satisfaction ratings of social integration support between time 1 and time 2,  $F(1, 73) = 5.72, p < 0.05$ . There was no significant difference between satisfaction ratings at times 2 and 3. The decrease in satisfaction ratings between time 1 and time 3 was significant,  $F(1, 73) = 9.07, p < 0.01$ .

Overall there were no cultural differences in satisfaction ratings of the amount of social integration support received. Only Pakistani mothers ratings changed across time. A significant drop in satisfaction with the amount of social integration support occurred during the 6 weeks following birth, and remained unchanged at the 6-8 week postnatal assessment.

8.6.6 Reassurance of Worth Support: Amount Satisfaction

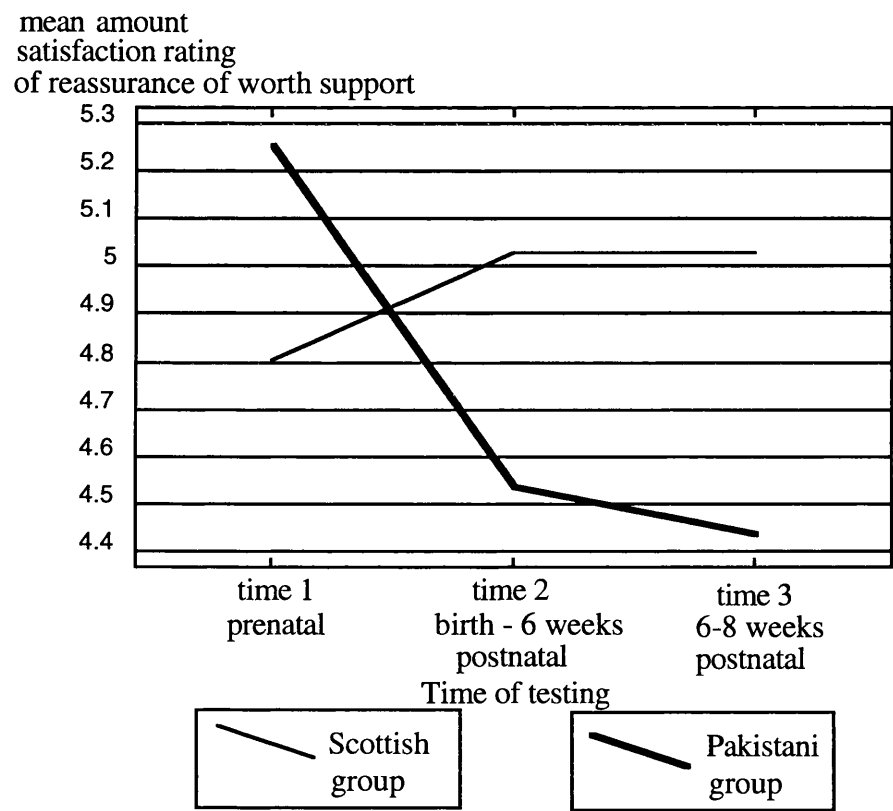
Anova results of amount satisfaction with reassurance of worth support are summarised in table 8.47.

**Table 8.47 Analysis of variance results: satisfaction with amount of reassurance of worth support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	2.48	73	2.46	1.00	n.s
Time (T)	2	1.92	146	.98	1.96	n.s
C x T	2	6.18	146	.98	6.33	.01

Results revealed no significant main effects of culture or time. The interaction of culture and time was significant,  $F(2, 146) = 6.33, p < 0.01$ . Results indicate that each group's satisfaction ratings for the amount of reassurance of worth support were differentially affected by time of testing. The interaction is illustrated graphically in figure 8.19.

**Figure 8.19 Culture and time interaction: amount satisfaction of reassurance of worth support**



From the graph (figure 8.19) it can be seen that there was a different pattern of amount satisfaction across time. The Scottish group's amount satisfaction ratings of reassurance of worth support increased from time 1 to time 2, and then remained unchanged at time 3. The Pakistani group's ratings decreased across time. The interaction was examined in more detail using a post-hoc Newman-Keuls analysis (table 8.48).

**Table 8.48 Newman-Keuls summary: culture and time interaction of amount satisfaction for reassurance of worth support**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	4.81		n.s	n.s	n.s	-----	-----
	2	5.03	n.s		n.s	-----	n.s	-----
	3	5.03	n.s	n.s		-----	-----	n.s
Pakistani	1	5.23	n.s	-----	-----		0.05	0.01
	2	4.54	-----	n.s	-----	0.05		n.s
	3	4.44	-----	-----	n.s	0.01	n.s	

----- comparisons not quoted as they are not relevant

The post-hoc results (table 8.48) show that there were no significant differences across time for the Scottish group. Scottish mothers' satisfaction ratings with the amount of reassurance of worth support remained stable across time.

The Pakistani mothers' satisfaction ratings decreased significantly from time 1 to time 2. The difference between ratings at time 2 and time 3 was non significant. Time 3 ratings were significantly lower than time 1 ratings. Results show that Pakistani mothers were less satisfied with the amount of reassurance of worth support available during the weeks following the birth (times 2 and 3) compared to prenatal levels (time 1).

No differences were found between Scottish and Pakistani mothers at each time of assessment, suggesting that they had comparable satisfaction ratings.

## 8.7 Satisfaction with Quality of Support

Mothers were asked to rate their satisfaction with the quality of each support type, with the exception of nurturance support. As nurturance support referred to support that mothers gave to others, it seemed biased to ask mothers to evaluate the quality of support they provided. There was a 6-point rating scale ranging from very dissatisfied (1) to very satisfied (6). Mothers' rating scores were analysed by means of 2 way repeated measures analyses of variance. The between subjects factor was culture and the within subjects factor was time of testing. The dependent variable was score on rating scale, with higher scores indicating greater quality satisfaction. Descriptive statistics of support quality satisfaction are summarised in table 8.49.

**Table 8.49 Means and standard deviations\* for satisfaction scores of quality of support**

quality satisfaction	Scottish			Pakistani		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
<b>reliable alliance</b>	5.53 (0.61)	5.39 (0.69)	5.25 (0.87)	5.44 (0.99)	5.33 (0.93)	5.15 (1.01)
<b>attachment</b>	5.44 (0.65)	5.33 (0.83)	5.31 (0.95)	5.59 (0.79)	5.33 (1.13)	5.44 (0.88)
<b>guidance</b>	5.22 (0.54)	5.25 (0.81)	5.25 (0.81)	5.41 (1.21)	5.67 (0.62)	5.21 (1.17)
<b>nurturance</b>	quality ratings for nurturance support were not evaluated					
<b>social integration</b>	5.31 (0.75)	5.22 (0.68)	5.03 (0.84)	5.54 (0.60)	5.10 (1.19)	5.44 (1.12)
<b>reassurance of worth</b>	4.64 (1.02)	4.92 (1.11)	4.89 (1.06)	5.18 (1.02)	4.46 (1.59)	4.36 (1.75)

\* standard deviations in parentheses

8.7.1 Reliable Alliance Support: Quality Satisfaction

The analysis of variance results for satisfaction of quality for reliable alliance support are summarised in table 8.50.

**Table 8.50 Analysis of variance results: satisfaction with quality of reliable alliance support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	.37	73	1.30	.28	n.s
Time (T)	2	1.48	146	.48	3.06	.05
C x T	2	.09	146	.48	.02	n.s

The analysis of variance results reveal a non significant main effect of culture, demonstrating that both groups of mothers rated quality of reliable alliance support similarly. The culture and time interaction was non significant. The main effect of time was significant,  $F(2, 146) = 3.06, p < 0.05$ . A post-hoc Newman-Keuls investigated the main effect of time in more detail (table 8.51).

**Table 8.51 Newman-Keuls summary: main effect of time for quality satisfaction of reliable alliance support**

			Probability levels *		
main effect Time	Scottish means	Pakistani means	Time 1	Time 2	Time 3
1	5.53	5.44		n.s (S)	0.05 (S)
2	5.39	5.33	n.s (P)		n.s (S)
3	5.25	5.15	0.05 (P)	n.s (P)	

\* S = Scottish group      P = Pakistani group

The post-hoc results (table 8.51) reveal that there was a significant difference between satisfaction ratings at time 1 and time 3. The difference between times 1 and 2, and times 2 and 3 were non significant. The results indicate that mothers' satisfaction with the quality of reliable alliance support remained unchanged at the prenatal stage and during the first 6 weeks after birth. The drop in perceived quality of support came at 6-8 weeks postnatal (time 3) for both groups of mothers.

#### 8.7.2 Attachment Support: Quality Satisfaction

Analysis of variance results reveal no significant main effects of culture or time. The interaction of culture and time was also non significant. Results demonstrate that Scottish and Pakistani mothers rated the quality of attachment support similarly across time. Quality ratings for attachment support were also unaffected by time of assessment.

#### 8.7.3 Guidance Support: Quality Satisfaction

The anova results revealed no significant results. The main effects of culture and time were non significant, as was the interaction. Results demonstrate that mothers from both cultures evaluated the quality of guidance support similarly. The quality ratings were also unaffected by time of assessment.

#### 8.7.4 Nurturance Support: Quality Satisfaction

Mothers were not asked to evaluate their own nurturance support towards others.

#### 8.7.5 Social Integration Support: Quality Satisfaction

Analysis of variance results revealed that there were no significant main effects of culture or time. The interaction of culture and time was also non significant. Results

demonstrate that both Scottish and Pakistani mothers evaluated the quality of social integration support similarly. Evaluations of the perceived quality of social integration support were unaffected by time of testing.

8.7.6 Reassurance of Worth Support: Quality Satisfaction

The analysis of variance results for satisfaction of quality for reassurance of worth support are summarised in table 8.52.

**Table 8.52 Analysis of variance results: satisfaction with quality of reassurance of worth support**

Effect	df Effect	MS Effect	df Error	MS Error	F	p-level
Culture (C)	1	1.23	73	2.91	.42	n.s
Time (T)	2	1.67	146	1.09	1.54	n.s
C x T	2	6.69	146	1.09	6.15	.01

The results of the analysis of variance revealed that there were non significant main effects of culture and time. The interaction of culture and time was significant,  $F(2, 146) = 6.15, p < 0.01$ . The results demonstrate that quality ratings for reassurance of worth support for each group were differentially affected by time. The interaction is investigated in more detail using a post-hoc Newman-Keuls analysis (table 8.53).



**Table 8.53 Newman-Keuls summary: culture and time interaction of quality satisfaction for reassurance of worth support**

			probability levels					
			Scottish			Pakistani		
culture	time	mean	time 1	time 2	time 3	time 1	time 2	time 3
Scottish	1	4.64		n.s	n.s	n.s	-----	-----
	2	4.92	n.s		n.s	-----	n.s	-----
	3	4.89	n.s	n.s		-----	-----	n.s
Pakistani	1	5.18	n.s	-----	-----		0.05	0.01
	2	4.46	-----	n.s	-----	0.05		n.s
	3	4.36	-----	-----	n.s	0.01	n.s	

----- comparisons not quoted as they are not relevant

The Scottish mothers' quality ratings for reassurance of worth were unaffected by time of testing.

In the Pakistani group, there were some significant differences. Ratings of the quality of reassurance of worth support decreased significantly from time 1 to time 2. There was a significant difference between ratings at time 1 and time 3, with time 3 ratings lower than prenatal ratings (time 1).

Between the two groups, there were no significant differences in ratings of quality at each time assessment.

Overall, the results support a picture of consistently high quality ratings across time in the Scottish group. The Pakistani group showed a marked decrease in perceived quality of reassurance of worth during the weeks after birth (times 2 and 3) compared to prenatal levels.

## 8.8 Relationship Between Aspects of Received Social Support, as Measured by the ISSB

Several types of support provisions (as defined by the SPS) were evaluated using the ISSB, on measures of: frequency of support, network size, amount and quality ratings of support satisfaction. Measures were correlated in order to evaluate the relationship between aspects of support measured.

### 8.8.1 Support Frequency and Support Satisfaction (Amount and Quality)

Frequency of support and its relationship with satisfaction ratings of the amount and quality of support were evaluated for both groups of mothers. Results are summarised in tables 8.54 and 8.55.

**Table 8.54 Correlations of frequency of support with amount and quality satisfaction ratings for Scottish subjects**

	amount and quality satisfaction ratings					
	Time 1		Time 2		Time 3	
	amount	quality	amount	quality	amount	quality
Frequency						
reliable alliance	n.s	.38 p<0.05	n.s	n.s	n.s	n.s
attachment	.46 p<0.01	.38 p<0.05	.39 p<0.05	.31 p=.07	.50 p<0.01	.49 p<0.01
guidance	n.s	n.s	n.s	n.s	n.s	n.s
nurturance	-.45 p<0.01	not applicable	-----	not applicable	-----	not applicable
social integration	n.s	n.s	.44 p<0.01	.31 p<0.05	.33 p=.052	n.s
reassurance of worth	n.s	.33 p=.053	.44 p<0.01	.48 p<0.01	n.s	.35 p<0.05

----- no correlation available as all mothers chose one frequency category

For Scottish mothers at time 1 (prenatal), there were several significant correlations of frequency and support satisfaction. For reliable alliance, more frequent support was associated with higher ratings of support quality. Greater frequency of attachment support was associated with increased satisfaction with the amount and quality of support given. There was a significant negative correlation between frequency of nurturance support and satisfaction with amount of support provided. More frequent demands for nurturance support were associated with less satisfaction as regards the amount of support given to others. In reassurance of worth support, the relationship between increased frequency and greater quality satisfaction approached significance.

At time 2 (birth to 6 weeks postnatal), more frequent attachment support was associated with higher satisfaction ratings of amount and quality of support. During the first 6 weeks following birth, Scottish mothers evaluated higher frequencies of social integration support more positively in terms of amount and quality satisfaction ratings. More frequent reassurance of worth support was associated with greater satisfaction with amount and quality of support received.

At time 3 (6-8 weeks postnatal), increased frequency of attachment support was again associated with higher ratings of amount and quality satisfaction. In social integration support, the relationship between increased frequency and greater amount satisfaction approached significance. For the reassurance of worth provision, increased frequency of support was associated with higher ratings of support quality.

**Table 8.55 Correlations of frequency of support with amount and quality satisfaction ratings for Pakistani subjects**

	amount and quality satisfaction ratings					
	Time 1		Time 2		Time 3	
	amount	quality	amount	quality	amount	quality
reliable alliance	.56 p<0.001	.64 p<0.001	n.s	n.s	.37 p<0.05	.30 p<0.05
attachment	.76 p<0.001	.54 p<0.001	.80 p<0.001	.73 p<0.001	.50 p<0.001	.44 p<0.01
guidance	n.s	n.s	n.s	n.s	n.s	n.s
nurturance	n.s	not applicable	n.s	not applicable	n.s	not applicable
social integration	n.s	n.s	n.s	n.s	n.s	.32 p<0.05
reassurance of worth	n.s	n.s	-.33 p<0.05	-.36 p<0.05	-.40 p<0.05	-.36 p<0.05

At the prenatal stage (time 1), more frequent reliable alliance support was associated with greater satisfaction ratings in terms of amount and quality of support. Attachment support showed the same pattern of association, with more frequent support related to higher satisfaction with amount and quality of support.

During the first 6 weeks following birth (time 2), increased frequency of attachment support was again associated with higher satisfaction ratings for amount and quality of support. There was a negative relationship between frequency of reassurance of worth support and satisfaction. More frequent reassurance of worth support was associated with decreased satisfaction in terms of amount and quality of support provided.

In the period of time from 6-8 weeks postnatal (time 3) there were several areas of significant association. More frequent support in reliable alliance, attachment and social

integration was associated with higher ratings of amount and quality satisfaction.

Increased frequency of reassurance of worth support was associated with lower ratings of amount and quality satisfaction.

### 8.8.2 Network Size and Support Satisfaction (Amount and Quality )

Network size and its relationship with satisfaction ratings of the amount and quality of support were evaluated for both groups of mothers.

For the Scottish group at time 1 (prenatal), there was one significant relationship for nurturance support. Larger network sizes were associated with lower satisfaction ratings in terms of the amount of support given . At time 2 (6 weeks following birth) there was another negative association. In this case, larger network size for social integration support was associated with less satisfaction with the amount of support. There were no significant associations between network size and ratings of support quality at any time, suggesting that network size was unrelated to perceived quality of support.

For the Pakistani group, the relationship between larger network size and greater amount satisfaction for reliable alliance support approached significance at time 1 ( $r = 0.31$ ,  $p=0.52$ ). No other relationships between network size and amount satisfaction were significant.

At time 1(prenatal) in the Pakistani group, there was one significant result for support quality. Larger network size of reliable alliance support was associated with increased satisfaction with support quality ( $r = 0.35$ ,  $p<0.05$ ). No significant associations were found at time 2 (birth to 6 weeks postnatal). At time 3 (6-8 weeks postnatal), larger network size for social integration support was associated with increased quality ratings for this provision. The negative relationship between network size of reassurance of worth support and ratings of support quality approached significance ( $r = -.30$ ,  $p=0.06$ ).

**Chapter Nine**

**Results: The Relationship Between Social Support and Depressive Symptoms**

The relationship between social support and depressive symptoms was investigated using Pearson correlations. The depression scores on the BDI were correlated with total SPS scores and sub-scale scores. Correlations were also made between BDI scores and aspects of social support as measured by the ISSB: frequency of support, network size, satisfaction with amount of support and satisfaction with quality of support.

**9.1 Relationship Between Perceived Support (SPS) and Depressive Symptoms (BDI)**

**Table 9.1 Correlations of SPS scores with depression scores on BDI for Scottish and Pakistani subjects**

SPS scores	Depression scores on BDI					
	Scottish			Pakistani		
	time 1	time 2	time 3	time 1	time 2	time 3
total SPS scores	n.s	-.58 p<0.001	-.58 p<0.001	n.s	n.s	-.33 p<0.05
reliable alliance	n.s	n.s	-.48 p<0.01	n.s	n.s	n.s
attachment	n.s	-.67 p<0.001	-.58 p<0.001	n.s	n.s	n.s
guidance	n.s	-.59 p<0.001	-.52 p<0.001	n.s	n.s	-.42 p<0.01
nurturance	n.s	n.s	n.s	n.s	n.s	n.s
social integration	n.s	-.47 p<0.01	-.34 p<0.05	n.s	n.s	-.33 p<0.05
reassurance of worth	n.s	-.37 p<0.05	-.41 p<0.05	n.s	-.60 p<0.001	-.32 p<0.05

The relationship between total social support scores on the SPS and depressive symptoms (BDI) shows no association at time 1 (prenatal) for both groups of subjects. There was a negative association at time 2 (3 weeks postnatal) for Scottish mothers only. Lower social support scores on the SPS were associated with increased depressive symptomatology on the BDI for Scottish mothers. At 8 weeks postnatal (time 3), both Scottish and Pakistani mothers displayed the same pattern of association. Lower social support levels (SPS) were associated with higher scores on the BDI.

Looking at these results in more detail, requires an interpretation of sub-scale associations with BDI scores. As would be expected by the lack of association between total SPS and BDI scores at the prenatal stage (time 1), no significant results were found for sub-scales at time 1 for either subject group.

For Scottish mothers at 3 weeks postnatal (time 2), there were negative correlations between BDI scores and the SPS sub-scales of attachment, guidance, social integration and reassurance of worth. Lower scores on these sub-scales predicted higher levels of depressive symptomatology on the BDI. For the Pakistani group, only lower scores on reassurance of worth predicted elevated BDI scores at 3 weeks postnatal.

For the Scottish group at 8 weeks postnatal (time 3) there were negative associations between BDI scores and SPS sub-scales of reliable alliance, attachment, guidance, social integration and reassurance of worth. Higher scores on the BDI were reflected by decreased social support scores in these provisions. For the Pakistani group, there were 3 areas of negative association. Lower scores on guidance, social integration and reassurance of worth were correlated with higher BDI scores.

**9.2 Relationship Between Received Support (ISSB) and Depressive Symptoms (BDI)**

Aspects of social support as measured by the ISSB were correlated with BDI scores. Depressive symptoms were assessed using the BDI during each of the three periods of support investigated by the ISSB. Correlations were conducted for time 1 (prenatal stage), time 2 (3 weeks postnatal) and time 3 (8 weeks postnatal).

9.2.1 Correlations Between Frequency of Support and BDI Scores

**Table 9.2 Correlations of ISSB frequency scores with depression scores on BDI for Scottish and Pakistani subjects**

frequency	Depression scores on BDI					
	Scottish			Pakistani		
	time 1	time 2	time 3	time 1	time 2	time 3
reliable alliance	n.s	n.s	-.35 p<0.05	n.s	n.s	n.s
attachment	n.s	n.s	-.37 p<0.05	n.s	-.55 p<0.001	n.s
guidance	n.s	n.s	n.s	n.s	n.s	n.s
nurturance	n.s	-----	-----	n.s	n.s	n.s
social integration	-.36 p<0.05	n.s	n.s	n.s	n.s	-.41 p<0.01
reassurance of worth	n.s	n.s	n.s	n.s	n.s	n.s

----- no correlation results as all mothers chose one frequency category

At time 1 (prenatal) there was only one significant result for the Scottish group. The frequency of social integration support was negatively correlated with depression scores on the BDI. Less frequent social integration support during the prenatal stage was associated with higher levels of depressive symptomatology in Scottish mothers.



At time 2 (3 weeks postnatal), one significant correlation was found in the Pakistani group. Less frequent attachment support was associated with higher scores on the BDI.

At time 3 (8 weeks postnatal) there were two negative correlations between frequency of support and depression scores in the Scottish group. Higher depression scores were associated with less frequent reliable alliance and attachment support provisions. For the Pakistani group, less frequent social integration support was related to increased depression scores.

### 9.2.2 Correlations Between Network Size and BDI Scores

No significant correlations were found between total network size and depression scores on the BDI for either group of mothers.

Correlations between depression scores and the network size of individual social support provisions (reliable alliance, attachment, guidance, nurturance, social integration and reassurance of worth) were conducted. One significant result was found for the Scottish mothers at time 2 (3 weeks postnatal). Smaller network sizes of social integration support at time 2 were associated with higher scores on the BDI ( $r = -0.37, p < 0.05$ ). No other relationships emerged from correlating network size and BDI scores.

9.2.3 Relationship Between Satisfaction with Amount of Support and BDI Scores

Ratings on the ISSB for satisfaction with the amount of support received (or given, in the case of nurturance) were correlated with scores on the BDI. Results are summarised in table 9.3.

**Table 9.3 Correlations of ISSB amount satisfaction scores with depression scores on BDI for Scottish and Pakistani subjects**

amount satisfaction	Depression scores on BDI					
	Scottish			Pakistani		
	time 1	time 2	time 3	time 1	time 2	time 3
reliable alliance	n.s	n.s	n.s	n.s	n.s	n.s
attachment	-.32 p = 0.054	-.36 p<0.05	-.51 p<0.001	-.32 p<0.05	-.46 p<0.01	n.s
guidance	n.s	-.34 p<0.05	-.35 p<0.05	n.s	n.s	n.s
nurturance	n.s	-.33 p<0.05	-.52 p<0.001	-.53 p<0.001	-.33 p<0.05	n.s
social integration	n.s	n.s	n.s	n.s	n.s	n.s
reassurance of worth	-.48 p<0.01	-.37 p<0.05	-.49 p<0.01	n.s	n.s	n.s

For both groups of mothers, there were no significant associations between satisfaction with the amount of reliable alliance support and depression scores at any time of assessment.

For Scottish mothers, less satisfaction with the amount of attachment support was associated with higher scores on the BDI. This association approached significance at the prenatal stage (time 1), and was increasingly significant across time 2 and time 3.

In the case of Pakistani mothers, less satisfaction with the amount of attachment support was associated with higher BDI scores at times 1 and 2.

Satisfaction with the amount of guidance support was negatively associated with depression scores in the Scottish group. Less satisfaction with the amount of guidance support provided by others was associated with higher depression scores at 3 weeks and 8 week postnatal (times 2 and 3). In the Pakistani group, no associations were found between satisfaction with the amount of guidance support and BDI scores.

Scottish mothers' satisfaction with the amount of nurturance required of them, was correlated with depression scores at times 2 and 3. Correlations found that less satisfaction with the amount of nurturance required by others was associated with increased depressive symptoms (BDI) during the postnatal assessments. For the Pakistani group, lack of satisfaction with the amount of nurturance provided to others was associated with higher scores on the BDI at the prenatal and 3 week postnatal stages (times 1 and 2).

No significant correlations were found for satisfaction with amount of social integration support received and depression scores at any time of assessment for either cultural group.

Satisfaction with the amount of reassurance of worth support provided by others was correlated with BDI scores for Scottish mothers only. Results indicated that less satisfaction with the amount of this provision were associated with higher levels of depressive symptoms at all time assessments.

**9.2.4 Relationship Between Satisfaction with Quality of Support and BDI Scores**

Ratings on the ISSB for satisfaction with the quality of support received were correlated with scores on the BDI. Results are summarised in table 9.4.

**Table 9.4 Correlations of ISSB quality satisfaction scores with depression scores on BDI for Scottish and Pakistani subjects**

	Depression scores on BDI					
	Scottish			Pakistani		
	time 1	time 2	time 3	time 1	time 2	time 3
quality satisfaction						
reliable alliance	n.s	n.s	n.s	n.s	-.53 p<0.001	n.s
attachment	n.s	-.32 p = 0.058	-.52 p<0.001	-.34 p<0.05	-.56 p<0.001	n.s
guidance	n.s	-.37 p<0.05	-.40 p<0.05	-.31 p = 0.052	n.s	n.s
nurturance	no quality measures were assessed for this provision					
social integration	n.s	n.s	-.33 p<0.05	n.s	n.s	n.s
reassurance of worth	-.42 p<0.05	n.s	-.36 p<0.05	n.s	n.s	n.s

For Scottish mothers, there were no significant associations between the satisfaction quality of reliable alliance support and BDI scores. Pakistani mothers' BDI scores were negatively correlated with reliable alliance quality satisfaction at 3 weeks postnatal (time 2).

For the Scottish group, the association between lack of satisfaction with the quality of attachment support and higher BDI scores, approached significance at 3 weeks postnatal (time 2). At 8 weeks postnatal (time 3) this correlation was significant, suggesting that

less satisfaction with the quality of attachment support was related to increased depressive symptoms. In the Pakistani group, less satisfaction with attachment support quality was associated with higher BDI scores at the prenatal and 3 week postnatal stages (times 1 and 2).

Less satisfaction with the quality of guidance support was related to higher BDI scores in the Scottish group at 3 weeks and 8 weeks postnatal (times 2 and 3). In the Pakistani group, the relationship between less satisfaction with guidance support quality and higher BDI scores approached significance at the prenatal stage (time 1).

For social integration support quality and depressive symptoms, there was one significant correlation. Less satisfaction with the quality of social integration support at 3 weeks postnatal (time 2) was associated with increased BDI scores for Scottish mothers. No quality and depression associations were found for Pakistani mothers.

Significant correlations between quality ratings of reassurance of worth support and BDI scores were found for Scottish mothers only. Less satisfaction with the quality of this provision was associated with higher scores on the BDI at the prenatal and 8 week postnatal assessments (times 1 and 3).

### 9.3 Mann Whitney U Analyses Comparing 'Depressed' and 'Non Depressed'

#### Groups on SPS Measures

Analyses were conducted to determine whether any aspects of perceived support distinguished between 'non depressed' and 'depressed' subjects on the BDI. Results of the Mann Whitney U analyses comparing social support scores (SPS) of 'depressed' and 'non depressed' groups (based on a cut-off point of 9) are summarised in table 9.5. Mean SPS scores can be found in appendix 13.

**Table 9.5 Results of Mann Whitney U analyses comparing 'depressed' and 'non depressed' groups \* in each culture on measures of the SPS**

comparison of 'depressed and 'non depressed' groups						
SPS scores	Time 1		Time 2		Time 3	
	Scottish	Pakistani	Scottish	Pakistani	Scottish	Pakistani
global SPS	n.s	n.s	p<0.01 ND>D	n.s	p<0.01 ND>D	n.s
reliable alliance	n.s	p<0.05 D>ND	n.s	n.s	n.s	n.s
attachment	n.s	n.s	p<0.001 ND>D	n.s	p<0.05 ND>D	n.s
guidance	n.s	n.s	p<0.001 ND>D	n.s	p<0.01 ND>D	p<0.05 ND>D
nurturance	n.s	n.s	n.s	n.s	n.s	n.s
social integration	n.s	n.s	p<0.01 ND>D	n.s	p=0.06 ND>D	n.s
reassurance of worth	n.s	n.s	n.s	p<0.01 ND>D	p=0.07 ND>D	p=0.07 ND>D

\* D - 'depressed' (scores <9)    ND - 'non depressed' (scores>9)

'Non depressed' Scottish mothers reported higher global scores on the SPS at both postnatal assessments. No differences in global SPS scores were found between Pakistani groups at any time.

For reliable alliance support, 'depressed' Pakistani mothers reported higher scores compared to 'non depressed' mothers at the prenatal assessment (time 1). No other differences were found between 'non depressed' and 'depressed' scores in this provision, for either cultural group.

Scottish mothers in the 'non depressed' group reported higher attachment support scores at the postnatal assessments (times 1 and 2). No differences were found between Pakistani groups at any time.

Higher guidance support scores were reported by 'non depressed' Scottish mothers after the birth (times 1 and 2). For Pakistani mothers, higher 'non depressed' scores for guidance support were found at time 3 only.

No differences in nurturance support were found for either cultural group at any of the three assessments.

Scottish mothers in the 'non depressed' group reported higher social integration support at both postnatal assessments (times 2 and 3), with time 3 results approaching significance. No significant results were found for the Pakistani group.

Scottish mothers in the 'non depressed' group reported higher reassurance of worth support at time 3 (0.07). Pakistani 'non depressed' scores for reassurance of worth support were higher at both postnatal assessments (times 2 and 3), with time 3 scores approaching significance (0.07).

**9.4 Comparing Low and High Clusters of the BDI on Measures of Received Support (ISSB)**

Analyses were conducted to determine whether low and high scorers on the BDI could be distinguished on aspects of received support. Firstly, data had to be reanalysed to determine low and high scorer characteristics.

**9.4.1 Cluster Analysis of the BDI**

In order to examine the pattern of change in depressive symptoms over time without predefining groups, data was subjected to a cluster analysis. The cluster analysis allowed data to be defined by groups characterised by common patterns of responding on the BDI across time. The K-means clustering method was applied to the data, and a solution was obtained after one iteration. A two group cluster divided the cases into a low scoring group whose means fell below the cut-off point of 9 (as used by O'Hara, 1984), with the remainder of cases falling into a high scoring group. Descriptive statistics for each of the clusters are summarised in table 9.6.

**Table 9.6 Cluster membership, means and standard deviations\* across time for BDI scores**

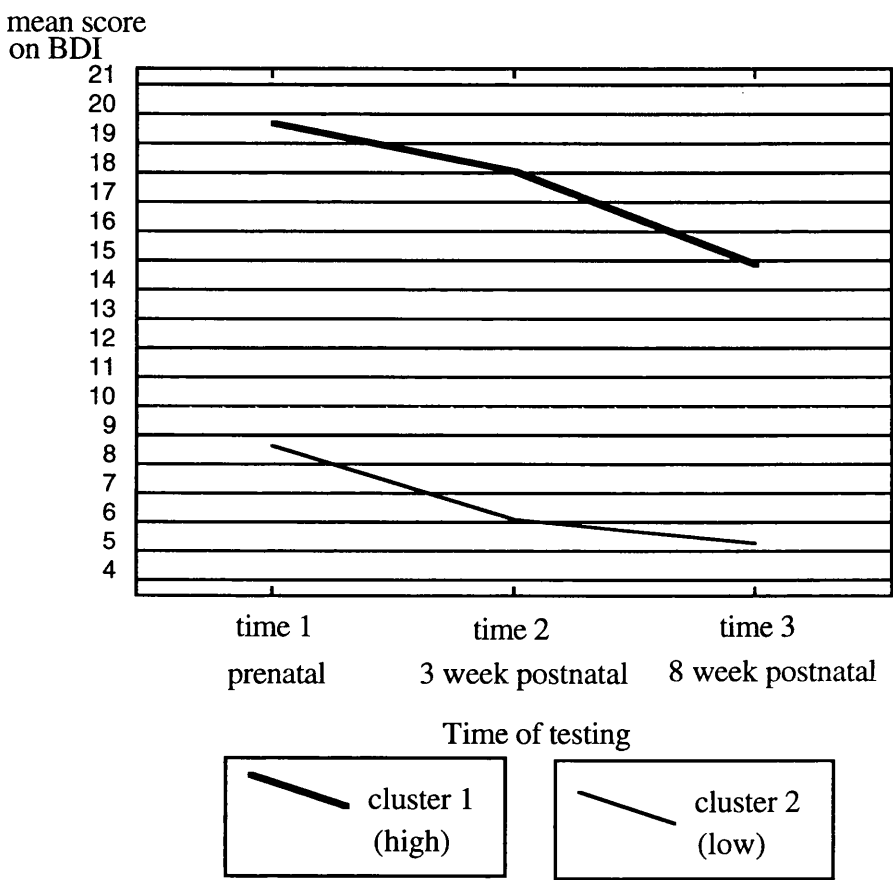
	Time 1	Time 2	Time 3	members of cluster
<b>cluster 1 (high)</b>	19.71 (7.50)	18.08 (7.51)	14.92 (6.37)	Scottish - 7 Pakistani - 17
<b>cluster 2 (low)</b>	8.65 (4.45)	6.10 (3.56)	5.29 (3.33)	Scottish - 29 Pakistani - 22

\* standard deviations in parentheses



In order to graphically illustrate patterns of responding on the BDI across time, cluster means were plotted (figure 9.1).

**Figure 9.1** Graph of cluster means across time on BDI for all subjects



Clusters 1 and 2 were labelled high and low to describe their relative patterns of responding on the BDI across time. Both clusters displayed the same pattern of decreasing scores across time. The high scoring cluster consisted of 7 Scottish mothers (19%) and 17 Pakistani mothers (44%). The low scoring cluster consisted of 29 Scottish mothers (81%) and 22 Pakistani mothers (56%).

### 9.4.2 Analysis of Cluster Membership

A 2 x 2 chi-square analysis was conducted on group membership data for clusters 1 and 2 (table 9.6).

A significant result was found for the comparison of Scottish and Pakistani mothers' membership of cluster categories,  $X^2(1) = 5.02$ ,  $p < 0.05$ . A higher proportion of Pakistani mothers were represented in the high depression cluster (44%) compared to Scottish mothers (18%).

### 9.4.3 Mann Whitney U Analyses Comparing Low and High Clusters of the BDI on Measures of Received Support

Mann Whitney U tests were conducted using the low and high cluster groupings of the BDI as depression severity categories. The cluster categories were based on responses on the BDI across all three time assessments, and were therefore better suited for analyses examining the ISSB. The three versions of the ISSB covered time periods outwith the times assessed by the BDI and SPS at specific data collection stages. Cluster categories were used for this reason, rather than BDI cut-off points specific to each time of assessment.

Analyses compared social support scores (low versus high cluster) for each of the six provisions of the SPS: reliable alliance, attachment, guidance, nurturance, social integration, and reassurance of worth. For each cultural group, low and high clusters scores were compared on support measures of: frequency, network size, and satisfaction ratings. Tables 9.7 to 9.12 summarise the results for each of the provisions examined by the ISSB. Mean ISSB scores of received support for each provision can be found in Appendices 14-19.

**Table 9.7 Results of Mann Whitney U analyses comparing low and high cluster groups\* in each culture on reliable alliance support measures of the ISSB**

	comparison of high and low clusters					
	Time 1		Time 2		Time 3	
	Scottish	Pakistani	Scottish	Pakistani	Scottish	Pakistani
reliable alliance						
frequency	n.s	n.s	n.s	n.s	p=0.06 L>H	n.s
total network	p=0.07 L>H	n.s	n.s	n.s	n.s	n.s
family network	n.s	n.s	n.s	n.s	n.s	n.s
non family network	p=0.06 L>H	n.s	n.s	n.s	n.s	n.s
amount satisfaction	n.s	n.s	n.s	n.s	n.s	n.s
quality satisfaction	n.s	n.s	n.s	n.s	n.s	n.s

\* L - Low cluster H- High cluster

Three differences between high and low scorers approached significance on measures of received reliable alliance support. Differences were only observed for Scottish subjects. At the prenatal assessment (time 1), Scottish low scorers on the BDI had larger support networks (total and non family) compared to high scorers. At 6 to 8 weeks postnatal (time 3), Scottish low scorers reported more frequent reliable alliance support.

**Table 9.8 Results of Mann Whitney U analyses comparing low and high cluster groups\* in each culture on attachment support measures of the ISSB**

	comparison of high and low clusters					
	Time 1		Time 2		Time 3	
	Scottish	Pakistani	Scottish	Pakistani	Scottish	Pakistani
<b>attachment</b>						
<b>frequency</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>total network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>family network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>non family network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>amount satisfaction</b>	p<0.01 L>H	n.s	n.s	n.s	p<0.05 L>H	n.s
<b>quality satisfaction</b>	n.s	n.s	n.s	n.s	p<0.05 L>H	n.s

\* L - Low cluster H- High cluster

Three differences were observed between low and high scorers on attachment support. Differences were only observed for Scottish subjects. Scottish low scorers rated the amount satisfaction of attachment support more highly at time 1 and time 3. At time 3, low scorers also rated quality satisfaction of support more highly.

**Table 9.9 Results of Mann Whitney U analyses comparing low and high cluster groups\* in each culture on guidance support measures of the ISSB**

	comparison of high and low clusters					
	Time 1		Time 2		Time 3	
	Scottish	Pakistani	Scottish	Pakistani	Scottish	Pakistani
<b>guidance</b>						
<b>frequency</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>total network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>family network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>non family network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>amount satisfaction</b>	p<0.05 L>H	n.s	p<0.05 L>H	n.s	n.s	n.s
<b>quality satisfaction</b>	p<0.05 L>H	n.s	n.s	n.s	n.s	n.s

\* L - Low cluster H- High cluster

Three differences were found between low and high scorers on guidance support. Again, differences were only observed for Scottish mothers. At the prenatal assessment (time 1), Scottish low scorers rated the amount and quality satisfaction of guidance support more highly. During the first 6 weeks after birth (time 2), Scottish low scorers also rated the amount of guidance support more highly than high BDI scorers.

**Table 9.10 Results of Mann Whitney U analyses comparing low and high cluster groups\* in each culture on nurturance support measures of the ISSB**

	comparison of high and low clusters					
	Time 1		Time 2		Time 3	
	Scottish	Pakistani	Scottish	Pakistani	Scottish	Pakistani
nurturance frequency	n.s	n.s	n.s	n.s	n.s	n.s
total network	n.s	n.s	n.s	n.s	n.s	n.s
family network	n.s	n.s	n.s	n.s	n.s	n.s
non family network	p<0.05 L>H	n.s	n.s	n.s	n.s	n.s
amount satisfaction	n.s	p<0.05 L>H	n.s	n.s	n.s	n.s
quality satisfaction	no quality satisfaction measures assessed for nurturance support					

\* L - Low cluster H- High cluster

Two differences were observed in nurturance support at the prenatal assessment. Scottish low scorers reported a larger network of non family supporters. Pakistani mothers in the low scoring category had higher satisfaction ratings for the amount of nurturance support given to others.

**Table 9.11 Results of Mann Whitney U analyses comparing low and high cluster groups\* in each culture on social integration support measures of the ISSB**

	comparison of high and low clusters					
	Time 1		Time 2		Time 3	
	Scottish	Pakistani	Scottish	Pakistani	Scottish	Pakistani
<b>social integration frequency</b>	p=0.06 L>H	n.s	n.s	n.s	n.s	p<0.05 L>H
<b>total network</b>	n.s	n.s	n.s	n.s	n.s	p<0.05 L>H
<b>family network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>non family network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>amount satisfaction</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>quality satisfaction</b>	p<0.05 L>H	p<0.05 H>L	n.s	n.s	n.s	n.s

\* L - Low cluster H- High cluster

At the prenatal assessment (time 1), Scottish low scorers reported more frequent social integration support, and greater quality satisfaction. In contrast, Pakistani high scorers at time 1 reported higher quality satisfaction ratings, compared to low BDI scorers. At time 3 (6-8 weeks postnatal), Pakistani mothers in the low scoring category reported more frequent social integration support and a larger support network.

**Table 9.12 Results of Mann Whitney U analyses comparing low and high cluster groups\* in each culture on reassurance of worth support measures of the ISSB**

	comparison of high and low clusters					
	Time 1		Time 2		Time 3	
	Scottish	Pakistani	Scottish	Pakistani	Scottish	Pakistani
<b>reassurance of worth</b>						
<b>frequency</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>total network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>family network</b>	n.s	n.s	n.s	n.s	p<0.05 L>H	n.s
<b>non family network</b>	n.s	n.s	n.s	n.s	n.s	n.s
<b>amount satisfaction</b>	p<0.01 L>H	n.s	n.s	n.s	n.s	p=0.06 L>H
<b>quality satisfaction</b>	p<0.05 L>H	n.s	n.s	n.s	n.s	p<0.05 L>H

\* L - Low cluster H- High cluster

At the prenatal assessment (time 1), Scottish low scorers reported more amount and quality satisfaction for reassurance of worth support. At time 3 (6-8 weeks postnatal), Scottish low scorers had a larger family network of support.

Pakistani mothers in the low scoring category reported higher satisfaction ratings for the amount and quality of support at time 3 (6-8 weeks postnatal).



## Chapter Ten

### Discussion

This chapter will discuss results under three main headings: depressive symptomatology (section 10.1), the social support system (section 10.2), and the relationship between depressive symptoms and social support (section 10.3).

#### 10.1 Depressive Symptomatology

##### 10.1.1 Is Childbirth Characterised by Increased Depressive Symptoms?

The question of whether the period after birth is a time of increased risk, can be ascertained by examining the pattern of depressive symptoms across time. As this study has employed a prospective design, the impact of childbirth on depressive symptoms can be assessed in a context which addresses psychological outcome before the event, as well as after.

Based on the BDI, the pattern of results across time revealed that scores were highest at time 1 (prenatal assessment), with scores decreasing over time. There was a significant drop in depressive symptoms at 3 weeks postnatal (time 2), with a non significant decrease at 8 weeks postnatal (time 3). Both Scottish and Pakistani mothers' BDI scores revealed the same pattern over time. This finding concurs with reports of decreased depressive symptoms after childbirth (Fergusson, 1996; O'Hara et al., 1984). O'Hara et al.'s study reported significant decreases in depressive symptoms from the third trimester to 3 weeks postnatal, and a further decrease at 9 weeks postnatal. The authors suggested that decreases in depressive symptoms may reflect less deviant scores due to retaking the BDI measure. While this explanation may explain the results of O'Hara et al.'s study, the present study did not find decreases at each assessment. Decreases in symptom severity occurred at 3 weeks postnatal, with symptom levels relatively unchanged at 8 weeks postnatal.

It is possible to speculate that the highest depressive symptoms in the postnatal period, attributable to hormonal factors (blues), had already passed when the 3 week postnatal assessments were conducted. Support for this assertion comes from Cutrona's (1984) study, in which she reported significantly higher depressive symptoms (BDI) at 2 weeks postnatal, as compared to the third trimester and 8 weeks postnatal. According to Cutrona, the higher scores at 2 weeks postnatal may be indicative of the hormonal effects experienced by mothers in the first 10 days after delivery. Even so, this study's results would suggest that any possible increase in symptoms is a transitory one, as indicated by the fall in symptoms by the third week after delivery.

Further support for concluding that depressive symptoms decrease after delivery comes from a study by Fergusson et al. (1996). The authors reported the results of a longitudinal study of 9000 mothers, which assessed depressive symptoms using the Edinburgh Postnatal Depression Scale (EPDS) at 18 and 32 weeks gestation and 8 and 32 weeks postnatal. Fergusson et al. state that depression rates showed a marked degree of instability from 32 weeks gestation to 8 weeks postnatal, with marked remissions in depression occurring after delivery. While the results of the present study found no main effect of time in EPDS scores, the interaction did not reveal any increases in depressive symptoms either. EPDS results indicated a decrease in depressive symptoms between times 2 and 3 for Scottish primiparae, and between times 1 and 3 for Pakistani multiparae. While these decreases are consistent with other authors' observations (e.g. Fergusson et al., 1996; O'Hara et al. 1984), this finding only applies to first time mothers in the Scottish group, and multiparae in the Pakistani group. This seems rather anomalous, as it does not allow any generalisation on the basis of parity. However, it is important to note that these results do confirm the findings of the BDI, in that there is no indication of increased depressive symptoms after birth.

As the EPDS has been designed specifically with the intention of removing somatic symptoms, comparisons between these two inventories are best made between the EPDS

and the cognitive-affective subscale. This is supported by correlations of BDI and EPDS scores, which reveal that EPDS scores are more highly correlated with the cognitive subscale of the BDI. In terms of assessing whether childbirth compromises the psychological well being of mothers; the cognitive subscale of the BDI and EPDS scores are in agreement. The findings that there were no changes in cognitive-affective symptoms after childbirth, concur with EPDS results indicating no main effect of time. Again, these comparisons agree with previous findings, indicating that depressive symptoms do not increase after childbirth.

Prospective studies of postnatal depression in other cultures have also reported decreased symptoms after delivery. Jinadu and Daramola (1990) and Aderbigbe et al. (1993) reported that depressive symptoms in Nigerian women were higher during pregnancy and decreased after the birth.

On the basis of these findings, it can be stated that the period after childbirth is not necessarily defined by increased depressive symptoms. In a review of studies which assessed depressive symptoms before and after birth, Green and Murray (1994) state that antenatal levels are as high, or higher, than levels in the postpartum. It is notable that this finding was not limited to self report assessment of depressive symptoms, with comparable depression rates reported in studies using recognised diagnostic criteria. Of particular relevance to the findings of this study, is Fergusson et al.'s (1996) comment that, "childbirth may be an event that has positive features that act to reduce the risks of depression in some women rather than resulting in an overall increase in depressive symptoms" (p.291). Indeed, the findings of this study illustrate that this conclusion can be applied equally to Scottish and Pakistani mothers.

#### 10.1.2 Does Culture have an Impact on Depressive Symptoms?

While the results suggest that mothers from two diverse cultures display the same pattern of depressive symptoms across time, there are other areas which have to be considered. This

study has examined depressive symptoms in cultures which can be differentiated on the basis of ritualised customs. Anthropologists have advocated that ritualised childbirth plays a role in protecting mothers from depression after childbirth (e.g. Stern and Kruckman, 1983). As such, this is an issue which has to be addressed. The other important consideration in a cross cultural study concerns somatisation, and whether this plays a role in depressive symptom presentation.

### 10.1.3 Is Ritualised Childbirth Protective?

The analyses of the Beck Depression Inventory revealed that Pakistani mothers had significantly higher levels of depressive symptoms compared to Scottish mothers. These differences in symptom level were observed consistently at each time assessment. The results do not support Stern and Kruckman's (1983) suggestion that cultures with ritualised childbirth customs will be protected from postnatal depression. Although this thesis has not examined clinical diagnoses of depression, the BDI results would suggest that depressive symptoms are actually more severe in non Western mothers. These results are also contrary to reported findings of similar depressive symptom levels in Japanese and American mothers (Shimizu and Kaplan, 1989), and Asian and British mothers (Upadhyaya et al., 1989).

The results relating to higher BDI scores for Pakistani mothers are similar to Park and Dimigen's (1995) findings for Korean mothers. These authors reported that Korean mothers scored higher on the BDI, as compared to Scottish mothers at 6 to 10 weeks postnatal. Unlike Park and Dimigen's investigation, this study has the additional advantage of a prospective design. This allows an examination of depressive symptoms before and after childbirth. While Park and Dimigen advocated that higher Korean scores may be a response to the withdrawal of ritual support, the findings of this study would indicate otherwise. Higher scores were a consistent feature of Pakistani mothers' depressive symptoms across time, and not just after the ritual support period had ended (time 3). The pattern of depressive symptoms across time also casts doubt on a

withdrawal reaction to the cessation of support, as neither the EPDS or BDI results indicate an increase in Pakistani depressive symptoms after the 40 day period.

Unlike the BDI, analyses based on the EPDS did not find main effects of culture or time. Instead, there was a three way interaction between culture, parity and time. Further analysis of this result showed that there were no cultural differences in global scores of the EPDS. One difference between parity was found at the prenatal assessment, indicating that Pakistani multiparae had higher levels of depressive symptoms compared to primiparae (time 1). Although this result seems surprising, it may be explained by the observation that many multiparous women in the sample found it difficult to arrange a return to their parent's home for subsequent births. Additional household and childcare responsibilities often meant that these mothers had to make alternative arrangements for care in the postpartum. Rather than returning home, mothers received help from visiting relatives who arrived before the birth. The late prenatal period was therefore a time of uncertainty and anxiety as mothers awaited the help of their visitors. While the EPDS does not indicate any cultural differences in depressive symptoms, these results are still comparable to those of the BDI. More specifically, neither questionnaire supports the view that ritualised childbirth is accompanied by less depressive symptoms.

### Levels of depression

An analysis of the levels of depression severity reveals more information regarding the similarities and differences in depressive symptoms between the two cultural groups. O'Hara et al.'s (1984) cut off point of 9 was used to distinguish 'non depressed' and 'depressed' subjects on the BDI. This revealed that there were no differences in the proportion of Scottish and Pakistani mothers scoring in these categories, at the prenatal and 3 week postnatal assessments. The findings of similar levels of depression between the cultures, concur with Cox's (1983) findings of comparable depression levels in Scottish and Ugandan women. Similar findings were reported with the EPDS in the present study, using the cut off point of 12/13 (Holden, 1994) to define 'depressed' and

'non depressed' groups. As with the BDI, results indicated that this dichotomy did not distinguish between parity or culture at any time.

The only difference between cultures was found on BDI scores at 8 weeks postnatal. Pakistani mothers were more likely to score above the cut off point, compared to Scottish mothers. While more severe Pakistani symptoms on the BDI at 8 weeks postnatal can be attributed to the larger proportion of Pakistani mothers who score above the threshold, this explanation is not sufficient for other findings. Although there were no cultural differences in the proportion of mothers who scored in the 'depressed' category at times 1 and 2, Pakistani mothers had higher BDI scores. These results imply that Pakistani mothers who scored above 9, had more severe depressive symptoms compared to Scottish mothers in this category.

Further investigation of the severity of depressive symptoms confirmed this. Chi square analyses of the BDI revealed that there *were* cultural differences when depressive symptoms were redefined as: 'non depressed' to mild (cut off point = 16), versus moderate to severe depressive symptoms (scores > 16). At each of the three assessments, more Pakistani mothers had scores in the moderate-severe category of depressive symptoms. The greatest difference between Pakistani and Scottish mothers occurred at 3 weeks postnatal, with the smallest difference at time 3 (8 weeks postnatal). Results suggest that the magnitude of severity differences decreased across time.

These results are further supported by the anova analyses of Pakistani and Scottish mothers who scored above the cut off point of 9. Among the 'depressed' group, Pakistani mothers had significantly higher BDI scores at the prenatal and 3 week postnatal assessments. In other words, the Pakistani 'depressed' mothers are more depressed than their Scottish counterparts. The distinction between the 'depressed' group suggests that Pakistani mothers are moderately 'depressed' compared to mildly 'depressed' Scottish

mothers. However, by 8 weeks postnatal (time 3) there were no differences, with both groups of 'depressed' mothers having mild depressive symptoms.

Unlike the BDI, further analyses of the EPDS found no cultural differences in the severity of depressive symptoms. The only difference in the 'depressed' scores, revealed that Pakistani multiparae had more severe depressive symptoms at 3 weeks postnatal (time 2) as compared to primiparae. This indicates that childbirth rituals may confer some advantage to primiparous mothers, as it is more likely that first time mothers can observe the rituals in full.

However, in terms of the anthropological view (e.g. Stern and Kruckman, 1983) that ritualised childbirth is protective, there is no evidence from the BDI or EPDS that Pakistani mothers are less 'depressed' at any of the time assessments. Indeed, more detailed analysis of the BDI suggests that more Pakistani mothers score in higher severity categories of depressive symptoms (at times 1 and 2) compared to Scottish mothers. In contrast, at time 3, there is no cultural difference in the severity of 'depressed' scores. This decrease in severity from moderate depressive symptoms to mild, could be interpreted as a positive effect of the preceding ritual support period. However, time 3 is also characterised by more Pakistani mothers scoring in the 'depressed' category of the BDI, compared to their Scottish counterparts. While previous analyses have not indicated support for the idea that Pakistani mothers experience a withdrawal reaction to the end of the ritual support period, the higher proportion of Pakistani mothers scoring in the 'depressed' category of the BDI may indicate otherwise.

In conclusion, there is very little evidence which supports the idea that ritualised childbirth is characterised by a lack of depression. Neither of the questionnaires found any results indicating that Pakistani mothers had less severe depressive symptoms.

#### 10.1.4 What Role do Somatic Symptoms Play?: A Comparison of Cognitive-Affective and Somatic-Performance Symptoms

An examination of the role of somatic symptoms requires a comparison of the BDI subscales: cognitive-affective and somatic-performance.

Analyses of the cognitive and somatic subscales of the BDI showed similar patterns of responding in Scottish and Pakistani mothers. These results revealed that both groups of mothers scored higher on the somatic-performance sub-scale in comparison to the cognitive-affective subscale at all three time assessments. This result is in agreement with O'Hara et al. (1984), who also reported higher somatic subscale scores throughout pregnancy and the postnatal period (3 weeks, 6 weeks, 9 weeks, and 6 months). Both groups of subjects also showed the same pattern of responding across time. Cognitive subscale scores were unaffected by time, while somatic subscale scores decreased at each time assessment. In explaining falling BDI scores after delivery, O'Hara et al. (1984) suggest that these reflect decreases in normal somatic symptoms associated with childbirth. This explanation is reasonable in terms of early postnatal adaptation, but is less feasible as an explanation of their higher somatic symptoms at 6 months postnatal. Interestingly, the results of this study would seem to lend weight to this argument, with somatic subscale scores decreasing across time, while the cognitive subscale scores showed no change.

One of the advantages of using the BDI in this cross cultural study is that it allows an examination of the role of somatic symptoms in a group of Pakistani mothers. Contrary to Park and Dimigen's (1995) finding that Korean mothers had higher depressive symptoms due to the somatic performance subscale alone, this study found that higher Pakistani scores were attributable to *both* subscales. This result makes it difficult to infer whether the higher somatic scores are due to a predominance of somatic responding, as the mothers also score higher on the cognitive subscale.



Data from Pakistani female college students ( $N=25$ ), collected by this author, revealed that scores on the BDI (mean = 11.64,  $s.d = 8.09$ ) were comparable to the mean found for Pakistani mothers at 3 weeks postnatal (11.81). The similarities in average scores suggest that Pakistani women may have higher levels of depressive symptoms compared to Scottish women. Unlike the Pakistani mothers, the student sample scored significantly higher on cognitive-affective symptoms (Mohammed and Dimigen, 1997). This finding suggests the possibility that somatic symptoms may reflect normal physiological changes, rather than a somatisation of depressive symptoms. Similar findings of lower somatic scores in non puerperal populations has also been reported by O'Hara and Rehm (1979). However, it may be problematic to compare the mothers in the Pakistani group with the student sample, as there are differences in education level which may contribute to differences in symptom presentation. At a very basic level, it has been stated that somatisation is more likely in less educated populations (Crandell and Dohrenwend, 1967). This may apply to the differences observed within these two Pakistani groups, with mothers having low levels of literacy compared to the college educated student sample.

The examination of somatic symptoms seems to have raised more questions than it has answered. These issues need to be examined further in order to understand whether the levels of increased somatic responding are truly a somatisation of depression, or indicative of generally higher levels of depressive symptoms. One way of achieving this goal, would be to compare depressive symptoms in Pakistani childbearing samples with matched samples of non puerperal controls.

While the subscale analyses have indicated a cultural difference in scores, the item analyses allow a more detailed evaluation of these findings. In the cognitive-affective sub-scale, Pakistani mothers scored higher on 8 out of 14 items. Compared to Scottish mothers, Pakistani mothers had higher scores on: mood, pessimism, sense of failure, self dissatisfaction, guilt, sense of punishment, self-dislike, and suicidal ideation. Park and

Dimigen's (1995) comparison of Korean and Scottish mothers in the postnatal period also found that Korean mothers scored higher on 5 items of the cognitive-affective subscale. The cultural difference in suicidal ideation is indicative of other findings, illustrating the relative severity of symptoms expressed in the Pakistani population. The item on 'body image change' was the only item which illustrated a main effect of time. Results indicated a decrease in this symptom from the prenatal to 3 week postnatal stage. This finding can be attributed to pregnancy, with mothers from both cultures evaluating their appearance more negatively during the third trimester assessment (time 1).

Unlike the cognitive-affective subscale, higher Pakistani scores on the somatic-performance subscale, are not clearly reflected by main effects of culture on the subscale items. The somatic performance items reflected a more consistent picture of changes across time, with some cultural differences. Of the 6 subscale items analysed, there was a significant main effect of time for 4 items: insomnia, fatiguability, somatic preoccupation, and loss of libido. All of these somatic symptoms decreased at some point in the postnatal period.

Improvements in these symptoms after birth may reflect changes from the pregnant to postnatal state. Based on interviews with mothers, it became apparent that sleep difficulties and fatigue were blamed on their heavily pregnant condition in the third trimester. Mothers frequently complained about sleep difficulties, due to feeling uncomfortable with their increased size and having to go to the bathroom more often at night. Similarly, fatiguability in third trimester was often explained as a result of mothers' heavily pregnant state. The period after the birth is devoid of problems relating to physical discomfort in late pregnancy, and could explain the decreased fatigue and sleep difficulties. Less somatic preoccupation at 8 weeks postnatal can also be attributed to improvements in physical health after the birth, although these improvements appear at a later stage of the postnatal period. Intuitively, it seems probable that somatic concerns will be heightened in late pregnancy, while similar levels in the early postnatal period are

related to the physical ramifications of childbirth. Loss of libido symptoms remained unchanged between the prenatal and 3 week postnatal stages, with a subsequent decrease at 8 weeks postnatal. Improvements in this symptom at 8 weeks postnatal may reflect a returning interest in sexual relations. Improved libido is more likely to occur after the initial periods of physical discomfort, attributable to late pregnancy and early postnatal recovery from childbirth and possible interventions (e.g. Caesarean sections).

Of all the somatic-performance items, only loss of libido revealed consistent culture differences across time, with Pakistani mothers scoring higher on this symptom. Like the Scottish mothers, Pakistani mothers' symptoms improved at the 8 week postnatal assessment. While the explanation regarding physical improvement and recovery is equally applicable to this group, there is also a cultural explanation for increased libido at time 3. Pakistani mothers abstain from sexual relations in late pregnancy and during the 40 day postnatal period. The improvements in scores at 8 weeks postnatal, could indicate a culturally sanctioned resumption of conjugal relations after the 40 day prohibition of the *chilla*. The higher scores of Pakistani mothers may simply reflect a cultural and religious abstinence from sexual relations, rather than increased somatic symptoms. However, while this may explain the higher scores at times 1 and 2, higher scores at 8 weeks postnatal (time 3) cannot be attributed to culturally enforced abstinence.

Culture and time interactions were found for two somatic-performance items: work difficulty and loss of appetite. In terms of cultural differences, Pakistani mothers scored higher on the work difficulty item at time 3. This finding is in agreement with Park and Dimigen's (1995) study which reported higher Korean scores at 6 to 10 weeks postnatal. While Park and Dimigen suggest that the cultural difference may be a reaction to the withdrawal of support, the Pakistani mothers in this study had consistent levels of work difficulty symptoms across time. Pakistani mothers' scores may reflect the cultural sanctioning of work and the emphasis on the need for rest, by endorsing responses on this item which highlight their vulnerable state. Higher Pakistani scores on the loss of

appetite item were found at the prenatal stage, but not at any other assessment. This result is contrary to Park and Dimigen's findings of higher Korean scores at 6-10 weeks postnatal.

Compared to Park and Dimigen's findings of higher Korean scores on five somatic-performance items, this study found two cultural differences 8 weeks postnatal: work inhibition and loss of libido. While other differences across time and between cultures can be ascribed to the stresses of childbirth or to culturally sanctioned beliefs, these differences are less easily explained. The idea of increased somatic symptoms due to the withdrawal of support are appealing, but do not seem to be borne out by the results. The analysis of symptoms across time has not shown increased depressive symptoms, on either subscale, after the cessation of ritual support.

The use of the BDI appears to have elucidated more similarities between these cultures, in terms of the pattern of depressive symptoms, than differences. For both groups, cognitive-affective scores do not change across time, while somatic-performance scores decrease. Comparisons of the subscales reveal that both groups score higher on somatic symptoms, as compared to cognitive ones. It would seem that both cultures experience higher somatic symptoms, which decrease after childbirth.

Similar to other analyses of the BDI, the differences between cultures relate to the severity of expressed symptoms. Pakistani mothers have significantly higher levels of depressive symptoms on both subscales, at each time assessment. In terms of somatisation, although the total somatic performance subscale scores are higher for Pakistani mothers, this is only reflected in the analysis of one item (loss of libido). Had there been consistent culture differences on all items across time, a stronger case could be made for the somatisation of depressive symptoms. As it stands, the higher scores on loss of libido and work inhibition may simply be a reflection of higher depressive symptoms in global and subscale scores, rather than a somatisation effect.

### 10.1.5 The BDI and EPDS: Similarities and Differences in Findings

In the course of discussing the results obtained with the BDI and EPDS, it is apparent that the most consistent finding relates to the greater severity of symptoms in the Pakistani group, as measured by the BDI. The higher scores of Pakistani mothers were observed at the level of global scores, depressive symptom severity, subscale scores, and item analyses.

There are several possible explanations for the severity findings. It may be that Pakistani mothers are more prone to 'exaggerate' their symptoms in a self report questionnaire. Guarnaccia et al. (1990) comment that epidemiological studies of Puerto Ricans revealed an acquiescent response style on self report measures, resulting in inflated prevalence estimates. While this is a possible reason for the present findings, it is also possible that mothers in Pakistan are especially zealous in reporting symptoms, due to the cultural significance given to childbirth. The emphasis on vulnerability, and taboos may all contribute to 'exaggerated' reports of symptoms.

Of course, it is also likely that the higher levels of depressive symptoms and increased severity are an indication of higher depression rates in this population. Although other childbirth studies conducted with Asian populations in the UK have found no differences in levels of puerperal depression and symptom presentation (e.g. Watson and Evans, 1980; Upadhyaya et al., 1989), these studies have not addressed the potential stressors associated with life in Pakistan. In a community study based in the Punjab, the home state of Pakistani mothers in this study, Mumford and colleagues (1997) have shown that Pakistani women have high levels of psychiatric morbidity. They estimated that 66% of women were suffering from psychiatric disorders, the majority of which were depressive illnesses (70%). Mumford et al. (1997) have suggested that the high rates of psychiatric morbidity in Pakistani women may be due to specific stressors. For example, they suggest that high morbidity may be due to the lack of control that women have over their lives.

In the case of childbirth in Pakistan, there are problems which are likely to make childbirth a more stressful event in comparison to childbirth in Scotland. It has already been stated that the role of the traditional birth attendant is prevalent in childbirth (Woods, 1991). While the TBA offers the mother advantages in terms of providing support consistent with rituals, this scenario often compromises childbirth outcomes. The potential problems with birth, including high maternal and infant mortality, would be common knowledge to these women, and may have had a bearing on the higher rates of depressive symptoms. Certainly, the scenario of childbirth is a far more stressful event than in the West, and may explain the higher levels of depressive symptoms and also the increased severity of symptom reports. The finding that more Pakistani mothers scored above the cut off point of 9 on the BDI at 8 weeks postnatal, may be indicative of a withdrawal reaction to the cessation of support at 6 weeks postnatal. Although there is no significant change in BDI scores from 3 to 8 weeks postnatal, it is possible to speculate that the Scottish mothers are making a better adjustment to the postnatal period (as illustrated by the finding that less Scottish mothers score above 9 at time 3).

In comparing the findings based on the BDI and EPDS, the most obvious distinction is the lack of culture differences on the EPDS. While, it was suggested that higher scores on the BDI may be due to an exaggeration of responses on the questionnaire, the EPDS results cast doubt on this idea. Had there been a general over endorsement of symptoms in the self report format, one would also have expected higher scores on the EPDS.

The only clear cultural differences on the EPDS were observed at the level of item analyses. Of the 10 items, there was a significant main effect of culture for 4 items: self blame, anxiety/worry, sleep difficulty, and crying. The main effects of culture were not generalisable to one particular group of mothers. Of the 4 items, Scottish mothers had higher depressive symptoms on self blame and anxiety/worry. The higher levels of self blame symptoms concur with Cox's (1983) study, in which he reported that Scottish mothers were more likely to report this symptom compared to Ugandan mothers. On the

other hand, Pakistani mothers had significantly higher symptoms relating to crying and sleep difficulties.

The higher Scottish symptom scores are in contrast to findings of higher Pakistani scores on the cognitive-affective subscale of the BDI. The differences in culture effects for these items may illustrate a cultural preference for symptom expression. It is notable that the wording of items on which Scottish mothers scored higher, referred to the unnecessary nature of symptoms. For example, the item on self blame was worded as, "I have blamed myself *unnecessarily* when things went wrong". Similarly, the item on anxiety/worry was presented as, "I have been anxious or worried *for no good reason*". It is possible to speculate that Pakistani mothers were less likely to attribute symptoms to an unknown cause. While this is purely speculative, further support for this argument comes from the results of item 5 of the EPDS. Item 5 represents the only other similarly worded item on the EPDS: "I have felt scared or panicky *for no good reason*". Although there was no straightforward main effect for culture, the interaction revealed that Scottish mothers had higher scores on this item at each assessment. Scottish multiparous mothers scored higher at time 1 and time 3, while Scottish primiparae scored higher at time 2.

The higher Pakistani scores on the sleep difficulty and crying items are interesting, as the equivalent items on the BDI reveal no significant differences. Again, there may be a difference attributable to the wording of these questions. While the BDI asks about the general severity of the symptom, the EPDS asks about these symptoms as a consequence of unhappiness. From the results, it would seem that Pakistani mothers are more likely to endorse items which attribute symptoms to unhappiness. Endorsement of symptoms in these two groups may well be influenced by the context in which the EPDS assesses these items. This suggestion is also supported by observations made during the course of administering the questionnaires orally to Pakistani mothers. Items which assessed symptoms occurring 'for no good reason', were questioned by a lot of mothers. The most

common response was an indication that the symptoms were present, but that they didn't agree that there was 'no good reason' for them.

What possible reasons could explain the differences in results, based on these two inventories? In terms of the lack of cultural differences found on the EPDS, there are several considerations which may shed light on this issue. Translation of the questionnaires was more problematic in the case of the EPDS. The BDI was relatively easy and straightforward to translate, and back translations were more accurate than the corresponding procedure with the EPDS. Problems in the translation of the EPDS were very apparent in the translation of item 1, "I have been able to laugh and see the funny side of things". This item was problematic as a literal translation did not make sense, and there was no equivalent Urdu expression which conveyed exactly the same meaning. This became apparent in the initial piloting of questionnaires, when Pakistani mothers commented that this item was very similar to item 2 ("I have looked forward with enjoyment to things").

As mentioned previously, the mothers commented on items that assessed symptoms due to 'no good reason'. In most cases mothers were reluctant to endorse these symptoms, as they could name good reasons for symptoms of panic and anxiety/worry. Similar observations about these items have been made by Thome (1991), who found that Icelandic mothers could also attribute these symptoms to identifiable causes. In the case of this study, the specific context of the items on self blame, anxiety/worry, and panic, may contribute to an under estimation of these symptoms in Pakistani mothers.

It has already been mentioned that the EPDS is best compared with the cognitive-affective scale of the BDI. Across time, the analyses of these measures support the idea that depressive symptoms do not increase after childbirth. However, they differ in terms of findings relating to cultural differences in severity of symptoms. The cognitive-affective subscale indicates that Pakistani mothers report more severe depressive



symptoms, whereas the EPDS global scores suggest that the two groups are similar. It is possible that the problems in translation and the context of aforementioned items on the EPDS, contribute to the lack of cultural differences found with this questionnaire.

In a similar vein, problems with the EPDS in another non Western culture have been noted. Yoshida et al. (1997) comment that the EPDS did not recognise cases of depression in Japanese mothers. On the basis of more in depth structured interviews, the authors suggest that the low scores on the EPDS are related to the scale's focus on mood states and the exclusion of physical symptoms. While this may also be relevant to the Pakistani mothers in this study, the previous discussion suggests that the context of symptom assessment may also be an important factor in underestimating depressive symptoms.

Overall, it would seem that the questionnaires support similar conclusions regarding the lack of increased depressive symptoms after birth. In terms of the anthropological argument, the results of the BDI and EPDS suggest that Pakistani ritualised childbirth is not characterised by less depressive symptoms, as compared to Scottish mothers. The lack of cultural differences regarding symptom severity on the EPDS, may be related to the aforementioned difficulties with this inventory. In the context of this study, it is suggested that the BDI may actually be a more accurate indicator of depressive symptoms in the Pakistani group.

## **10.2 Evaluating Social Support in the Context of a Multidimensional Model**

The anthropological approach has described the support of non Western birth cultures, in terms which differentiate it from Western cultures. For example, Stern and Kruckman (1983) define non Western birth environments in terms of six components: a structurally distinct postpartum period, the use of rituals which highlight the vulnerability of the new mother, social seclusion, mandated rest, assistance in tasks from female relatives and midwife, and social recognition of the new mother. While this is an accurate description

of Pakistani support, comparisons with Scottish cultures only emphasise the absence of these rituals.

In order to compare the support available and received in both cultures, it is important to use a model which is applicable to both. The multidimensional model advocated by Cutrona and Russell (1987) assesses support in the context of six provisions: reliable alliance, attachment, guidance, nurturance, social integration, and reassurance of worth. In this context, analyses allow an investigation of received support which is independent of culture specific definitions (e.g. Stern and Kruckman, 1983). Authors in the anthropological tradition have suggested that non Western cultures have more support given to them in the ritual period after birth. It would be interesting to see how this assertion fares when two cultures are compared on support components of a multidimensional model. Based on the anthropological approach, one would expect social support to show evidence of cultural patterning. The following discussion centres on this idea, and aims to show if there are support types which display a pattern consistent with the idea of ritual support provision. In addition to this, comparisons with Scottish mothers will allow cultural similarities and differences to be highlighted within the context of a multidimensional support construct.

#### 10.2.1 Amount of Support: What is Perceived as Being Available?

Of the six support provisions, reliable alliance and social integration suggest a pattern consistent with culturally patterned childbirth.

Changes in the availability of reliable alliance support were perceived by Pakistani mothers only. Mothers reported that less support was available after the ritual childbirth period had ended (at time 3). The lack of differences in the Scottish group and the observed decrease for Pakistani mothers are interesting, as this may indicate changes related to ritual support. It is possible to speculate that Pakistani mothers' perceptions of support are dictated by their cultural expectations. The Pakistani mother can count on a

great deal of reliable alliance support, in the form of help with household chores, childcare, and other duties, during late pregnancy and the ritual *chilla*. However, mothers would expect less of this help after the ritual period, as they are then expected to resume their normal duties. The observed decrease in available support would seem to reflect culturally appropriate expectations, regarding support provision after the *chilla*. Consequently, Pakistani mothers report that less support is available at 8 weeks postnatal, as compared to Scottish mothers.

The availability of social integration support also appeared to be influenced by the ritualised approach to childbirth. This provision assessed support derived from recreational and group activities. While results showed that Scottish mothers' perceptions remained unchanged, Pakistani mothers indicated that less social integration support was available after childbirth. It is feasible to suggest that traditions governing the seclusion of mothers will influence how much support Pakistani mothers think is available. As the period following childbirth is one of ritual seclusion and enforced rest, it is unsurprising that less support is perceived as being available. During the *chilla*, mothers are expected to stay indoors and not to engage in social activities. The emphasis is on rest and safeguarding the mother from harm in her polluted state. As such, the *chilla* is a time when the mother's safety and care can be ensured by restricting socialising activities with friends and family. For Scottish mothers, who have no such restrictions, there is no change in the expected availability of this support. Scottish mothers in this study were very keen to "get out of the house" to visit friends and family. In contrast to Pakistani mothers, Scottish mothers wanted to continue the routine that they had before the birth. Given these cultural differences, it is unsurprising that Scottish mothers have higher expectations of support availability in the postnatal period. Like reliable alliance, it would seem that the availability of social integration support may also be subject to change in a ritualised birth culture.

Interestingly, two provisions showed postnatal changes for Scottish mothers only: nurturance and reassurance of worth. In both provisions, support availability increased after birth. Nurturance support is the only provision which assesses support given to others. Similarly, Cutrona (1984) has also reported postnatal increases of this support provision in a Western sample of mothers. In contrast, Pakistani mothers expected to provide similar amounts of support at all times. Also, compared to Scottish mothers, they expected to provide more support to others. These findings may be accounted for by considering the different family systems of Scottish and Pakistani mothers. The greater support provision by Pakistani mothers may reflect the extended family environment of this group. In extended households, family members are expected to take collective responsibility (Rack, 1982). In the case of Pakistani mothers in this study, the well being of all family members is an important concern and this is reflected in their higher scores. In the case of Scottish mothers, the smaller nuclear family unit does not involve such widespread responsibility for the well being of family members. Consequently, when the new baby arrives, Scottish mothers perceive a discernible increase in their responsibility to provide care to another person.

Finally, Scottish mothers reported that more reassurance of worth support was available after the birth. This provision assesses the recognition of skills and competence by others. In comparison to the prenatal assessment, Scottish mothers were more confident of their skills and competence being recognised in the postnatal period. For Pakistani mothers, there was no change in perceived availability of this support. Contrary to the anthropological view (e.g. Stern and Kruckman, 1983), this suggests that Scottish mothers have a support advantage over Pakistani mothers. Cutrona and Russell (1987) have suggested that increased reassurance support enhances effective coping. This result may suggest a postnatal advantage for Scottish mothers, in terms of resources which can help to counter stress.

In conclusion, only expectations regarding the availability of reliable alliance and social integration support seem to reflect changes attributable to the ritual childbirth period.

### 10.2.2 Received Support: What do the Frequency and Network Size of Support Tell Us?

Of the six support provisions, four support types showed evidence of cultural patterning: reliable alliance, attachment, nurturance, and social integration.

The frequency of reliable alliance support given to Pakistani mothers illustrated the importance of the ritual postnatal period. Pakistani mothers received the most help with practical tasks and duties during the *chilla*. After the ritual period, the amount of practical support (reliable alliance) decreased to its lowest level. These findings neatly illustrate the importance of the 40 day postnatal period for Pakistani mothers. It is clearly a time when mothers receive the most support from others around them. The *chilla* is a time when other female relatives arrive to help with household chores. Help is also available in the form of taking over cooking duties, and providing the new mother with her meals. These meals are carefully prepared with 'hot' ingredients (e.g. chicken stock) to help the mother purify her body. In line with Stern and Kruckman's (1983) hypothesis, Pakistani mothers received more practical support during the first six weeks postnatal, as compared to Scottish mothers. The size of Pakistani mothers' support networks only decreased after the end of the *chilla*. The frequency and network size results support the idea that the 6 week period after birth is distinct, at least in terms of the reliable alliance support given by others.

Unlike Pakistani mothers, there was no change in the amount of reliable alliance support given to Scottish mothers across time. Scottish mothers in this study were very keen to "do things for themselves", and did not want to feel dependant on others for help. Similar to Pakistani mothers, Scottish mothers had less supporters at 6 to 8 weeks postnatal (time 3). This result points to possible cultural similarities in the mobilisation of reliable alliance support. It is possible to speculate that support from others, particularly practical

(reliable alliance) support, is given at the most difficult time for mothers. In both cultures, support in practical tasks (e.g. household duties) was offered by more people during late pregnancy and the first six weeks after birth.

However, there were cultural differences in the number of supporters, with Scottish mothers having more supporters. This finding is similar to Park and Dimigen's (1994) study, which also reported that Scottish mothers had a larger practical support network than Korean mothers. Park and Dimigen's results are based on support received from 6 to 10 weeks postnatal, and are therefore comparable to the present study's support assessment at time 3 (6 to 8 weeks postnatal). The authors suggest that smaller Korean support networks may be due to the withdrawal of ritual support. This is unlikely in the present study, as Pakistani networks are smaller than Scottish networks at each time of assessment. It is possible that the Pakistani mother has a smaller network of providers who cater for most of her needs. This is especially pertinent in late pregnancy and the early postnatal period, when mostly female relatives (e.g. mother, aunts, and sisters) stay with the mother to provide any practical support she needs. This pattern of support provision is not given to Scottish mothers. Instead, these mothers tend to receive occasional support from a wider range of support persons, beyond their immediate family.

Attachment support also seemed to be influenced by the cultural patterning of birth. In line with the anthropological view, Pakistani mothers received more support during the *chilla* compared to their Scottish counterparts. This support is typically provided by the female relatives and the *dai*, who take care of all the mother's needs. The new mother is surrounded by women who can empathise with her, and provide sympathy and understanding during this time. This situation changes after the *chilla*, with Pakistani mothers receiving less support from a smaller group of people. It is quite likely that the end of the ritual period is accompanied by a change in attitude towards the new mother's needs. After the initial six weeks of intensive support, mothers are expected to be fit

enough, and prepared enough to cope with a new baby. The decrease in emotional (attachment) support may reflect this cultural view, with subsequently less attention given to mothers after the ritual period.

Scottish mothers receive similar amounts of attachment support across time. However, they also have less supporters at 6 to 8 weeks postnatal (time 3). This may suggest that support is mobilised in a similar manner for both groups. It can be speculated that larger networks of support in late pregnancy and the early postnatal period, are indicative of the increased interest of others around the time of the birth. While there are cultural explanations for the smaller networks at time 3 for Pakistani mothers, these do not apply to Scottish mothers. It may be that the later postnatal period consists of support from a core group of close friends and family, rather than a more widespread interest by others (e.g. colleagues and neighbours). This is supported by observations made in the course of interviewing Scottish mothers. Mothers described the later postnatal period as a quieter time, compared to the initial 'rush' of visitors and well wishers who came to see the baby.

Nurturance support was also influenced by the ritual support period. This provision assessed the amount of care and attention that mothers provided to others in their social network. In the prenatal period, Pakistani mothers provided more support to their families than Scottish mothers. This finding is unsurprising if one considers the extended family structure of Pakistani mothers. Most mothers were staying at their in-laws' home, where daughter-in-laws are obligated to take care of all the family members (e.g. communal cooking duties). In addition to household duties, mothers are jointly responsible for the well being of every person. This can include the care of the husband's nieces and nephews, as well as the mother's own children. Indeed, it was notable that many mothers reported that they provided nurturance support to *all* household members.

In terms of the ritual period after birth, the support situation is markedly different.

During the *chilla*, Pakistani mothers provided care to smaller networks (i.e., primarily

expected to care for the baby only). In fact, the size of network was comparable to that of Scottish mothers. This result supports Stern and Kruckman's (1983) suggestion that ritualised birth cultures provide a protection from normal duties. The six weeks following the birth require that the mother rest and recuperate from childbirth, and are accompanied by a cessation of normal responsibilities. During this time, the mother focuses on taking care of her baby and is prohibited from undertaking cooking and housework tasks. The *chilla* is viewed as a time of vulnerability, when other female relatives can take over all of the mother's duties. Indeed, the practice of going back to the parental home is seen as a way to encouraging mothers to rest, without having any responsibilities to worry about. The results also show that, after the *chilla*, the Pakistani mother resumes her usual pattern of providing care to a larger group of people.

In contrast, Scottish mothers provide more nurturing support to a larger network in the period after birth. Again, the family structure of Scottish mothers can explain these findings. The prenatal period is often a time when mothers only provide care to their husband, and any children they may have. Indeed, most Scottish mothers reported that they had more freedom from responsibilities in the prenatal period. In many cases, husbands would take over household chores, such as cooking, cleaning, and ironing, so that the mother-to-be could rest in the final weeks of pregnancy. The arrival of a new baby changes this situation and is associated with increased responsibility for the Scottish mother, as she now has to provide daily care for the new baby. Clearly, the cultures differ in terms of which period involves the least responsibility for providing care. Scottish mothers offer the least support to others during the prenatal period, while Pakistani mothers receive a rest from their care duties during the *chilla*.

The final area of support which showed evidence of cultural patterning, was social integration. The *chilla* was a distinct period for Pakistani mothers, characterised by less socialising and recreational activities with a smaller group of people. In contrast, Scottish mothers received similar amounts of support at all times. These differences can be



attributed to the ritual structure of the postnatal period. Pakistani mothers are expected to remain confined at home during the *chilla*. Indeed, many people would object to a mother visiting their home while she is considered impure and polluted. The most adequate protection and rest is achieved by prohibiting contact with others. Given these cultural restrictions, it is unsurprising that mothers report less socialising during the *chilla*. In contrast, Scottish mothers in this study made every effort to continue their usual social activities. Often, mothers would arrange babysitters for a few hours so that they could go to the cinema, or eat out at a restaurant with their husband. Unlike Pakistani mothers, Scottish mothers emphasised the importance of social and recreational activities as a means of making a smooth transition to motherhood.

It can be concluded that these four support provisions of reliable alliance, attachment, nurturance, and social integration show evidence of cultural patterning, in line with childbirth rituals. No group differences were found in the amount of reassurance of worth support, suggesting that this support is not culturally patterned. The results of guidance support the conclusion that Scottish mothers receive *more* informational support from a larger support group. Impressions gathered from interviewing mothers would support these findings. Scottish mothers were more likely to mention consultations about child care issues with medical staff, such as: doctors, midwives, and health visitors. In the case of Pakistani women, most mothers received all the information and advice they needed from a small group of female relatives.

Finally, a consistent cultural difference in support networks was noted. Scottish mothers received more support from non family members compared to Pakistani mothers. This difference was observed for all types of received support provisions. These findings illustrate an interesting cultural difference between the two groups. It was notable that Pakistani mothers relied almost exclusively on their family and in-laws for different types of support. However, Scottish mothers were far more likely to mention the help of friends, colleagues, and medical staff. For Scottish mothers, it would seem that friends

and other non family persons are important sources of support. Pakistani mothers are unlikely to need the help of friends, as their family is obligated to support them.

### 10.2.3 How Important is the Spouse as a Support Person?

A striking difference in the role of spouses was observed between Scottish and Pakistani groups. In general, Scottish spouses played a more prominent role in the provision of support to their wives. In particular, Scottish spouses provided more support in the first 6 weeks after birth, as compared to their Pakistani counterparts. The importance of the spouse in support provision, has also been reported in other studies of Western mothers (e.g. O'Hara, 1986; Logsdon, 1996). Scottish husbands were consistently involved in providing support across time. In contrast, Pakistani spouses were less involved in providing reliable alliance, attachment, and reassurance of worth support after the birth.

Observations based on interviewing subjects, made it apparent that Scottish mothers mentioned their husbands far more than Pakistani mothers. This is unsurprising, if one considers that Scottish mothers have the most contact with their spouse, as opposed to other relatives or friends. Scottish mothers were more likely to mention that their husband helped them with practical chores and household tasks. In addition, the spouse was considered an important source of emotional support and comfort.

Again, these differences may be ascribed to the different family systems which prevail in these two cultures. The role of the spouse as a support provider is paramount in the nuclear family situation of Scottish mothers, as there are no other adults available to provide support. It is possible to speculate that the extended family system of Pakistani mothers provides a broader base of support, with mothers not exclusively dependant on their spouse. Another possible reason for the differences in spousal support may relate to the role of female assistance for the mother in non Western childbirth. Support before, during, and after childbirth is traditionally associated with female relatives and traditional birth attendants, with the husband not having a clearly defined role in this ritual process.

In addition, it became apparent from interviews that the Pakistani spouse was not considered as an important source of practical support in household chores, as this is defined as "woman's work".

While Scottish mothers felt that their husband should be involved in all aspects of the birth, Pakistani mothers did not feel that this was an important consideration.

Consequently, the supportive roles were usually the domain of female relatives and close family. In many cases, mothers remained at the parental home without their husbands. Work commitments and family obligations usually mean that the husband visits his wife, rather than stay at his in-law's home. All of these considerations make it less likely that Pakistani mothers will turn to their husbands for support at this time. The importance of spousal support in Western populations has also been illustrated by Park and Dimigen (1994). These authors reported that Scottish spouses were more involved in support provision, as compared to Korean husbands. The results of this study would suggest that the role of the spouse as a support person, is more important in the nuclear family situation of Western mothers.

#### 10.2.4 How Satisfied are Mothers with their Support Provision?

Ratings of the quantity and quality of support showed that there were no cultural differences. This is interesting, given that there are cultural differences in the provision of support in childbirth. This result is contrary to Park and Dimigen's (1994) findings, that Scottish mothers rated support more highly than their Korean counterparts. It is possible that these authors have assessed a withdrawal reaction to the end of ritual support for Korean mothers. Park and Dimigen assessed support up to 10 weeks postnatal, whereas the present study only assessed support up to 8 weeks postnatal. It is possible to speculate that non Western mothers become less satisfied with support at a later period after the end of ritual support. Future studies would have to assess support on a longer time scale in order to evaluate any possible withdrawal effect.

It was notable that Scottish mothers' satisfaction ratings remained unchanged across time for most support provisions: guidance, nurturance, social integration, and reassurance of worth. An interesting observation was made regarding nurturance support given to others in the prenatal period. Scottish mothers were less satisfied when they had to give more support to a larger group of people in the prenatal period. This suggests that Scottish mothers may value a break from care duties in the period before birth.

Two provisions showed the same pattern of support satisfaction for Scottish and Pakistani mothers: reliable alliance and attachment. Mothers were less satisfied with the quality and quantity of reliable alliance support given at 6 to 8 weeks postnatal (time 3). In the case of Pakistani mothers, it can be speculated that this represents a withdrawal reaction after the end of the *chilla*. Mothers would certainly be receiving less intensive support from female relatives at this time. Indeed, they may have moved back to their in-laws' home, where less help may be forthcoming. It is notable that less frequent support is associated with lower satisfaction ratings, after the *chilla*.

Scottish mothers were also less satisfied with reliable alliance support at 6 to 8 weeks postnatal. However, support frequency and number of support persons are unrelated to satisfaction in this group. Similar results regarding network size and support satisfaction have been reported by Logsdon et al. (1997) with American mothers at 6 weeks postnatal. While these authors did not measure social support in the same manner as this study, similar support components to reliable alliance can be identified. The authors reported that satisfaction with 'day-to-day concerns' and 'immediate help with urgent needs' were unrelated to the size of support network. In the present study, there does not seem to be an obvious explanation for the postnatal decrease in satisfaction. It can be speculated, that although practical help is still given by supporters, the type of support offered is less adequate for mothers' needs at this stage.

For both groups, mothers were less satisfied with the amount of attachment support given in the first 6 weeks after birth. Although scores decreased, the mean scores after birth indicated that mothers were still fairly satisfied with the amount of support received. Correlations showed that more attachment support was associated with greater satisfaction.

For Pakistani mothers, another two provisions were also associated with less satisfaction after the birth: social integration and reassurance of worth. Like reliable alliance support, these can be interpreted in the context of ritual childbirth. Pakistani mothers were less satisfied with the amount of social integration support available during the *chilla*. This suggests that mothers may have been displeased with the lack of social contact available during this time. It is possible to speculate that the ritual seclusion period may be a source of frustration. From the interviews with Pakistani mothers, it became apparent that many mothers were agitated by the restrictions on socialising outwith the home.

Similarly, Pakistani mothers were actually less satisfied with the amount and quality of reassurance support given during the *chilla*. It is possible that mothers have heightened expectations of the support they will receive after the birth, and are subsequently disappointed. However, an alternative explanation may centre on the type of reassurance support received during the ritual period. The assessment of support addressed the feedback mothers had been given (for example: praise, compliments, criticism, blame, etc.). It is possible to speculate that less satisfaction was related to more negative feedback. Correlation data would seem to support this, with Pakistani mothers expressing more satisfaction when *less* support was received.

From the interviews with Pakistani women, it became apparent that mothers were usually happy to have no feedback. For many mothers, feedback often took the form of critical comments from 'well meaning' relatives. Pakistani mothers were more likely to be

criticised about their child care techniques. Mothers were frequently chastised about the way they were breastfeeding, with female helpers giving unwelcome advice. The other main criticism concerned the shape of the baby's head. Pakistani mothers were expected to keep the baby lying on its back with its head straight, as this is thought to help develop a rounded skull. A well rounded skull is considered a sign of beauty, and mothers are encouraged to 'shape' the skull while the bones are still malleable. Consequently, mothers often found that visitors would criticise this aspect of their baby's appearance. As feedback could often involve a critical appraisal of the mother's efforts, Pakistani mothers were usually relieved to have as little feedback as possible. In contrast, impressions gathered from interviews suggest that Scottish mothers were more likely to receive feedback which was interpreted as positive and encouraging. Indeed, unlike Pakistani mothers, Scottish mothers' postnatal satisfaction ratings were related to *more* frequent support from others.

### **10.3 Social Support and Depressive Symptoms**

Low levels of social support have been implicated in the development of depression (Brown et al., 1975; Brown and Harris, 1978). The following section discusses analyses which compared social support measures and depressive symptoms. The analyses assessed the relationship of perceived and received support with depressive symptomatology.

#### **10.3.1 How do Depressive Symptoms Relate to the Support that Mothers Believe is Available?**

The postnatal results demonstrate a well established inverse relationship between perceived availability of support and psychological distress (Cohen and Wills, 1985; Barrera, 1986). While the correlational data is consistent with the expected pattern of relationships, there appear to be cultural differences in the strength of these associations. Compared to Scottish mothers, Pakistani results demonstrated fewer significant relationships, and correlations were of a smaller magnitude.

For Scottish mothers, the relationship between available support and depressive symptoms was very clear. Depressive symptoms were associated with less perceived support after the birth. Specifically, depressive symptoms in the postnatal period were associated with 5 out of 6 support provisions. This relationship was found for *all* types of support which were given by others: reliable alliance, attachment, guidance, social integration, and reassurance of worth support. For Scottish mothers, nurturance support was the only provision with no relationship to postnatal depressive symptoms. As this provision assesses the support given *to* others, one would not expect BDI scores to be associated with less support giving responsibilities.

While Pakistani mothers' postnatal depressive symptoms also demonstrate an inverse relationship with available support, the results are less comprehensive than Scottish findings. There was no relationship between *total* support available and depressive symptoms at time 2. Indeed, reassurance support was the only provision demonstrating an inverse relationship with depressive symptoms at this time. However, by 8 weeks postnatal (time 3), total available support was negatively correlated with scores on the BDI. More specifically, depressive symptoms were associated with three out of six provisions: guidance, social integration and reassurance of worth support.

From the correlational analyses, it can be seen that the relationships between depressive symptoms and available support are culturally distinct. Scottish mothers' depressive symptoms are inversely related to more provisions at times 2 and 3, compared to Pakistani mothers. Pakistani results demonstrate an increasing relationship across the postnatal period, while Scottish results remain relatively unchanged. In other words, the association between more severe depressive symptoms and less available support, is more applicable to the Scottish mothers in this study. It can be speculated that the availability of support is more important in defining the psychological health of Scottish mothers *throughout* the immediate postnatal period (times 2 and 3). However, in the case of

Pakistani mothers, perceived availability of support only seems to be important after the *chilla* has ended (at 8 weeks postnatal).

Similar patterns of results were found when 'depressed' and 'non depressed' mothers were compared on perceived support using Mann Whitney U tests. 'Depressed' mothers reported that less support was available in the postnatal period, as compared to 'non depressed' mothers. Again, these findings were more consistently observed for Scottish mothers, with 'depressed' mothers having less overall support available to them. Specifically, 'depressed' Scottish mothers perceived support deficits in four provisions: attachment, guidance, social integration, and reassurance of worth. In contrast, 'depressed' and 'non depressed' Pakistani mothers had comparable perceptions of overall support availability in the postnatal period. 'Depressed' Pakistani mothers only perceived less available postnatal support in two provisions: guidance and reassurance of worth.

### 10.3.2 Which Perceived Support Provisions were Unique in Identifying Postnatally 'Depressed' Scottish Mothers?

The support provisions which were unique in differentiating Scottish 'depressed' and 'non depressed' mothers were attachment and social integration. These provisions are both representative of the presence of affectional ties (Cutrona and Russell, 1987). The importance of attachment support suggests that 'depressed' Scottish mothers perceived they had less emotionally close relationships, as compared to the 'non depressed' group. As regards social integration support, results illustrate that 'depressed' Scottish mothers lacked relationships which provided comfort, security, and a sense of identity. According to Cutrona and Russell (1987) these provisions of support may have health benefits by virtue of their role in promoting a sense of well being.

In particular, the role of social integration in the psychological well being of Scottish mothers, indicates the importance of recreation and group activities. Cutrona (1984) has noted that social integration may enable mothers to avoid depressive symptoms by



providing a source of positive reinforcement. For Scottish mothers, recreational activities with family and friends may have provided more positive feedback, thus contributing to the lower depressive symptoms observed postnatally. Cutrona also notes that social integration support assesses help available from others who share the same concerns. As such, the benefits of this support may also be achieved through the mothers' interactions with friends and family who have experienced parenthood, and can empathise with her. The magnitude of this difference was greatest at 3 weeks postnatal, and approached significance at 8 weeks postnatal. Therefore, the importance of knowing that there are others who share the same concerns, is most important to Scottish mothers' psychological health in the first few weeks after birth. Intuitively, this seems sensible, as positive reinforcement is more likely to be needed in the immediate postnatal period.

Other studies using Western childbearing populations have also emphasised the relationship between postpartum depression and deficits in emotional support (Paykel et al., 1980; O'Hara et al., 1983). Similarly, a relationship between less social integration support and depression after childbirth has also been reported (Mills et al., 1995; Shimizu and Kaplan, 1987). It is interesting to note that the levels of available support, regarding these affectional provisions, did not distinguish between 'depressed' and 'non depressed' mothers in the Pakistani group.

The Shimizu and Kaplan (1987) study is of particular interest as it involved a cross cultural comparison of American and Japanese mothers after childbirth (4 to 6 weeks postpartum). The authors assessed social isolation, which is similar to the social integration provision assessed in the present study. Shimizu and Kaplan predicted that socially isolated mothers in both cultures would be more depressed. This relationship was only confirmed for American mothers, with levels of social isolation having no impact on depression in the Japanese group. These results are similar to the findings of the present study, in that less attachment and social integration support characterise 'depressed' Scottish mothers only. These results indicate that there may be cultural

differences in the importance of specific support provisions to psychological well being. Possible explanations for these cultural differences will be addressed later in this section.

### 10.3.3 Which Perceived Support Provisions were Common Identifiers of Postnatally 'Depressed' Mothers in Both Cultures?

The perceived provisions which were common to both groups' differentiation of 'depressed' and 'non depressed' mothers in the postnatal period, were reassurance of worth and guidance support. The importance of guidance support illustrates that access to information and solutions to problems may be relevant in preventing depressive symptoms. Researchers have suggested that information from others may be instrumental in minimising the stressful context of problems (LaRocco et al., 1980). The knowledge that others in the support network can be called upon to provide advice seems especially important to the psychological well being of Scottish mothers. 'Depressed' mothers were characterised as having less available guidance support at both postnatal assessments. This suggests that Scottish mothers' psychological well being may benefit from the knowledge that there are people she can turn to for advice and information.

For Pakistani mothers, the relationship between the lack of available guidance support and increased depressive symptoms was observed at 8 weeks postnatal only (time 3). It is possible to speculate that the cessation of ritual support represents a period of vulnerability for 'depressed' Pakistani women, in terms of being able to interact with knowledgeable support providers. For 'depressed' mothers, the period after the *chilla* may be a time of insecurity as the ritual support structure is no longer in place. While 'depressed' and 'non depressed' mothers can both expect similar amounts of guidance support during the *chilla*, this situation appears to change after the forty day period has ended. Depressive symptoms in Pakistani mothers at 8 weeks postnatal, may be linked to perceptions that there is less potential help with problem solving at this time. After all, many mothers may return to their in-law's home at this time, or they may simply receive less advice from female relatives and the *dai*.

Perceptions of reassurance of worth support are negatively related to depressive symptoms in the postnatal period, for both groups of mothers. Clear differences between the 'depressed' and 'non depressed' groups are found at time 2 for Pakistani mothers, with results approaching significance at time 3 for both groups. Reassurance of worth support assesses the recognition of skills and competence by others. Cutrona and Russell (1987) note that this provision may be beneficial to psychological health by virtue of its effect on self-efficacy and self-esteem. Cobb (1979) has suggested that the knowledge that one is well regarded by others, may increase confidence and subsequently benefit individuals by encouraging them to deal with stressful situations. Similarly, the work of Bandura (1982) on self-efficacy suggests that this type of support provision promotes more effective coping and a stronger resistance to stressful reactions. The inverse relationship between this support and depressive symptoms, suggests that 'non depressed' mothers' psychological health may have benefited from enhanced self-esteem and self-efficacy beliefs.

One result did not fit the pattern of 'depressed' mothers perceiving less support. During the prenatal assessment, 'depressed' Pakistani mothers reported more reliable alliance support. Although this result seems counterintuitive, it may be a reflection of increased support provision mobilised by the 'depressed' mother. In a similar vein, other studies have reported findings indicating positive relationships between support and psychological distress (Cutrona, 1986a, Dunkel-Schetter, Folkman, and Lazarus, 1987). It is possible that the 'depressed' mothers were given more practical support by others in the support network, and that mothers' perceptions reflected this reliance.

#### 10.3.4 What Could Explain the Cultural Differences in the Relationship Between Perceived Support and Depressive Symptoms?

Collins et al.'s (1993) observation that there may be cultural differences in the types of support that are beneficial to health, seem to be borne out by these findings. In general, it

seems that Scottish mothers' perceptions of available support bear a stronger relationship to postnatal depressive symptoms, and are observable across a wider range of support provisions. Why might these differences have been observed?

One possible reason for the lack of differences between support perceptions of 'depressed' and 'non depressed' mothers in the Pakistani group, may relate to the ritual support period. It is possible that 'depressed' and 'non depressed' mothers perceived similarly high levels of available support, as these expectations are culturally conditioned. Regardless of their depressive symptoms, Pakistani mothers would have expected ritual support around the time of childbirth. The correlational data would seem to support this view. Unlike previous assessments, the period after the *chilla* was characterised by relationships between less available support and more depressive symptoms. While the correlational analyses indicated an increasing trend in this association at 8 weeks postnatal, this was not reflected by the Mann Whitney comparisons. It is possible, that assessing mothers' support at 8 weeks postnatal is too soon to measure differences associated with a withdrawal of ritual support. This is because many mothers receive support from their family beyond the forty day period. Therefore, the lack of support differences may be a reflection of increased support availability at this time. Clearly, further longitudinal studies should assess support and depressive symptoms beyond the immediate postnatal period, in order to clarify this issue.

While it is plausible that both 'depressed' and 'non depressed' mothers in the Pakistani group can expect similar amounts of support, there are other issues to be considered. It is possible, that other factors of perceived support could have distinguished these groups. In particular, perceptions regarding available support could have been more informative. Norwood (1996) has commented that social support relationships are not always positive, and can be a source of stress. Gottlieb (1981) and Rook (1984) have pointed out that the social network can include neutral or negative relationships, as well as relationships which are positively supportive. Given that this is a possible element of available

support, it may have been more profitable to assess satisfaction with the support available. It may be that 'depressed' mothers are less satisfied with the amount or quality of available support. Studies with Caucasian mothers have found that while the size of the available support system was similar in depressed and non depressed subjects, depressed mothers reported less satisfaction with available support (Spangenberg and Pieters, 1991). Future studies of Pakistani mothers would have to assess perceptions of available support in more depth, in order to determine whether evaluations of potential support are more important to psychological health in this population.

With regards to perceived support in the Pakistani population studied, several interesting observations were made in the course of data collection. The oral administration of questionnaires allowed mothers to informally discuss certain aspects of support. The high reports of available support were often made with reference to an idealised support situation. In most cases, the support was perceived as being available from family members. While this is not unusual, many mothers often alluded to the fact that, although they knew they could count on this support, they would not actually ask for it. For many mothers, this was viewed as an admission that they were having problems. It seems that many Pakistani mothers were keener to 'suffer in silence', rather than ask their families for help. The importance of culture, in this regard, cannot be underestimated. Mothers were very keen to give their families the impression that married life was going well, and did not want to burden others with their problems. This suggests that, while mothers know that they have available help, there are many considerations that would influence whether this help would actually be used. The measures of perceived support only assessed the *amount* of support that mothers perceived as being available. These informal observations suggest that there may be cultural differences in the utilisation of effective support networks. Ideally, cultural approaches to support utilisation should also be examined in future studies (for example, the willingness to ask for help). Indeed, researchers have postulated that the tendency to seek help is an individual difference variable, which may influence support receipt (Heller and Swindle, 1983). It is possible

to speculate that depressive symptoms of Pakistani mothers may have been influenced by perceived cultural barriers to support utilisation.

Another possible explanation for the lack of differences in perceived support, between 'depressed' and 'non depressed' mothers in the Pakistani group, centres on the levels of stress. Cutrona's (1984) study of primiparous mothers reported that social support did not appear to support the buffering hypothesis, i.e. support was not most beneficial at high levels of stress. Cutrona suggests that social support may only exert a positive influence on depression, within certain stress limits. While this thesis did not examine levels of stress, it was notable that social support had no impact on the most severe depressive symptoms (prenatal stage). More social support was not related to less depressive symptoms for either group, before the birth. This suggests that the lack of observed relationships between support and depressive symptoms in the Pakistani group, may be related to higher levels of depressive symptoms. Further research would have to address this issue by incorporating measures of stress into studies. Stress specific to childcare issues could be assessed using the Childcare Stress Inventory (Cutrona, 1981), while more general stress could be measured using an inventory, such as the List of Recent Experiences (Henderson, Byrne, and Duncan-Jones, 1980).

#### 10.3.5 Received Support and Depressive Symptoms: Does Received Support Accurately Reflect What is Thought to be Available?

While perceived support measures the availability of support, received support assesses supportive behaviours which are perceived as having actually occurred (Collins et al., 1993). Initially it was thought that perceived social support reflected support received from others (Heller and Swindle, 1983; Cohen and Wills, 1985; Thoits, 1985; Thoits, 1986). However, Dunkel-Schetter and Bennet (1990) reported that studies which assessed perceived and received support, found modest or non existent associations between the two constructs (e.g. Barrera, 1986; Wetherington and Kessler, 1986). Indeed, the results of this study would seem to suggest a similar conclusion. In

comparison to perceived support, there were far fewer associations between the frequency of received support and depressive symptoms. Collins et al. (1993) note that the lack of relationships between received support and depressive symptoms, are often found in studies which assess the frequency or network size of received support.

#### 10.3.6 Which Aspects of Received Support are Important in Relation to Depressive Symptomatology?

The aspects of received support which appeared to be most important in relation to depressive symptoms, were satisfaction with the amount and quality of received support. Indeed, the size of network which provided support was largely unrelated to depressive symptoms. This result is in line with previous research findings, which suggest that the size of network is not as important as the subjective evaluation of support (Barrera, 1981; Sarason et al., 1983; Dunkel-Schetter et al., 1992; Logsdon et al., 1994). In terms of support benefits to psychological well-being, it would seem that number of support providers are less important than satisfaction with the support given. This concurs with O'Hara et al. (1983), who also found that the size of support network did not distinguish between depressed and non depressed mothers, before or after the birth.

The results of this study found that there were more inverse associations between depressive symptoms and satisfaction measures, than any other received support component (e.g. frequency or network size). The following discussion will therefore focus on Mann Whitney comparisons of satisfaction ratings. The satisfaction ratings of received support were compared for mothers who were categorised as low or high scorers on the Beck Depression Inventory. These categories were based on depressive symptoms across all three time assessments. Scottish mothers were more likely to be categorised as low scorers, with mean BDI scores of 8.65, 6.10, and 5.29. The high scoring group had more Pakistani mothers, means were 19.71, 18.08, and 14.92.

### 10.3.7 How do the Cultures Differ in Terms of Satisfaction with Received Support?

Similar to the findings of perceived support, more support differences were found between high and low scorers in the Scottish group.

Scottish mothers in the high scoring BDI group expressed the least satisfaction with prenatal received support. The prenatal differences in satisfaction were observed in four out of six provisions: attachment, guidance, social integration, and reassurance of worth. Postnatal differences were found for two provisions: guidance and attachment. Scottish high scorers were less satisfied with the amount of advice and information (guidance) given in the first 6 weeks after birth. In addition, this group was less satisfied with the amount and quality of attachment support received between 6 and 8 weeks postnatal.

High scorers in the Pakistani group were characterised by less satisfaction on two provisions only. At the prenatal stage, Pakistani mothers were less satisfied with the amount of nurturance support given to others. Interestingly, this is the only result relating to support provided by the mother to others. This suggests that the depressive symptoms of Pakistani mothers may be linked to stresses of responsibility. Extended family networks are often composed of three generations living under one roof. It is possible to speculate that mothers who have higher depressive symptoms, feel more burdened by their responsibilities, and have a more stressful home life. The second support difference was found at 6 to 8 weeks postnatal, when Pakistani mothers expressed less satisfaction with the amount and quality of feedback (reassurance support) received.

### 10.3.8 Is there any Element of Support Satisfaction which is Common to Both Cultures?

Less satisfaction with reassurance of worth support was common to high scorers in both cultures. Scottish mothers in the high scoring group were less satisfied with the amount and quality of support prenatally, whereas Pakistani mothers reported less satisfaction at 6 to 8 weeks postnatal. As reassurance of worth support is about the recognition of skills and competence by others, less satisfaction with this provision may be indicative of



coping problems. Received reassurance support was assessed in terms of the feedback provided by others, for example: praise, compliments, criticism, blame. High scorers may have been less satisfied with this support, as they may have interpreted feedback from others in a negative manner (e.g. criticism and blame).

Less effective reassurance support could have an impact on depressive symptoms via self-efficacy. Bandura (1982) has suggested that self efficacy judgements have an impact on cognitive and affective reactions to stress. As such, it can be speculated that less satisfaction with reassurance support may influence mothers' self-efficacy judgements. Bandura (1982) has stated that those low on self-efficacy respond to stressful situations by giving up more quickly, and also experience more stress and anxiety. For mothers who had severe depressive symptoms, a lack of positive support and feedback from others may have contributed to their symptoms.

#### 10.3.9 What Conclusions can we Draw about Received Support and Depressive Symptoms?

Overall, it would seem that satisfaction with received support and its relationship with depression, is more important to Scottish mothers. In particular, the role of prenatal support is paramount in defining Scottish mothers who have high depressive symptoms. It would appear that the period before birth may be a more vulnerable time for Scottish mothers. The high scorers' depressive symptoms, before and after birth, may have been influenced by less satisfactory prenatal support. The importance of prenatal social support to the psychological well being of Western mothers has also been found in other studies (Cutrona, 1984; Cutrona and Troutman, 1986; O'Hara, 1986; Collins et al., 1993). It is possible to speculate that Scottish mothers who are less satisfied with the amount and quality of support given in the prenatal period are also more likely to have difficulties in coping with the postnatal period, i.e. are more likely to remain 'depressed' after the birth.

As with all other findings on support, the contribution of received support to Pakistani mothers' psychological well being, is less comprehensive. However, the two received support provisions which distinguish low and high scorers are very informative. The finding that Pakistani high scorers are less satisfied with the amount of nurturance given to others in the prenatal period, suggests that stresses at home may be an important consideration. The prenatal measures assess support given to others before the ritual period begins. It may be, that Pakistani mothers' depressive symptoms are related to support deficiencies outwith the forty day period of support. Having to provide nurturance support to others can entail heavy responsibilities and stress for the Pakistani mother. In the course of interviewing subjects it became apparent that many mothers were expected to continue household duties in late pregnancy. As mothers usually live in extended households with their husband's family, this can involve responsibility for the care of many people. It can be speculated that such stressors may be an important consideration in the psychological health of Pakistani mothers. The *chilla* may therefore be very important in providing a break from such stressors. The intensive period of rest and recuperation, combined with freedom from the mother's normal care duties, may have provided a much needed respite for high scorers in the Pakistani group.

Interestingly, satisfaction ratings with support during the forty period were comparable for high and low scorers in the Pakistani group. This suggests that satisfaction with received support during the *chilla* is not a risk factor for depressive symptoms. However, high scorers are less satisfied with the amount and quality of reassurance support *after* the ritual period. As deficits in this provision are indicative of less self-efficacy beliefs, it can be speculated that the end of the ritual period is a risk period for high scorers. It may be that the end of the *chilla* is accompanied by a sense of being unable to cope, and this is reflected in the satisfaction ratings of reassurance support. It is also possible that these mothers have returned to their in-law's home and are subsequently cut off from the sources of feedback and reassurance they had previously received. Like nurturance

support, less satisfaction with this provision may indicate problems at home. High scorers may receive negative and unwelcome feedback from the husband's family.

Overall, it would seem that high scorers in both of these cultures assess their received support differently. Scottish high scorers on the BDI can be identified by their lack of satisfaction with *received* prenatal support, as compared to low scorers. In contrast, Pakistani high scorers can be defined by their lack of satisfaction with support *given* to others in the prenatal period. Almost half of the Pakistani sample (44%) were categorised as high scorers on the BDI across time, compared to 19% of the Scottish sample. This suggests that a large proportion of Pakistani mothers may be experiencing dissatisfaction with their home environment, associated with the responsibilities of caring for other family members. It would appear that the *chilla* may be important in providing a break from the stress of caring for others in an extended family system, especially for those Pakistani mothers who are the most 'depressed'.

To conclude, it would appear that there are important differences in received support which define these two groups of mothers. While Scottish high scorers are less satisfied with the support that others provide, Pakistani mothers are less satisfied with the support they have to give to others in the prenatal period. It would appear that the role of culture is pertinent to defining the relationship between social support and depressive symptoms. Indeed, the results seem to confirm Collins et al.'s (1993) observation that, "we might expect that different types of support...would be more or less beneficial to populations of women who share different life circumstances or cultural histories" (p.1255).

## Chapter Eleven

### Conclusions and Future Directions

#### 11.1 Conclusions

The aims of this study were to compare depressive symptoms and social support, between the ritualised childbirth of Pakistani mothers and the relatively non structured birth culture of Scottish mothers. The conclusions of these comparisons are presented below.

##### 11.1.1 Depressive Symptoms:

- There was no evidence to suggest that the postnatal period was characterised by increased depressive symptoms. This finding applied equally to Scottish and Pakistani mothers.
- There was no evidence for the anthropological view (Stern and Kruckman, 1983) that ritualised childbirth was protective, at least in terms of depressive symptoms. Pakistani mothers had more severe depressive symptoms at each time assessment.
- Both groups of mothers had higher somatic-performance symptoms, as compared to the cognitive-affective sub-scale of the BDI. However, it was not possible to ascertain whether Pakistani mothers somatised their symptoms, as these mothers had more severe symptoms on *both* sub-scales of the BDI.

##### 11.1.2 Social Support:

Evaluating social support in the context of a multidimensional model of support (Cutrona and Russell, 1987), revealed that:

- The social support provisions of Cutrona and Russell's model identified changes in support, which were consistent with the cultural patterning of childbirth in Pakistan. This finding applied to perceived and received support. There was evidence to support Stern and Kruckman's (1983) assertion that non Western cultures receive more support during the ritual childbirth period, as compared to their Western counterparts.

- Non family persons were more likely to provide support to Scottish mothers, as compared to Pakistani mothers.
- The role of the spouse in providing support was more prominent in the Scottish group.
- Despite the differences in support provision, both groups of mothers were equally satisfied with the support that they received at all times.

### 11.1.3 Social Support and Depression

- While there was an inverse relationship between social support and depressive symptoms, there were cultural differences in the strength of these associations. Scottish mothers' postnatal depressive symptoms were more strongly related to deficits in perceived and received social support, as compared to Pakistani mothers.
- Satisfaction with the amount and quality of received support was the most important aspect of received support, in relation to depressive symptoms. The frequency and network size of received support did not differentiate between 'depressed' and 'non depressed' mothers, in either group.
- Scottish mothers who scored highly on the BDI across time, were less satisfied with the amount and quality of support *received* in the prenatal period. In contrast, Pakistani mothers who scored highly on the BDI, were characterised by less satisfaction with the amount of support they had *given* to others in the prenatal period.

The most important aspect of these results relates to their implications for the anthropological argument concerning the supposed psychological benefits of ritualised childbirth (Stern and Kruckman, 1983). The lack of support for these ideas is indicated by consistent evidence showing that Pakistani mothers experienced more severe depressive symptoms, as compared to Scottish mothers. Similarly, comparisons of Scottish and Korean mothers have also indicated that non western mothers experience

more severe depressive symptoms (Park and Dimigen, 1995). Indeed, these results would indicate that objective investigations of support and depressive symptoms cast doubt on previous anthropological work suggesting that postpartum psychological problems do not exist in non western birth cultures (e.g. Pillsbury, 1978; Harkness, 1987). The results of this study find no support for Stern and Kruckman's (1983) assertion that postpartum depression represents a culture bound syndrome of the West.

## **11.2 Future Directions**

It is important to bear in mind that the present thesis represents an original contribution to the study of depressive symptoms and social support in a cross cultural context. To this author's knowledge, there have been no published studies relating to the analysis of Pakistani childbirth rituals in the context of a multidimensional model. The utility of this multidimensional approach has been substantiated by the present study's findings of support differences between these cultures. Clearly, future research would benefit from using such an approach. This approach could be extended to further comparisons between mothers from Western societies and other ritualised childbirth cultures.

Further research in this area needs to be conducted using larger samples than were possible in this study. Indeed, this is necessary to increase confidence in the findings of culture differences in support and depressive symptoms. With reference to the lack of significant findings between social support and depressive symptoms (chapter 9), it is suggested that future studies should utilise power tests in order to ascertain appropriate subject numbers for such research (see Howell, 1997). While the current study only used single self report measures of support, future research should aim to use multiple sources of information regarding support. For example, Logsdon et al. (1997) suggest using diary methods, or daily accounts from multiple sources, in addition to self report questionnaires.

In the case of Pakistani mothers, in particular, future studies would benefit from comparing childbearing samples with non puerperal controls. Ideally such controls should be matched on the basis of age, parity, education level, and social class. Such comparisons would clarify the issue of whether Pakistani mothers primarily endorse somatic symptoms in a general context, as well as in childbirth.

In the case of women from Pakistan, and other developing nations, it would be pertinent to look at the effects of social support on physical health outcomes of childbirth. Collins et al. (1993) found that mothers who received better support had improved labour progress, and gave birth to babies with higher Apgar scores and heavier birthweights. Establishing the relationship between social support and physical health, may be even more important in countries where the mother and child are subject to increased health risks.

The importance of the ritual period as a culturally distinct time of support, also has implications for the psychological health of immigrant mothers. For example, it can be speculated that Pakistani mothers who give birth in the UK, removed from traditional family support and familiar rituals, may be at increased risk of depression. Clearly, further research should investigate support and depressive symptoms in the context of such childbirth scenarios.

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## Appendix 1A

### Scottish mother: Excerpts from interviews at the prenatal stage and at three weeks postnatal (time 2)

*The following excerpts are from the tape recorded interviews of a Scottish mother (K.T). K.T. is a 29 year old who is expecting her first baby. She and her husband have been married for five years and have recently moved into a terraced home in the south side of Glasgow. K.T. works as a housing officer for the District Council and received maternity leave in the final six weeks of her pregnancy. Her husband is a manager in the Housing Department. K.T. has an M.A. degree, and has also a diploma in teaching and another in housing. Her husband has a similar level of education, with a B.A. degree and a diploma in housing. K.T. has a close relationship with her family, especially her siblings (two brothers and four sisters).*

#### Excerpts from antenatal interview (Time 1):

**1. What were your feelings when you found out that you were pregnant?** It was like wow! I remember I did a home pregnancy test and we were waiting for the colour to change and I was really pleased and really excited. **Was it something that you had wanted?** oh yes, well we had planned it and I actually got pregnant quite quickly and everything, so there was no problem and I remember feeling brilliant, it's like being bowled over.

**2. How did you break the news of your pregnancy? Do you remember who you told first?** Well obviously I told my husband first and it was funny because he was on a night out, and I was waiting for him and he came in and he was really drunk, really bad and he had a fish supper in his hand and he sat down in that chair-and I thought, well I'm not telling him now. So the next morning he got up and had a big hangover and everything and I sort of told him then. And he was like, Oh, my God! But he was really pleased and everything. And when he came home from work that day, he said, 'did you tell me that you were pregnant this morning?' So, I told him first and at that point it was quite early so we just kept it to ourselves. **How long did you keep it like that?** Well I think that I was about 9-10 weeks when I told my mum, but I wasn't going to, I was going to leave it 'til about 12 weeks because you are dead unsure at the beginning. You know-am I really pregnant? Is this true? Because you don't really feel anything. But my sister was at my Mum's and she produced this bottle of wine and said "Mum, I'm pregnant", and I went "Uhhhhh, well so am I" So the next one was obviously my Mum and the rest of the family. **So after that you told others too?** Well I think that I let it go until about 3 and

a half months before I said at work. I held off, I had my first check-up at 10 weeks and I held off for about 2 weeks after that. **Did you have any reservations about telling anyone that you were pregnant?** It wasn't about telling them, it was just to be sure in yourself, it was so early, and because you hear that things can go wrong and the first 3 months are..you know..I think that we would have kept it to ourselves completely if things hadn't happened with my sister. Then I began to feel that I wanted to tell people at work. I didn't want to tell them too early in work because I wanted to work on and I thought they'll be so bored with me being pregnant, it'll seem like forever to them, because people react funny, especially colleagues.

**3. You said before that you had been planning it, so you had given consideration to having children before you got pregnant.** That's difficult, we hadn't really heavily thought about it. We had been living together for 4-5 years before, and decided to get married, and I think that it was after that, that we kind of knew that we would start a family-all very kind of predictable. Then we thought well we'll leave it 'til when we've moved house and plan it from then.

**4. Were you working when you found out that you were pregnant?** Yes. **So, did you change your routine in any way?** No, I just carried on as normal. **Are you still working now?** No, I just stopped last Friday or was it the 7th April? I worked as long as I felt comfortable, but I was starting to get a bit tired, it was getting cumbersome.

**5. What would you say were your reasons for wanting to have a baby?** It's funny you know, because it's such a huge thing, and I'm 29, nearly 30. I suppose you're sort of thinking about your age. You can be perfectly happy, but I think that you know that you want a child, or children, and it's just a case of talking to your partner about that. I mean it's not something that we went into lightly or we rushed into or anything. It's just a feeling you get, and that can be over a long period of time, but I probably felt that I wanted a baby before my husband was sure. It's just a feeling you get, I mean my sister is a year younger than me and she's just got married, but she says "oh looking at you and everything, I'm not ready yet". I mean she doesn't feel ready...you get a desire or a feeling, but you do time it and plan it as well though. I suppose you have to these days.

**6. What were your husband's feelings about the news of your pregnancy?** Yeah, he was really pleased, I mean it wasn't a shock as such. Although, he was like 'that's really quick', maybe in another couple of months or something he was expecting a baby, he was like 'well we don't do things by halves!' He was joking that if we want to do something, we just do it. So, I think that he was quite bowled over that it had happened so quickly,

but he was really pleased. So, he's been really good, he's had his moments.. **As they do!** Yes, as they do. well he's had his moments of uncertainty and so have I.

**7. How would you say that you have coped with your pregnancy so far?** Really well, I mean I'm only now starting to feel the baby a bit. To begin with, it was there all the time, I was thinking about it all time, I was completely paranoid, and you're dead excited. Then the middle bit when you're not too bothered, I have kept really well, and it's been a breeze. **What about things like morning sickness?** I didn't have that all. I felt a bit nauseous with smells, I mean like the smell of washing-up liquid. But never any cravings or illness or anything like that.

**8. Well, have you had any kind of help from others in dealing with your pregnancy, whether it's practical stuff ..?** My mum's been really good, and Charlie's been really good, if I'm tired, he'll do things I haven't really done that day-big jobs around the house that I haven't been able to do. He's been good in talking about it, there was a wee while when I think that he felt pushed out a bit. I suppose I felt that way a bit, I felt as though this baby's taking over-where does that leave us? We went through a funny wee phase like that. But now that the baby is so near, we're all back in focus. My mum's had 7 children and she loves babies, and she's so pleased and so enthusiastic. I think that she's more excited than us, she's looking forward to it and knitting-so that's been really good. Because some of my friends' mums aren't like that, especially when they're older-too tired for it. So she's been brilliant. And my sister who's had 2 children, she's been there and done it-but she won't give me any gory details. **I think that's best left really!**

**9. Do you feel that you've had enough support from the people around you?**

**Emotional support?** Well I'm not one for that, I'll cope on my own because they're not extreme feelings. If I'm feeling a bit fed up I'll just pick up the phone and chat, or chat to Charlie. Or go for a walk or buy myself something!

**10. Who would you say has helped you the most throughout your pregnancy?**

Mmm, that's difficult as everyone's been so good. But I think that it'll have to be Charlie because he's been here, he's been living here all that time-because he's around and he's been through it all with me.

**11. Do you feel that people around you have confidence in your abilities?** I think they do. And it's funny because, my sister and I are both pregnant with our first babies, I think that we're getting compared and we're very different people, and she's had terrible illnesses nausea and I've had this wonderful healthy pregnancy. So people are sort of saying, well yours will be a scoosh! You're coping well and stuff, I think I'm more of a

coper than her, just a different kind of person. She's more of a worrier, more paranoid. I just listen to her and try and get her through it.

**12. What about spending time with other people that share the same interests?** I've been meeting with the girls from work and friends. You get lots of phone calls from people wanting you to go out, but you don't feel like it, especially if it's the pub. You know, another juice! Well I've changed I don't go out as much as I used to, maybe for meals and the movies and stuff, but not been seeing as much of friends, because I don't really feel like doing that-but they understand. Like yesterday, I went for a walk, and got to the front door, and thought well can I make it! Your whole body tells you to take it easy, you do think twice.

**13. Would you say that your relationships are providing you with the kind of emotional security that you feel you need and you want?** Yeah. That's for certain, I feel really comfortable about me and my husband, and I know that no matter what, there's always me and him-and that's a great comfort. And we're a big family, but we're really close and that helps as well. I can see how other people would have to rely on midwives and other people, but I don't need to.

**14. Are there other people who depend on you for help?** I suppose just family. **What kind of help do you think that they depend on you for?** Just sort of the relationships between ourselves. **Do you think that it's more of a kind of reliance, that you are there for them?** Yeah, it's more that, than anything-it's not a practical thing-but that might change!

**15. If you wanted to know something relating to your pregnancy, how would you go about getting this information?** I'd probably read one of the books, they usually tell you everything. If I was feeling something, I'd look at the book. If I didn't find anything, I'd have a chat to my sister and mum, and ask them. But I don't want to read those books any more, I don't care-all those horror stories!

**16. What have your rest patterns been like lately?** I've been lucky, but I've gone through phases, you know, you just can't get comfortable, it's just a discomfort, it's your joints. Like if you're in bed lying on your side for a couple of hours then you'll get a pain down that side, then you're up, or going to the toilet. I'm maybe getting up once or twice to go to the toilet. I get back to sleep, but it's disturbed sleep. So I'm up 6-7 in the morning when my husband gets up for work, I try to sleep in the afternoon, but I'm not a great sleeper. **Do you try and make time to sit down and get a rest?** Well yes, I have done since I stopped work. It's not even just sleeping, it's more relaxing, like on Sunday



there, I just lay on the couch and watched the TV and read the papers. You feel as though you are really unwinding, I felt brilliant. Relaxing is as important as sleeping, I think. When I was working, that's when I was feeling, you know, 9-5 and by Friday I was like.. but I've unwound the last couple of weeks, now I'll be winding up again!

**17. How do you feel about the way that your pregnancy has been handled by the people around you?** Yeah, it's been really good. First when I went to the doctor, I remember she was really, well she's very efficient and good, but she doesn't mince her words, and that suits me. But she was like fine, OK, baby due-that's fine, goodbye! And I was kind of sitting there thinking, help! At first you are dying for someone to say something but once you get to grips with it, I've felt that everyone's been fine. **So you've been fine up at the hospital then?** Yeah, they are so nice up at Rutherglen, so good. Everyone has been so nice, and that's so important because it makes you feel like..And like my sister, she's going to Paisley Hospital and she's had problems, and a couple of the doctors have said the wrong thing, but when you're pregnant you are really sensitive, and unless someone's really nice to you-you pick up on things-and they obviously know that in Rutherglen and they are so nice, and they mean it. **What about at work, your colleagues and stuff?** I think that some of them were shocked, I don't think that they expected it. Everybody was great about it, you know-don't do this and don't do that. But they just kind of get on with it, obviously, your pregnancy doesn't mean the same thing to them as it does to you or your family. But you know, people always ask you how you are feeling, how you're doing..and you need all that. You know that they are concerned.

**18. Have you altered your diet in any way since becoming pregnant?** Yes! Eating too much! But I've not been too bad, I've generally been eating more. You know, snacking when I normally wouldn't have. Oh, I fancy a wee bit of toast so I'll go and have some. I've probably been eating too many of the wrong things but trying to eat the right things too, like fruit and vegetables. I'm just so hungry all the time. And it's terrible, because you're getting bigger, you think 'what the hell, I've got a big stomach anyway!' Because your whole body shape is changing, you think 'well I can have that cake!' But I think that it's wrong, because you don't actually need that much extra. So I think that I'll probably have to work a wee bit at the other end-just cut down really. The funny thing is that my husband has put on weight as well, so he's getting bigger as well! **coming out in sympathy!** Yes, well any excuse! **Have you avoided any kind of foods?** Yes, well I knew know to eat pate and liver and certain soft cheeses and raw eggs. Meat and things, make sure that it's well cooked-from general knowledge and because they tell you all that at the beginning as well. **b. So, would you say the reason that you changed your eating habits was for medical, health reasons?** Yes, purely that. **So you were taking the advice that was given?** Yes. Like I stopped coffee, I just

went right off it at the beginning. Now maybe I'll have the odd cup of tea-but you're thinking- caffeine, should I? Or should I have a caffeine free drink, like a juice?

**19. Are you aware of any activities that are encouraged or discouraged during pregnancy? Have you given up certain things because you are pregnant?** Well yes, my Mum said watch when you're lifting and stretching, because your body is changing so you can strain yourself. Early on in the hospital they gave us a talk on does and don'ts and they were really practical, like around the house kind of things and general stuff like bending. They were encouraging walking and swimming, you can do all that. In the beginning, I didn't take too much heed of that because you're not that big, so you feel as if you can do these things. Like I cleaned the car one day, and the next day I was in agony, I mean that was really stupid-and since then I've been watching. Like before I could do this house from top to bottom, now I can only do one room. You've got to watch.

**20. So have you altered your behaviour based on any old wives' tales about that kind of thing?** I've not really heard too many. My Mum said something about the way you are carrying, if it's to the front then it's a boy, if you are carrying to the back and rounder, then it's a girl! I'm sure she believes that, so she thinks that I'm having a girl, and Margaret is having a boy. But I haven't really heard much other than that.

**21. In what way would you say that being pregnant has affected you?** It's probably changed me so much without me knowing! I mean a lot of people say that you lose your brains when you are pregnant! Especially after it's born! I mean I think that does happen, everything is just about the baby, although you're not going around boring everyone about the baby-but it's there from day 1. **Do you think that it's more your outlook on things?** It's such a huge thing. At the beginning, I remember thinking, wow I can't believe this, I'm having a baby! Until the baby's born, I won't believe it. I'll always be me, but it's difficult to describe-but I'll always be me. I just want to get back to normal. **Have the changes been physical things as well, energy and motivation and stuff?** Yes sure. When you are working you are more organised, I was more of a do-er than I am now! I find that you forget things and you're not thinking about practical things too much. I think that I've slowed down in a lot of ways-both physically and mentally! I thought I would be bored when I stopped work, but I'm not.

**22. OK, what would you say were the good points, if any, of your pregnancy?** I've kept really well. You constantly think that something is going to go wrong, it's always at the back of your mind-until you see it born. Will it have 10 fingers and toes. So the good points were the scans-the 16 week scan was great, because up 'til then I hadn't really told anyone. But that really gave me a boost because it was so clear and you could see everything and they were so nice and you get a wee picture. We went for a meal after

that and I was on a high for about 3 days afterwards. You know they said everything's intact it's all fine. Sometimes I kept well, and when I went to the hospital they checked the heart rate, my stomach and blood pressure and when they told you it was all fine you feel good. I bought loads of baby things and you feel so good when you get things together and organised.

**23. Well, bad points,if any, of your pregnancy?** I suppose...me and Charlie not being so close, physically and emotionally. I think we went a bit.. because we were so close and then our lives changed, and that was difficult. But when you talk-it's not been a big problem. At the moment I can't sleep at night and neither can he-but now we can just laugh at it.

**24. How do you feel about giving birth?** I'm quite scared, 99% of the time you are fine, then maybe one night you'll wake up with a pain, and you think, well one of these nights I'll be getting up and it'll be the real think aarrghhh! So, I'm trying not to get too scared because that's just crazy and I'll just be a complete mess, and that's stupid-because nobody else can do this, so I just try not to think about it. It's just the unknown. I'm not scared of going through it, it's just the level of the pain. I keep saying to my Mum, 'is it like hot knives in your stomach?' and she'll say, don't be ridiculous, that would be terrible! My sister says It is painful, but looking back you wouldn't think 'that was absolutely horrendous!', you get through it. I don't know how I'll be!

**25. Do you plan to have anyone with you during labour? Charlie. Does he want to be there, or do you want him to be there?** Oh yes he does want to be there. With first babies you know they say that it can be a long labour, and I'd really want someone there to maybe give me a glass of water or just to talk to. I'd rather he was there, especially for the painful parts-because I think well 'you'll go through this with me'.

**26. How do you feel about taking painkilling drugs during labour?** I feel OK about that. We had lots of information about that. I would try my best for as long as I could, then I'd go to gas and air, then diamorphine. I wouldn't necessarily want to take the epidural, but if I have to, then..I'll keep an open mind-and they tell you to be flexible. Probably, when I'm in there, I'll be like-'give me that epidural now!'

**27. Would you rather have a natural delivery rather than a C-section?** In fact I was quite shocked when I spoke to the anaesthetist and he said that 1 in 6 new mums have a c-section, that's really high. I remember looking, and this girl said, 'well I hope that it's you!', and I said 'well I hope that it's you!' I thought wow! I came home and read up on it just in case it happened, I wanted to know what happened. But I mean, I think that they

would avoid that, they wouldn't just think, well I'm bored with this woman, let's just whip it out!

**28. How would you feel if your labour had to be induced?** I've got a feeling that that's going to happen to me, I don't know why, it's just a feeling. Well the baby's due in 4 weeks and I've to go back to the hospital then, and I just know that I won't have had it by then and I'll have to go a week over and then they'll check me again. And I can see it not coming of its own accord, and then I'll get fed-up and huge and my blood pressure.. My sister went that way too, and I feel like her, and her baby went 10 days and they induced her. But I wouldn't be too bothered because I think at that stage I would be like 'get this baby out!' They say that when they do induce you, it can take a while, but when it starts it is usually faster.

**29. Did you ever consider the possibility of having a home birth?** I did, I thought that would be great. But I just thought about myself.. **You didn't discuss it?** No, I thought well it's a first baby, I've never done it before, I thought I'll just go to the hospital. But I do admire the women who go for that, but I thought, what if? What if something goes wrong, and you were at home and didn't have the equipment.. I didn't want to get myself into an emergency situation, so I decided against it.

**30. Do you have any preference about whether the staff are male or female?** It's actually been all females, so I think that I'd prefer that, especially for things like internal examinations. I'm like that anyway, I'd rather have a female. Although I wouldn't insist on it. When it comes to it, I don't care, just a human being who knows what they are doing!

**31. Would you find it more helpful to have your own GP or midwife at the birth?** I think that would be good, but I haven't had the opportunity. I mean they deal with so many people..but that would be nice, if you saw that one lady all the time and she was at the birth-if you liked her of course!

**32. Do you feel as though you could cope with a long labour?** I think I could. Physically, I'm quite strong and I've kept well. I'd probably be tired at the end, but you just have to, so you just get on with it.

**33. Ideally, how long would you like to stay in hospital?** 3-4 days, maybe even 3 days. It's so boring in the hospital, and so hot. I like fresh air, and there doesn't seem to be much of that in the hospital-not in the labour suite anyway! I'm not looking forward to the heat, and you miss your own bed.. so I wouldn't like to be in for longer than that. I

think that when I've had the baby, I'll need that time to recover and get used to the baby-I think that it'll be nice, and there will be other girls there.

**34. Do you have any preference about the sex of your baby?** I honestly don't. I think that Charlie would like a wee boy, but he hasn't said that. I really don't care. I can understand if someone has had 3 boys, and they really want a girl, I can understand disappointment then, but with a first baby, so long as it's healthy.

**35. Have you thought of any baby names yet?** We're thinking about Eilidh for a girl and Harry for a boy, because Charlie had an uncle called Harry, so it's after him. I sort of liked Michael, but we're swithering.

**36. How well do you think that you will cope with the demands of childcare?** Hopefully, I'll cope well, but I think to begin with it will be quite difficult. I can't imagine what it'll be like. Charlie says that I'll be a really good mum, but he probably thinks that I'm going to be a bit soft, and I probably think that he'll be a bit harsh! -but together we'll get there. I don't have any negative feelings or major anxieties, and I think that I'm lucky that I have good support behind me and that'll help.

**37. Do you have any concerns or worries about motherhood?** Yes I do. First of all you can't think beyond having this baby, but recently I'm thinking, God, it's a human being, and I can't cope with that! And you see other children and you realise what a great responsibility it is, and how they watch your every move, and listen to everything that you see-so I'll have to behave now! It's all these decisions, and responsibility, we'll just need to see how it goes. Probably repeat all the things that my mum said, that I hated! But to begin with all it needs is love, when it starts getting cheeky then I don't know what I'll do!

#### **Excerpts from interview at three weeks postnatal (Time 2):**

**1. Could you describe your birth experience for me?** Actually, I did well...I was lucky! I went twelve days early...the night before I was up with stomach cramps, but obviously it was contractions. **You didn't know?** Well, I thought that it was the lasagne I'd had the night before! In the morning, I still wasn't feeling great, and my husband was going to Aberdeen...and he was saying, "do you think this is the baby?" Well I said I didn't know..and I told him to go. Anyway then I phoned the hospital and described it..and they said to have a bath. So I told him to go, and then I had my bath. My sister came over that day as I was due to go to the doctor that same day. I went there and said that I thought that I might be in labour, so she examined me..and said "no you're not",

when in actual fact I was! So I went to the shops, came back home and had lunch!

**While in labour!** Well yes, so then I kept having these pains...so at about 2:30 I thought wait a minute, and my sister was here just knew by looking at me that I was..I phoned the hospital, who said to me to come in...when I got there they said that I was 3 centimetres dilated...I thought well this has been going on since last night. I was in labour and coping, so then I got the tens machine..which helped to take the pain away from the back, but then it came to the front. We kept phoning and phoning my husband, so that he could be there before the birth...and he arrived at 6 pm that evening..and he was born at 8:50. I didn't have any pain relief except gas and air, because it all came so quickly, and because it was too late for anything else by the time that I got up there. The midwives were saying that was really good..but it worked out well. I was a wee bit shocked that it was so early. **Did it help having your husband there?** Yes...my sister was with me, but I think that she was really anxious that she was going to be with me until the end..she doesn't have children of her own, but she was great...I remember thinking, where's Charlie... He didn't actually say anything, just held my hand..and he really wanted to be there too. I felt really tired and relieved afterwards...**What kind of birth did you have then?** Well it was natural, I had an episiotomy..**How did you cope with that?** It was OK, it's something that nobody wants, but by that time the midwives were having to make a quick decision..and the baby would have come out and could have torn the wrong way...at that stage you'll do anything.

**2. You had a boy.... do you think, either you or Charlie would have preferred a girl?**

No, so long as the baby is healthy...well I kind of wanted a wee girl, but I was really pleased..I don't think that he was worried one way or the other.

**7. Could you describe your routine since you came home...how often are you feeding him, changing him etc.?** Well the first week my mum did everything...she was in every day because the baby was early, and my husband still had to work because he had planned time off according to the delivery dates. But my mum..she was great, I didn't lift a finger. In the second week, my husband was off a couple of days, and I had a couple of days on my own. So you just have to get in to routine. Physically you're not feeling up to it for a couple of weeks, and then you know, with mum's advice and what not..I have started feeding him every 4 or 5 hours. **Do you try to get up at a set time, or does Harry control your day?** Well yes, he has changed our lives, and we just work around him. I get the jobs done between his feeds..I don't get as much sleep, I probably never will. **What about now, are you trying to get on with things yourself?** Well yes, my mum was saying that I shouldn't do too much, but physically I'm feeling better and capable of doing everything.

**8. Since having Harry have you been away to stay with anyone?** Well we have done a lot of visiting, but not staying over. I'd rather be at home, to get the baby settled, and bathed and stuff.

**9. Have other people been around to help you, other than your mother and sister?** Well yes, my sister came around and cooked a meal, while friends have just popped in to visit.

**11. How long would you say that a new mother needs to rest and recover from the birth, are you feeling fully rested?** I'm not physically back to what I was, they say that can take months, but obviously I'm capable enough to do most things. Well I would say that after the baby is born, you need at least two weeks of doing practically nothing...just looking after yourself, eating, washing...just all the basic things and attending to the baby. I mean my mum said not to get out, even just walking is draining...it's a weird feeling. I suppose everyone's different. **Do you feel that you need a few more weeks to get back on top of things?** Well yes, at 6 weeks the babies and mums get check ups, so we're kind of working towards that...there's obviously the 6 week mark, so we'll see how we are then.

**12. Is there anything you think that a new mum should avoid doing?** Just strong physical tasks, like cleaning the windows or Hoovering at the beginning...they tell you all that at the hospital...and also you have to eat well, and shouldn't diet straight away.

**13. What about things that a new mum is actively encouraged to do?** The physiotherapist came around when I was at the hospital, and gave me a leaflet about pelvic floor exercise and pulling your muscles..I try and remember to do that, and also wee sit ups...but getting the time! But I've been going out for walks with the pram. When I'm a bit more together I'll start swimming again, and gently get back into it!

**14. Are you aware of any foods that are recommended or prohibited after the birth?** When you're breastfeeding they say that you shouldn't eat too much of the one thing...or other things like cabbage and grapes, or excessive alcohol. **Is that stuff that you heard from the hospital?** Yes, there and from literature and things...but they were saying that you should eat and drink more if you're breastfeeding. I don't eat as much as I did when I was pregnant!

**15. Would you say, then, that you have altered your diet in any way since the birth?** Basically it is the same..but I'm still off the things that I went off in pregnancy. **What**

**about the stuff that you couldn't eat in pregnancy, like soft cheeses and things?** Well I'm dying for pate, but I'm not going mad.

**16. Since having Harry, did you actively remain confined at home for any period?**

Well yes, I was home for three days, and then I went out with my sister in the car. We just went for a wee walk around the shops. I felt a bit funny, but it was OK..then the next week on Sunday, I visited my mum..which was good as others looked after the baby. I wanted to go out, because it's good for you. helps your recovery.

**19. In what ways has the birth of your baby been celebrated? Mostly cards and presents, or anything religious?**

Well cards and presents...but nothing religious, like a baptism... 'cos we're not really religious, we're not part of any church. Loads of cards and presents...even from people we didn't expect, the neighbours...but people really surprised us!

**20. So, you chose the name Harry- any particular reason why?**

It was Charlies' uncle, who was more like a brother to him..because he was an only child..but they were really close.

**24. Have you been managing to spend time with others...to socialise?**

Well I haven't really, but a group of my girlfriends are coming around on Sunday to see him..and we'll have lunch and go for a walk...after that we'll get a night out in the pub. **Who'll look after Harry then?** Charlie will..he's already been out to celebrate, so now I can! Mostly I've been visiting other people.

**28. Have you had any conflicts over childcare, with family or friends?**

Not really, but people do say 'do this, or that', but I just listen and do my own thing. Even midwives and nurses keep offering advice..but I just do what I want.

**29. Have you experienced any strain in your relationship with Charlie?**

No...he was fine during the labour and afterwards. Charlie was crying when Harry was born, but he was fine. We had a bit of a disagreement about me discontinuing breastfeeding...but we got over it.

**36. Do you feel trapped or confined?**

I did in the first two weeks and when I was on my own...but I just phoned people, who came around to visit. Just felt a bit alone...but you get used to things..I just make sure that I get out everyday.



**38. Do you miss the lifestyle you had before the baby was born?** Not so far...we're not that young, so we weren't really out disco-ing every weekend....we would go to the movies and stuff. But obviously, your lifestyle becomes more restricted, and things change...but we will be able to get back into the swing of things.

**41. Are you going to go back to work?** Well yes I am, mainly to keep the money coming in. We decided I would go back..part-time, if I can. I haven't made the decisions yet...The boss is a bit funny about job sharing, so they might say full-time, or nothing. **If you do go back, who'll look after Harry?** My mum's offered to look after him...we discussed all that before he was born...I don't like the thought of leaving him with anyone else. He should be OK with her initially, so we'll just see what happens from there. I'm really lucky!

## Appendix 1B

### **Pakistani mother: Excerpts from interviews at the prenatal stage and at three weeks postnatal (time 2)**

*The following excerpts are from the tape recorded interviews of a Pakistani mother (B.L.). Her marriage was arranged with her cousin, on the mother's side of the family when she was a teenager. She went to school for five years and gained no formal qualifications, although she can read Arabic competently enough to recite the Qu'ran. B.L. is a 26 year old mother of three children: one son and two daughters, all of whom go to primary school. She is expecting her fourth child, and comes from a large family of three brothers and six sisters. She has five brothers-in-law and four sisters-in-law, with whom she gets on very well. She has been married for ten years, and has lived mostly with her in-laws. Now, her husband has bought her a new home, and she lives there with her mother and children. Her husband is an electrician, who works abroad and comes home every few months to visit. B.L. is a housewife, who has never worked outside the home.*

#### **Excerpts from antenatal interview (Time 1):**

- 1. What were your feelings when you found out that you were pregnant?** I was happy. It was the right thing.
- 2. How did you break the news of your pregnancy? Do you remember who you told first?** I told my older sister first. **And then?** And then I told others, my sisters and then my sister-in-laws also found out. **You told your husband?** Yes I did, he was also very happy. **Were you apprehensive about telling others that you were pregnant?** Well It's obviously embarrassing to have to tell others, but I started to get morning sickness, and then everyone found out!
- 3. Had you given much consideration to having this child, before you got pregnant?** Well...**How many children do you have?** This is my fourth, so I just pray that I have a boy, so that there are two girls and two boys.
- 5. What would you say were your reasons for having a baby?** Well, like I said I would like a boy to complete my family..after that ..no more! **And after that ?** Well I'll either have an operation (sterilisation) or use some other family planning method.
- 6. What were your husband's feelings about the news?** He was very happy.

**7. How would you say that you have coped with your pregnancy so far? Have others helped?** Well I'm on my own because my husband works abroad, but my mum lives with me so that I am not on my own. With this baby, I have been feeling a lot of pain from the first month, a pressure, sort of pushing down.

**8. Well, have you had any kind of help from others in dealing with your pregnancy, have others been helping you in any way?** Yes I have had help from my niece...**What kind of help does she give?** It's very good...she does all the housework. She's a teacher, and once she finishes work with the children, she will come over and do all of the work.

**9. Do you feel that you've had enough support from the people around you?** Well yes. **From whom?** From my sister and sister-in-laws. **Do they live quite near to you?** Well my sister-in-law lives very near to me...she will phone me every other day, and comes around too. My sisters are also very good.

**10. Who would you say has helped you the most throughout your pregnancy?** I would have to say my niece, and also my mum. Because I'm on my own she (mum) can look out for me. But she can't really do anything because her leg is broken and she has to walk with a stick. So that is why my niece is here.

**11. Do you feel that people around you have confidence in your abilities?** Yes I feel that my sisters-in-law and brothers-in-law appreciate me...if someone is good, then of course others will appreciate that and compliment it.

**12. What about spending time with other people that share the same interests?** Only go to visit the neighbours a little bit, when there is someone else visiting...other than that there is no time due to all the household chores. But in the case of relations, such as my in-laws, I look forward to going there.

**13. Would you say that your relationships are providing you with the kind of emotional security that you feel you need and you want? From whom do you get this support?** My sister-in-law and her husband are very kind to me.

**14. Are there other people who depend on you for help?** Really, I would say that my brothers-in-law depend on us a great deal to help them (practically and emotionally).

**15. If you wanted to know something relating to your pregnancy, how would you go about getting this information?** In the past, my three pregnancies have been fine and

the children were born healthy..but this time I have had a lot of pain..so I came to the hospital last Sunday so that they could check..at first they said that the baby was in the wrong position, but this time they have said that the baby is fine. There is also this *dai*, who is very wise and has also done a course, and she the same thing.

**16. What have your rest patterns been like lately?** Well you know I don't like lying down in bed, so I don't..I'll sit and do work, or do some embroidery. Even when I'm ill I don't like lying in bed, it's something that I just won't do. If I do lie down, I feel as though I can't breathe, so I sit up again. **At night?** At night I just keep changing positions to try and get more comfortable.

**17. How do you feel about the way that your pregnancy has been handled by the people around you? Is it the same as before, or better?** Well I would say it's been very good..because I haven't been feeling well during this pregnancy..all of my sisters and sister-in-laws have been paying attention to me...also because I'm on my own.

**18. Have you altered your diet in any way since becoming pregnant?** For three or four months I didn't feel like eating anything, especially meals. **What would happen, was it the smell, or..?** No, not the smell..I would just feel nauseous. **For how long?** Well about 4 months, once there was life in the baby-it stopped. **How did you cope then?** I would drink tea, and I also liked *lassi* (a yoghurt based drink) as it was cold..I felt like cold things. **Did you feel like eating anything, in particular?** I like sharp tasting things, like unripe pickles, which is the same as my other pregnancies. **What about avoiding certain foods?** No, none at all. **What about eating fruits and vegetables?** Well yes I have been eating those, especially oranges and apples...**For what reasons, health?** Yes for my health and the baby's..they say that my baby might be weak, so I also have to take capsules and other medicines that have been prescribed..I have been doing that for the whole pregnancy..they say that I should eat fruit and take the capsules with milk.

**19. Are you aware of any activities that are encouraged or discouraged during pregnancy?** A mother should remain happy in this condition, and she should avoid any worries.

**20. So have you altered your behaviour based on any old wives' tales about that kind of thing?** I don't go to any house where there has been a death, or where there is a *chilla*. **What about eclipses of the moon?** Well the elders say that when there is an eclipse, that you shouldn't do anything that could affect the child at that time. **Like?** Well for example, if you're living in a village, then you shouldn't use a scythe to cut grass

for animal feed. **What happens if you do?** They say that the baby has fingers missing or has marks on its body. **What about the father?** It's the same if either parent does anything.

**21. In what way would you say that being pregnant has affected you? For example, mood changes?** Well you don't feel as well..I have been feeling dizzy..**So there have been changes?**

**22. OK, what would you say were the good points, if any , of your pregnancy?** Well this time I'm not as big as I was with the girls, my stomach is much smaller...I'm really hopeful that this is a boy..everyone else thinks so too.

**23. Well, bad points, if any, of your pregnancy?** Even if it is a girl, that's not bad..there's nothing bad actually.

**24. How do you feel about giving birth?** I certainly feel afraid. **Is it because of the pain?** Well I suppose the pain makes you feel like that. Well there is a lot of pain in childbirth, in bringing a child into the world. But even so, God gives a woman strength to get through it. Even though it is my fourth, I'll still spend day and night thinking about what is going to happen.

**25. Do you plan to have anyone with you during labour, a mother, a sister?** Yes, it is good to have someone who is older and wiser there. **Why is that?** I suppose it is reassuring.

**26. How do you feel about taking painkilling drugs during labour, if these were available, would you take them?** Well yes...**Are they available?** I don't know, I have never given birth in hospital before.

**27. Would you rather have a natural delivery or a C-section?** Oh natural..all my other deliveries have been natural births..I'm just worried about this pregnancy because of all the pains I have been having. Previously I would go back to the village, where my mother-in-law was also staying..and the *dai* would deliver the baby after a quick one - two hour labour. But now, I am in the city and I feel that maybe I should have the baby in hospital. I am scared of the operation. **Why are women afraid?** I don't know..it could be because of the pain, or some women's stitches become infected.

**28. How would you feel if your labour had to be induced?** Well only God knows when the baby will come..but the doctors also have the knowledge to decide for the best..in the case of the baby and mother.

**29. Would you prefer to have your delivery at home or at the hospital?** Well in this case I would prefer to have the baby at the hospital. I have spoken to a lot of other woman who have reassured me about this decision. When you deliver at home, you can suffer all day..but at hospital they can accelerate the labour and bring the delivery forward..so I'd like to deliver the baby in the hospital.

**30. Do you have any preference about whether the staff are male or female?** No males, a lady doctor..**Why not a male doctor?** I just don't think it's right, I wouldn't like it.

**31. Would you find it more helpful to have a doctor or midwife at the birth?** In the past I have used *dais*, but in this case I would say that a lady doctor is best...she is sensible and educated.

**32. Do you feel as though you could cope with a long labour?** Yes, I think I can!

**33. Ideally, how long would you like to stay in hospital?** I am thinking that going home within about 2 hours of the birth, as the children are young.

**34. Do you have any preference about the sex of your baby?** Well everyone at home has left it up to God..but the desire for a boy is always greater..God has already given me two girls, and I have one son..so it would be nice. **What about your in-laws?** Well you know how it is with in-laws, they always say that it would be good if it were a boy, so that I can have two boys..my mum is also praying for a baby boy.

**35. Have you thought of any baby names yet?** No not yet..when the baby's born then we will think about it. **What about your husband?** Well he did say that if it is a boy, then the name should compliment my other boy's name (Aslam). If it is a girl, then a similar type of name to the other girls will be best. **Do you mind who keeps the name?** No, I don't. In the case of the girls, their aunts (father's sisters) kept their names. And my mum kept my son's name.

**36. How well do you think that you will cope with the demands of childcare?** I can do it, I'm not worried.

**37. Do you have any concerns or worries about motherhood? Any worries about the children?** Well just now the children are being educated privately...but you do worry, just hope that their future is a good one. You worry about their manners, but I feel that I can handle it. I'm not like those mothers who don't know that their kids aren't going to school, or that their kids are loitering about the streets. If they're not supposed to be out, then I make sure that they come straight home.

**Excerpts from interview at three weeks postnatal (Time 2):**

**1. Could you describe your birth experience for me?** There was one day when I felt that my contractions, false labour, had started, and I went to the hospital, but they sent me home with capsules and told me to take those. As I took them throughout that day, the pains subsided and stopped. Then I actually went 21 days after that! **Were you quite happy with the treatment that you got, the first day when you thought you were in labour?** No, I wasn't..they (hospital staff) weren't very helpful at all..there was no bed, no pillow..nothing...I just got upset and came home. Even when I was having Furhan, the others said that I should go to the hospital, because we couldn't find a *dai* here...but I said there's no way I'm going back to the hospital, I'm just going to have it at home. **Your other children were also born at home, is that right?** Yes, it is. **So tell us exactly what happened with this birth?** Well the pains started in the morning, and all day, they got worse at about 3 in the afternoon. Then we tried to find out about the *dais*, but of the three that we have in this area, none were available! One was away to Faisalabad, the other was in town shopping, and another was away to the bus station! **Well what happened then?** Well the *dai* who was away to Faisalabad had got on the 6 am train that same day, and she arrived here at 4:30pm. So as soon as she got home, her family told her that I wasn't feeling to good, and the poor woman ran over here straight away. **Well when the *dai* wasn't here, who was with you?** My mother was here. **Did she reassure you?** Well I think that she had given up hope at that time! She said that we should go to the hospital, but I just told her that I wasn't going to go there, and that I wanted a home birth. **Did your pains get worse after 4pm?** Yes they did, and then at about 5pm the *dai* arrived and said that we shouldn't worry, that the baby would be born that night at about 3am. But judging from my contractions, I thought that I would have the baby sooner..maybe at about 10pm that night...and I had him at 11:20 that night! **Who was with you at the time of the birth? A doctor, any pain relief?** No nothing, nothing at all...my mother and the *dai* were here. **What were you thinking when you were in labour, and the *dai* hadn't arrived?** Nothing, what's to think...I just prayed that God would release me from the pain, I was very worried.

**2. You had a boy.... do you think, you would have preferred a girl?** Well I did actually want a boy...but even if it had been a girl, I would have wanted her too. If anything, girls get more love from their parents than the boys.

**3. Do you feel that it was better to have your baby at home, rather than going to the hospital?** Yes, definitely..it's very good. **What about the *dai*'s care, how do you think it compares with the hospital?** Well I can't say anything about the hospital...because I didn't have my baby there..but the thing about the *dai* is that she will bath the baby in the proper manner. She washed the baby, put on his clothes and got him all cleaned up.

**What about the afterbirth?** There was actually a bit of a problem with that...it came after a long time...about 20 minutes..it was very painful. **What do they do with it then?** Well they get rid of it, they bury it. **What else happened?** The 'azaan' (call to prayer) was given to the baby right away after the birth. **Who did that?** My brother-in-law, my sister's husband. **How did your night pass then?** It was difficult, I was in a lot of pain.

**7. What was your routine like in the days after the birth..rest patterns dealing with baby etc.?** Well the first four days were difficult, as I was in pain. I took painkillers for it though..and stayed in bed. I couldn't really sit up or anything either in the first few days. On the second day after the birth, we had the baby circumcised, really because he hadn't urinated, so we thought it best to do the circumcision quickly. We also had the local barber remove the baby's first hair. **What about celebrations?** Well we distributed sweetmeats...I did it on the first Friday after his birth, and because his father is still away, he distributed it the following Friday in Saudi Arabia. **What about other routines, of bathing and treatment from the *dai*?** Well that *dai* who delivered the baby worked for the first five days..she just does the delivery, and stays on, if you ask her to. There is another one who comes now..she does the massage, and applies oil to the head and body...but she doesn't wash the clothes or anything, she comes everyday. **Will you keep her services for the full *chilla*?** Yes...it helps to get rid of tiredness and keeps the woman in good health. **What about avoiding certain foods or other restrictions?** Well I can't eat 'hot' foods anyway, they don't agree with me at all. Since he was born, I have been very fevered and on medication...so I haven't felt like eating much at all. Just feel really thirsty, so I have been drinking lots of water. **What about other people coming to visit?** Well they came over straight away really. There was a film on at about 11 that night, and as soon as he was born..she told every one that I had a boy. So, as soon as he was bathed, everyone came in to see him. **Do you breastfeed or bottle feed the baby?** I don't like the bottle at all...I would only breastfeed..I feed him whenever he's hungry, sometimes two or three times during the night. **What about the ritual bathing on certain days...have you done that?** I bathed the fifth, and the tenth days of the *chilla* ..then the twentieth. The next one will mark the month, and then the six week one. After



that we will be free to get out and about! **Is there any particular reason why this is done?** These are the customs of old..well the woman is 'polluted' during the six weeks anyway...only after the ritual bath, can she go out herself or take her baby out. **Do you actually go out though?** Well I'll go to my sisters or my sister-in-law's house, but I won't take the baby. I would only go to the homes of family during the *chilla*, not to see outsiders. **Have you been able to catch up with sleep?** well I can't sleep during the day...so I'll bath the baby at about 12, then the other kids will come home from school, and they won't settle down until the evening...so I can't really sleep.

**8. Have you been to stay with family at all?** well I won't go anywhere during the *chilla*. But after the 6 week bath...I'll go to my father-in-law's home..he's just come back from his pilgrimage in Mecca and he came to visit me...but I haven't gone as I'm still observing the *chilla*. I'll stay for two or three days, then go to visit my sister-in-law.

**Have other people come to see you, family etc.?** Well two of the baby's aunts (paternal) came here from Faisalabad to see the baby. They just left two days ago actually. **What did they bring for the birth?** They brought clothes for the whole family, for my husband, the other children, five suits for the baby, a suit for me too. They also brought Furhan his bracelets, silver ones. The other sister brought clothes as well, and a gold ring and bracelets too. **Then what did you have to give?** Well I gave them two suits each for themselves, suit material for their husbands and children. I also gave them a kilo of sweets each. **How were they?** They were both really happy...**Are there other aunts?** Yes, another two...they haven't been here to visit yet. The ones who were here, told me that they would come, once I had completed the *chilla*.

**10. Are you happy with the amount and quality of help that you have been getting?** Yes, it has been good. **Who provides it?** My niece, the one that has been here since the end of my pregnancy. She does everything.

**How long do you think that a mother needs to rest and recover, the whole *chilla*?** Certainly, the *chilla* is a necessary length of time...but depending on your on strength you can start to work again before that, just a little.

**Are you aware of any things that are prohibited, foods etc.?** Well in the *chilla*, you shouldn't eat hard foods, foods should be soft...at least for the first 20-25 days...then after that you can start mixing in harder foods to the diet. **Why is that, is it for you, or the baby?** They say that you should avoid hard foods so that your stomach remains settled. But in my case, I started to eat hard foods like chappaties and found that my stomach became upset, it's still sore..and you find that as soon as the baby has a feed, he'll be upset

too and soils his nappy straight away. **What about eating *yukhni* (meat stock) or *punjeeri* (see chapter one)?** *Punjeeri* was made for me and I ate it for two or three days and then stopped. **Why do they say you should eat these things?** Really because they are 'hot'...they are good for healing the back. **What about *yukhni*?** I didn't have that...instead I just have cooked lamb.

**What about things that a mother is discouraged or encouraged to do after the birth?**

They say that you should be careful when using water..you should drink less as the stomach swells up during the *chilla*. But I haven't been able to...it's been so hot and I had a fever. **What about exercises for the stomach ?** No, just the walking about that I do really.

**19. In what other ways has the birth of your baby been celebrated?** Just giving the sweets out really...his dad says that when he comes back, then we'll have a celebration.

**20. Any particular reason for the name Furhan..religious reasons, or a custom?**

Well the tradition that my husband satisfied, was to invite friends around to celebrate and give them sweets...and then they suggested we should keep the name Bilal..a nice religious name. My husband had been phoning every other day to keep in touch...on the 10th day after the birth he phoned and we told him that we had registered his name. My husband's nephews came with sweetmeats on the fourth day, and I had told them that I liked the name Hassan...but they said no..that they wanted to keep the name Furhan, as it matches the name of my other son. Then, when his dad phoned he asked me why I had kept the name Furhan, as he liked the name Bilal! I just told him that it was too late as we had registered the name.

**24. Have you been managing to spend time with others...to socialise?** Well my family just all come here to see me, so I do see them..everyday.

**28. Have you had any conflicts over childcare, with family or friends..like shaping the head or feeding?** Well there's been a lot of stuff going on because of the shape of his head! **How do you shape his head?** Well you keep him lying straight on his back..so that you can kind of flatten it....like you can see, that even now, it's looking a lot better.

**29. Have you experienced any strain in your relationship with your husband?...although I suppose it's hard to say, as he's far away.** well even though he's not here he keeps in touch by phone on a regular basis.

**36. Do you feel trapped or confined?** No, not at all!

**38. Do you miss the lifestyle you had before the baby was born?** That was good...but it's also good now!

**41. Do you have any intention of working?** No, none...**So what now?** Well definitely some family planning..**an operation?** No, I won't have an operation..just use some other method of contraception!

## Appendix 2A

### PERSONAL DATA QUESTIONNAIRE

*All responses will be treated in confidence*

1. Age \_\_\_\_\_
2. Religion \_\_\_\_\_
3. Is this your first child? (please circle the appropriate response) YES NO
4. Place of birth \_\_\_\_\_
5. Nationality \_\_\_\_\_
6. Marital status (please circle the appropriate response)  
SINGLE MARRIED CO-HABITING WIDOWED DIVORCED
7. Occupation \_\_\_\_\_
8. Occupation of husband/partner \_\_\_\_\_
9. How many years have you spent in education? \_\_\_\_\_ years
10. What qualifications, if any, do you have? \_\_\_\_\_
11. How many years has your husband/partner spent in education? \_\_\_\_\_ years
12. What qualifications, if any, does your husband/partner have? \_\_\_\_\_
13. How many years have you been married/in a stable relationship? \_\_\_\_\_ years
14. How many brothers and sisters are there in your family?  
\_\_\_\_\_ brothers \_\_\_\_\_ sisters
15. What position do you occupy within your family? For example, are you the eldest child, second eldest, youngest, etc. \_\_\_\_\_
16. How many brothers and sisters are there in your husband's/partner's family?  
\_\_\_\_\_ brothers \_\_\_\_\_ sisters
17. What position does your husband/partner occupy within his family? For example, is he the eldest child, second eldest, youngest, etc.  
\_\_\_\_\_
18. How many people are there in your household? \_\_\_\_\_
19. Please state the relationship of these people to yourself:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Appendix 2B

### Personal Data Questionnaire

تمام جوابات کو سینہ داز میں رکھا جائے گا۔

- 1 - عمر \_\_\_\_\_
- 2 - مذہب \_\_\_\_\_
- 3 - کیا یہ آپ کا پہلا بچہ ہے؟ (مناسب جواب پر دائرہ لگائیے)۔ ہاں - نہیں
- 4 - جاننے پیدائش \_\_\_\_\_
- 5 - قومیت \_\_\_\_\_
- 6 - ازدواجی حیثیت (براہ کرم مناسب جواب پر دائرہ لگائیے)۔  
غیر شادی شدہ۔ شادی شدہ۔ غیر قانونی مباشرت۔ بیوہ۔ مطلقہ۔
- 7 - پیشہ \_\_\_\_\_
- 8 - شوہر / ساتھی کا پیشہ \_\_\_\_\_
- 9 - آپ نے تعلیم پر کتنے سال لگائے ہیں؟ \_\_\_\_\_ سال۔
- 10 - آپ کی اپنی تعلیمی حیثیت کیا ہے؟ \_\_\_\_\_
- 11 - آپ کے شوہر / ساتھی نے کتنی تعلیم حاصل کی ہے؟ \_\_\_\_\_ سال۔
- 12 - آپ کے شوہر / ساتھی کی تعلیم اگر ہے تو کیا ہے؟ \_\_\_\_\_
- 13 - آپ کی شادی کو کتنے سال ہو چکے ہیں۔ / \_\_\_\_\_ سال۔
- 14 - آپ کے خاندان میں کتنے بھائی اور بہن ہیں؟ \_\_\_\_\_
- 15 - خاندان میں آپ کی حیثیت کیا ہے؟ مثلاً سب سے بڑے بچے۔ دوسرے درجہ پر۔ سب سے چھوٹے وغیرہ۔
- 16 - آپ کے شوہر / ساتھی کے خاندان میں کتنے بھائی اور بہن ہیں؟ \_\_\_\_\_
- 17 - خاندان میں آپ کے شوہر / ساتھی کی حیثیت کیا ہے؟ مثلاً سب سے بڑے بچے۔ دوسرے درجہ پر۔ سب سے چھوٹے وغیرہ۔
- 18 - آپ کے گھر میں کل کتنے آدمی ہیں؟ \_\_\_\_\_
- 19 - مہربانی کر کے بیان کیجئے آپ کی ان سے کیا رشتہ داری ہے؟ \_\_\_\_\_

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

## **Appendix 3A**

### **BECK DEPRESSION INVENTORY**

On this questionnaire are groups of statements. Please read each group of statements carefully. Pick out the one statement in each group which best describes the way you have been feeling in the **PAST WEEK, INCLUDING TODAY!** Tick the statement that you picked. If several statements in the group seem to apply equally well, tick each one. Be sure to read all the statements in each group before making your choice.

1. ☐ I do not feel sad  
☐ I feel sad  
☐ I am sad all the time and I can't snap out of it  
☐ I am so sad or unhappy that I can't stand it
  
2. ☐ I am not particularly discouraged about the future  
☐ I feel discouraged about the future  
☐ I feel I have nothing to look forward to  
☐ I feel that the future is hopeless and that things cannot improve
  
3. ☐ I do not feel like a failure  
☐ I feel I have failed more than the average person  
☐ As I look back on my life, all I can see is a lot of failure  
☐ I feel I am a complete failure
  
4. ☐ I get as much satisfaction out of things as I used to  
☐ I don't enjoy things the way I used to  
☐ I don't get real satisfaction out of anything anymore  
☐ I am dissatisfied or bored with everything
  
5. ☐ I don't feel particularly guilty  
☐ I feel guilty a good part of the time  
☐ I feel quite guilty most of the time  
☐ I feel guilty all of the time

6. ☐ I don't feel I am being punished  
☐ I feel I may be punished  
☐ I expect to be punished  
☐ I feel I am being punished
7. ☐ I don't feel disappointed in myself  
☐ I am disappointed in myself  
☐ I am disgusted with myself  
☐ I hate myself
8. ☐ I don't feel I am any worse than anybody else  
☐ I am critical of myself for my weakness or mistakes  
☐ I blame myself all the time for my faults  
☐ I blame myself for everything bad that happens
9. ☐ I don't have any thoughts of killing myself  
☐ I have thoughts of killing myself, but I would not carry them out  
☐ I would like to kill myself  
☐ I would kill myself if I had the chance
10. ☐ I don't cry any more than usual  
☐ I cry more now than I used to  
☐ I cry all the time now  
☐ I used to be able to cry, but now I can't cry even though I want to
11. ☐ I am no more irritated by things than I ever am  
☐ I am slightly more irritated now than usual  
☐ I am quite annoyed or irritated a good deal of the time  
☐ I feel irritated all the time now

12. ☐ I have not lost interest in other people  
☐ I am less interested in other people than I used to be  
☐ I have lost most of my interest in other people  
☐ I have lost all of my interest in other people
13. ☐ I make decisions about as well as I ever could  
☐ I put off making decisions more than I used to  
☐ I have greater difficulty in making decisions than before  
☐ I can't make decisions at all anymore
14. ☐ I don't feel that I look any worse than I used to  
☐ I am worried that I am looking old or unattractive  
☐ I feel that there are permanent changes in my appearance that make me look unattractive  
☐ I believe that I look ugly
15. ☐ I can work about as well as before  
☐ It takes an extra effort to get started at doing something  
☐ I have to push myself very hard to do anything  
☐ I can't do any work at all
16. ☐ I can sleep as well as usual  
☐ I don't sleep as well as I used to  
☐ I wake up one-two hours earlier than usual and find it hard to get back to sleep  
☐ I wake up several hours earlier than I used to and cannot get to sleep
17. ☐ I don't get more tired than usual  
☐ I get tired more easily than I used to  
☐ I get tired from doing almost anything  
☐ I am too tired to do anything



18. ☐ My appetite is no worse than usual  
☐ My appetite is not as good as it used to be  
☐ My appetite is much worse now  
☐ I have no appetite at all anymore
19. ☐ I haven't lost much weight, if any, lately  
☐ I have lost more than five pounds  
☐ I have lost more than 10 pounds  
☐ I have lost more than 15 pounds
20. ☐ I am no more worried about my health than usual  
☐ I am worried about physical problems such as aches and pains, or upset stomach, or constipation  
☐ I am very worried about physical problems and it's hard to think of much else  
☐ I am so worried about my physical problems that I cannot think about anything else
21. ☐ I have not noticed any recent change in my interest in sex  
☐ I am less interested in sex than I used to be  
☐ I am much less interested in sex now  
☐ I have lost interest in sex completely

## Appendix 3B

### Beck Depression Inventory

ہدایات - یہ سوالنامہ 21 گروپ کے بیانات پر مشتمل ہے۔ ہر بیان میں 4,3,2,1 نمبر ہیں۔ آپ گروپ میں دینے لگے بیانات میں سے جس طرح سے سمجھتے ہیں اور آج محسوس کر رہے ہیں۔ اس پر (✓) کا نشان لگا دیجئے۔

#### 1

- 1 میں ایسا محسوس نہیں کرتی۔
- 2 میں ایسا محسوس کرتی ہوں۔
- 3 میں ہر وقت ایسا رہتی ہوں اور اس سے بچھٹانا نہیں پاسکتی۔
- 4 میں اتنی ایسا اور ناخوش ہوں کہ اس کو برداشت نہیں کر سکتی۔

#### 2

- 1 میں خاص طور پر مستقبل کے لئے مایوس نہیں ہوں۔
- 2 میں مستقبل کے بارے میں مایوس ہوں۔
- 3 میں محسوس کرتی ہوں کہ میرے پاس ایسی کوئی چیز نہیں کہ میں مستقبل کی طرف دیکھ سکوں۔
- 4 میں محسوس کرتی ہوں کہ مستقبل مایوس کن ہے۔ اور اس میں بہتری کی کوئی امید نہیں۔

#### 3

- 1 میں ناکام آدمی کی طرح محسوس نہیں کرتی۔
- 2 میں محسوس کرتی ہوں کہ میں اوسط درجے کے آدمی سے زیادہ ناکام ہو چکی ہوں۔
- 3 جب میں اپنے ماضی کی طرف دیکھتی ہوں تو اس میں بہت سی ناکامیاں دکھائی دیتی ہیں۔
- 4 میں محسوس کرتی ہوں کہ بطور انسان میں مکمل طور پر ناکام ہوں۔

#### 4

- 1 میں حالات سے اتنی ہی مطمئن ہوں کہ جتنی ہوا کرتی تھی۔
- 2 میں چیزوں سے اتنا محفوف نہیں ہوتی جتنا میں ہوا کرتی تھی۔
- 3 مجھے اب حقیقی معنوں میں کسی چیز سے اطمینان نہیں ملتا۔
- 4 میں ہر چیز سے اکتانی ہوئی اور غیر مطمئن ہوں۔

## 5

- 1 میں کوئی خاص ندامت محسوس نہیں کرتی۔
- 2 اکثر اوقات میں اپنے آپ کو قصور وار سمجھتی ہوں۔
- 3 میں زیادہ تر اوقات اپنے آپ کو قصور وار تصور کرتی ہوں۔
- 4 میں ہر وقت اپنے آپ کو قصور وار تصور کرتی ہوں۔

## 6

- 1 میں یہ محسوس نہیں کرتی کہ مجھے سزا دی جا رہی ہے۔
- 2 میں محسوس کرتی ہوں کہ مجھے سزا دی جا رہی ہے۔
- 3 میں توقع کرتی ہوں کہ مجھے سزا دی جائے۔
- 4 میں محسوس کرتی کہ مجھے سزا دی جا رہی ہے۔

## 7

- 1 میں اپنے آپ سے مایوس نہیں ہوں۔
- 2 میں اپنے آپ سے مایوس ہوں۔
- 3 میں اپنے آپ سے بیزار ہوں۔
- 4 میں اپنے آپ سے نفرت کرتی ہوں۔

## 8

- 1 میں یہ محسوس نہیں کرتی کہ میں کسی اور سے زیادہ بد تر ہوں۔
- 2 میں اپنی کمزوریوں اور غلطیوں کیلئے اپنے آپ پر تنقید کرتی ہوں۔
- 3 میں ہر وقت اپنی غلطیوں پر اپنے آپ کو موردِ لازم ٹھہرتی ہوں۔
- 4 ہر بری چیز جو پیش آتی ہے اس کے لئے اپنے آپ کو لازم دیتی ہوں۔

## 9

- 1 میرے اندر خود کشی کا کوئی رجحان نہیں۔
- 2 میرے اندر خود کشی کرنے کے رجحانات ہیں لیکن میں اس پر عمل کرنے سے قاصر ہوں۔
- 3 میں اپنی زندگی ختم کرنا پسند کروں گی۔
- 4 اگر مجھے موقع ملا تو میں اپنی زندگی ختم کر لوں گی۔

## 10

- 1 میں معمول سے زیادہ نہیں روتی۔
- 2 میں ہمیشہ کے مقابلے میں اب زیادہ روتی ہوں۔
- 3 میں اب ہر وقت روتی رہتی ہوں۔
- 4 میں پہلے رویا کرتی تھی۔ لیکن اب باوجود چالنے کے بھی رو نہیں سکتی۔

## 11

- 1 میں پہلے سے زیادہ چڑچڑی نہیں ہوں۔
- 2 میں اب پہلے کے مقابلے میں زیادہ آسانی سے چڑجاتی ہوں۔
- 3 میں زیادہ تر اوقات خفگی اور چڑچڑاہٹ محسوس کرتی ہوں۔
- 4 میں اب ہر وقت چڑچڑاہٹ محسوس کرتی ہوں۔

## 12

- 1 میری دوسرے لوگوں میں دلچسپی ختم نہیں ہوئی۔
- 2 میں اب پہلے کی نسبت دوسرے لوگوں میں کم دلچسپی لیتی ہوں۔
- 3 میری لوگوں میں زیادہ تر دلچسپی ختم ہو گئی ہے۔
- 4 دوسرے لوگوں میں میری تمام تر دلچسپی ختم ہو گئی ہے۔

## 13

- 1 میں پہلے کی طرح اب بھی فیصلے کر سکتی ہوں۔
- 2 میں پہلے کی نسبت اپنے فیصلوں کو مطمئن کرنے لگی ہوں۔
- 3 مجھے پہلے کی نسبت فیصلے کرنے میں زیادہ دشواری پیش آتی ہے۔
- 4 میں اب کوئی بھی فیصلہ حتمی طور پر نہیں کر سکتی۔

## 14

- 1 مجھے یہ محسوس نہیں ہوتا کہ میں پہلے کے مقابلے میں زیادہ بری لگتی ہوں۔
- 2 میں پریشان ہوں کہ میں عمر رسیدہ اور غیر پُرکشش نظر آنے لگی ہوں۔
- 3 میں محسوس کرتی ہوں کہ میری ظاہری شکل و شہادت میں مستقل تبدیلیاں آگئی ہیں۔ جو کہ مجھے غیر جاذب نظر بنا دیتی ہیں۔
- 4 مجھے یقین ہے کہ میں بد صورت نظر آتی ہوں۔

## 15

- 1 - میں اتنا ہی کام کر سکتی ہوں جتنا کہ میں پہلے کرتی تھی۔
- 2 - مجھے کوئی کام شروع کرنے کیلئے امنانی کوشش کرنی پڑتی ہے۔
- 3 - مجھے کوئی بھی کام کرنے کیلئے اپنے آپ کو بہت زیادہ مشکل میں ڈالنا پڑتا ہے۔
- 4 - میں کوئی بھی کام نہیں کر سکتی۔

## 16

- 1 - میں حسب معمول سو سکتی ہوں۔
- 2 - میں پہلے کی طرح نہیں سو سکتی۔
- 3 - میں معمول سے ایک دو گھنٹے پہلے اٹھ جاتی ہوں۔ اور دوبارہ سونے میں مشکل محسوس کرتی ہوں۔
- 4 - میں معمول سے کئی گھنٹے پہلے اٹھ جاتی ہوں اور دوبارہ سو نہیں سکتی۔

## 17

- 1 - میں معمول سے زیادہ نہیں تھکتی۔
- 2 - میں پہلے کی نسبت زیادہ آسانی سے تھک جاتی ہوں۔
- 3 - میں کوئی بھی کام کرنے سے تھک جاتی ہوں۔
- 4 - میں تھکن کی وجہ سے کوئی بھی کام نہیں کر سکتی۔

## 18

- 1 - میری بھوک پہلے سے زیادہ خراب نہیں ہے۔
- 2 - میری بھوک پہلے کی طرح اچھی نہیں رہی۔
- 3 - میری بھوک اب بہت خراب ہے۔
- 4 - مجھے اب بالکل بھوک نہیں ہے۔

## 19

- 1 - میرا وزن پہلے کی نسبت کم نہیں ہوا۔
- 2 - میرا وزن پانچ پاؤنڈ سے زیادہ کم ہو گیا ہے۔
- 3 - میرا وزن دس پاؤنڈ سے زیادہ کم ہو گیا ہے۔
- 4 - میرا وزن ہندو پاؤنڈ سے زیادہ کم ہو گیا ہے۔

## 20

- 1 - میں پہلے کی طرح اب بھی اپنی صحت کے بارے میں متفکر نہیں ہوں۔
- 2 - میں قبض، خرابی معدہ اور مختلف دردوں کی بنا پر اپنی صحت کے بارے میں فکر مند ہوں۔
- 3 - میں جسمانی عوارض کے بارے میں انتہائی پریشان ہوں کہ میرے لئے کسی اور چیز کے بارے میں سوچنا مشکل ہو گیا ہے۔
- 4 - میں اپنے جسمانی مسائل کے بارے میں اس قدر پریشان ہوں کہ کچھ اور سوچ ہی نہیں سکتی۔

## 21

- 1 - جنسی میلان کے بارے میں میں اپنے اندر کوئی تازہ تبدیلی محسوس نہیں کرتی۔
- 2 - پہلے کی نسبت جنسی رجحان میں میری دلچسپی کم ہو گئی ہے۔
- 3 - اب جنسی طور پر میری دلچسپی تقریباً ختم ہو گئی ہے۔
- 4 - اب میری جنسی میلان میں دلچسپی بالکل ختم ہو چکی ہے۔

## Appendix 4A

### EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS)

- J.L. COX, J.M. HOLDEN, R. SAGOVSKY

Date: \_\_\_\_\_

Baby's age: \_\_\_\_\_

Baby's date of birth: \_\_\_\_\_

Birth weight: \_\_\_\_\_

Mother's age: \_\_\_\_\_

Baby's place in family: 1 2 3 4 5 6 7 (please circle)

---

Please **UNDERLINE** the answer which comes closest to how you have felt **IN THE PAST 7 DAYS**, not just how you feel today.

---

Here is an example, already completed.

I have felt happy:

Yes, all the time

Yes, most of the time

No, not very often

No, not at all

This would mean: "I have felt happy most of the time" during the past week. Please complete the other questions in the same way.

In the past 7 days:

1. I have been able to laugh and see the funny side of things

As much as I always could

Not quite so much now

Definitely not so much now

Not at all

2. I have looked forward with enjoyment to things

As much as I ever did

Rather less than I used to

Definitely less than I used to

Hardly at all

3. I have blamed myself unnecessarily when things went wrong

Yes, most of the time

Yes, some of the time

Not very often

No, never

4. I have been anxious or worried for no good reason

No, not at all

Hardly ever

Yes, sometimes

Yes, very often

5. I have felt scared or panicky for no good reason

Yes, quite a lot

Yes, sometimes

No, not much

No, not at all

6. Things have been getting on top of me

Yes, most of the time I haven't been able to cope at all

Yes, sometimes I haven't been coping as well as usual

No, most of the time I have coped quite well

No, I have been coping as well as ever



7. I have been so unhappy that I have had difficulty sleeping

Yes, most of the time

Yes, sometimes

Not very often

No, not at all

8. I have felt sad or miserable

Yes, most of the time

Yes, quite often

Not very often

No, not at all

9. I have been so unhappy that I have been crying

Yes, most of the time

Yes, quite often

Only occasionally

No, never

10. The thought of harming myself has occurred to me

Yes, quite often

Sometimes

Hardly ever

Never

## Edinburgh Postnatal Depression Scale

گزشتہ سات دنوں میں "جو آپ نے محسوس کیا" دینے کے جوابات میں سے جو آپ کے احساسات کے نزدیک ترین ہو۔ اس کے نیچے لائن نکادیں۔ (آج کے احساسات کے علاوہ۔)

یہاں ایک پہلے سے مکمل مثل درج کی جاتی ہے۔

میں نے خوشی محسوس کی۔

ہاں ہمہ وقت۔

ہاں زیادہ تر۔

نہیں ۲ کثر اوقات۔

نہیں بالکل نہیں۔

اس کا مطلب یہ ہے۔ کہ میں گزشتہ ہفتے کے دوران۔ زیادہ تر خوش رہی ہوں۔ مہربانی کر کے دوسرے سوالات بھی اسی طرح مکمل کیجیے۔

## گزشتہ سات دنوں میں:

1 میں لہذا اظہار مسرت بیان کر سکتی ہوں عجیب و غریب چیزوں کو دیکھ کر۔

1۔ میں جتنا بھی خوش ہو سکی تھی۔

2۔ اب میں اتنی خوش نہیں ہوں۔

3۔ یقیناً بہت زیادہ نہیں۔

4۔ میں بالکل خوش نہیں ہوں۔

2۔ میں چیزوں کو دیکھ کر لطف اندوز ہوئی۔

1۔ اتنی کہ جتنی پہلے تھی۔

2۔ جتنی معمول سے کچھ کم۔

3۔ یقیناً معمول سے کمی کے ساتھ۔

4۔ مشکل سے خوش ہوئی۔

3 - میں نے اپنے آپ کو خواہ مخواہ مورد الزام ٹھہرایا۔ جبکہ حالات خراب ہو گئے۔

ہاں، زیادہ تر۔

ہاں، کبھی کبھار۔

نہیں، اکثر۔

نہیں، کبھی نہیں۔

4 - میں بغیر کسی وجہ کے حیران کن اور پریشان رہی۔

نہیں، بالکل نہیں۔

زیادہ تر نہیں۔

ہاں، کچھ عرصہ تک۔

ہاں، زیادہ تر۔

5 - میں بغیر کسی وجہ کے ڈر گئی۔ اور مضطرب ہوئی۔

ہاں، بہت، کافی۔

ہاں، کچھ وقت تک۔

نہیں، زیادہ نہیں۔

نہیں، بالکل نہیں۔

6 - حالات میری برداشت سے باہر ہو رہے ہیں۔

ہاں، اکثر اوقات میں ان سے بالکل نہٹ نہیں سکتی۔

ہاں، اکثر اوقات میں ان سے اس طرح نہٹ نہیں سکتی جیسا کہ پہلے کر سکتی تھی۔

نہیں، اکثر اوقات میں ان سے بہتر طریقے سے نہٹ چکی ہوں۔

نہیں، میں حسب سابق ہی نہٹ رہی ہوں۔

7 - میں اس قدر ناخوش ہوں کہ مجھے سونے میں مشکل پیش آتی ہے۔

ہاں، اکثر اوقات۔

ہاں، کچھ وقت۔

اکثر اوقات نہیں۔

نہیں، بالکل نہیں۔

8 - میں اپنے آپ کو اداس اور بد نصیب محسوس کرتی ہوں۔

ہاں اکثر اوقات۔

ہاں اکثر۔

نہیں اکثر نہیں۔

نہیں بالکل نہیں۔

9 - میں اتنی تلاش ہوں کہ میں چلا رہی ہوں۔

ہاں اکثر اوقات۔

ہاں اکثر۔

صرف کبھی کبھار۔

نہیں بالکل نہیں۔

10 - مجھے اپنے آپ کو نقصان پہنچانے کا خیال پیدا ہوا۔

ہاں اکثر اوقات۔

کچھ وقت۔

بہت ہی کم۔

کبھی نہیں۔

## Appendix 5A

### SOCIAL PROVISIONS SCALE

*Please respond to the following statements by indicating the number that matches your level of agreement*

strongly disagree

1

disagree

2

agree

3

strongly agree

4

1. There are people I can depend on to help me if I really need it. \_\_\_\_\_
2. I feel that I do not have any close personal relationships with other people. \_\_\_\_\_
3. There is no one I can turn to for guidance in times of stress. \_\_\_\_\_
4. There are people who depend on me for help. \_\_\_\_\_
5. There are people who enjoy the same social activities I do. \_\_\_\_\_
6. Other people do not view me as competent. \_\_\_\_\_
7. I feel personally responsible for the well-being of another person. \_\_\_\_\_
8. I feel part of a group of people who share my attitudes and beliefs. \_\_\_\_\_
9. I do not think other people respect my skills and abilities. \_\_\_\_\_
10. If something went wrong, no one would come to my assistance. \_\_\_\_\_
11. I have close relationships that provide me with a sense of emotional security and well-being. \_\_\_\_\_
12. There is someone I could talk to about important decisions in my life. \_\_\_\_\_
13. I have relationships where my competence and skill are recognised. \_\_\_\_\_
14. There is no one who shares my interests and concerns. \_\_\_\_\_

strongly disagree

1

disagree

2

agree

3

strongly agree

4

15. There is no one who really relies on me for their well-being.

\_\_\_\_\_

16. There is a trustworthy person I could turn to for advice if I were having problems.

\_\_\_\_\_

17. I feel a strong emotional bond with at least one other person.

\_\_\_\_\_

18. There is no one I can depend on for aid if I really need it.

\_\_\_\_\_

19. There is no one I feel comfortable talking about problems with.

\_\_\_\_\_

20. There are people who admire my talents and abilities.

\_\_\_\_\_

21. I lack a feeling of intimacy with another person.

\_\_\_\_\_

22. There is no one who likes to do the things I do.

\_\_\_\_\_

23. There are people I can count on in an emergency.

\_\_\_\_\_

24. No one needs me to care for them anymore.

\_\_\_\_\_

## Appendix 5B

### Social Provisions Scale

مہربانی کر کے ظاہر کریں کہ مندرجہ ذیل بیانات سے آپ کتنا اتفاق کرتی ہیں؟

بہت زیادہ ناراضامندی۔ ناراضامندی۔ رضامندی۔ بہت زیادہ رضامندی۔

- |   | 4     | 3 | 2 | 1 |
|---|-------|---|---|---|
| 1 - کچھ لوگ ایسے ہیں کہ ضرورت پڑنے پر میں ان پر انحصار کر سکتی ہوں۔                   | _____ |   |   |   |
| 2 - میں محسوس کرتی ہوں میرے اپنے قریبی ذاتی تعلقات دوسرے لوگوں سے نہیں ہیں۔           | _____ |   |   |   |
| 3 - مصیبت کے وقت کوئی بھی ایسا نہیں جس سے یہ مسئلہ کھلنے میں رجوع نہ کر سکوں۔         | _____ |   |   |   |
| 4 - کچھ لوگ اپنی مدد کھلنے مجھ پر انحصار کرتے ہیں۔                                    | _____ |   |   |   |
| 5 - میرے اور کچھ لوگوں کے سماجی مسائل یکساں ہیں۔                                      | _____ |   |   |   |
| 6 - دوسرے لوگ مجھے مستعد نہیں سمجھتے ہیں۔   | _____ |   |   |   |
| 7 - میں بذات خود دوسروں کی فلاح و بہبود کھلنے خود کو ذمہ دار سمجھتی ہوں۔              | _____ |   |   |   |
| 8 - میں یہ محسوس کرتی ہوں کہ لوگوں کا ایک گروہ میرے رویوں اور عقائد سے اتفاق کرتا ہے۔ | _____ |   |   |   |
| 9 - میرے اپنے خیال میں کچھ پڑھائی میری قابلیت اور حسن تدبیر کا احترام نہیں کرتے۔      | _____ |   |   |   |
| 10 - اگر کوئی غلطی ہو گئی۔ تو میری مدد کھلنے کوئی نہیں آئیگا۔                         | _____ |   |   |   |
| 11 - میرے سماجی تعلقات کی وجہ سے مجھے جذباتی تحفظ اور فلاح و بہبود حاصل ہے۔           | _____ |   |   |   |
| 12 - کوئی ایسا شخص ہے جس سے میں اپنی زندگی کے اہم فیصلوں کے بارے میں بات کر سکتی ہوں۔ | _____ |   |   |   |
| 13 - میرے ایسے تعلقات ہیں۔ جہاں میری قابلیت اور حسن تدبیر کی شناخت کی جاتی ہے۔        | _____ |   |   |   |
| 14 - کوئی بھی ایسا شخص نہیں ہے جو میرے مسائل اور میری دلچسپیوں میں حصہ لیتا ہو۔       | _____ |   |   |   |
| 15 - درحقیقت کوئی بھی ایسا شخص نہیں جو اپنی فلاح و بہبود کھلنے مجھ پر اعتماد کرتا ہو۔ | _____ |   |   |   |

- 16 - ایک قابل اعتماد شخص ہے جس سے میں اپنے مسائل کے بارے میں مشورہ لے سکوں۔ \_\_\_\_\_
- 17 - میں سمجھتی ہوں کہ کم از کم ایک شخص سے جذباتی ہم آہنگی ضرور ہونی چاہئے۔ \_\_\_\_\_
- 18 - درحقیقت کوئی بھی ایسا شخص نہیں کہ ضرورت پڑنے پر میں اس کا تعاون حاصل کر سکوں۔ \_\_\_\_\_
- 19 - کوئی بھی ایسا آدمی نہیں کہ میں اس سے اپنے مسائل پر گفتگو کر سکوں۔ \_\_\_\_\_
- 20 - کچھ لوگ میری ذہانت اور قابلیتوں کی تعریف کرتے ہیں۔ \_\_\_\_\_
- 21 - میں اس کمی کو محسوس کرتی ہوں کہ میری کسی سے بھی بے تکلفی نہیں ہے۔ \_\_\_\_\_
- 22 - کوئی بھی ایسا شخص نہیں جو وہ کرنا پسند کرے جو میں کرتی ہوں۔ \_\_\_\_\_
- 23 - کچھ لوگ ایسے ہیں جن پر میں ہنگامی حالات میں انحصار کر سکتی ہوں۔ \_\_\_\_\_
- 24 - کسی بھی شخص کو اپنی ضرورت کے وقت میری مدد کی پرواہ نہیں۔ \_\_\_\_\_



## PRENATAL INVENTORY OF SOCIALLY SUPPORTIVE BEHAVIOURS

- 1- how often these activities occurred over the past few weeks;
- 2- the relationship to you of the people involved;
- 3- a rating of your satisfaction with the support.

6- very satisfied  
5- fairly satisfied  
4- a little satisfied  
3- a little dissatisfied  
2- fairly dissatisfied  
1- very dissatisfied

Question 1

**In the past few weeks, including now, have you been getting practical assistance or services from others? (i.e. chores, tasks, financial help, etc.)** (Please underline the appropriate response)

not at all      once or twice      about once      several times      about every  
   a week                      a week                      day

**Who provides this help?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

no one 1) \_\_\_\_\_ 6) \_\_\_\_\_  
2) \_\_\_\_\_ 7) \_\_\_\_\_  
3) \_\_\_\_\_ 8) \_\_\_\_\_  
4) \_\_\_\_\_ 9) \_\_\_\_\_  
5) \_\_\_\_\_

**How satisfied are you with the amount of assistance that you are receiving?**  
(Please underline the appropriate response)

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

**How satisfied are you with the kind or quality of assistance that you are receiving?**  
(Please underline the appropriate response)

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

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[illegible]

a week                      a week                      day

more than nine people per question.

3) \_\_\_\_\_

Receiving: (Please underline the appropriate response)

4- a little satisfied 1- very dissatisfied

**Receiving:** (Please underline the appropriate response)

7 = a little satisfied                      1 = very dissatisfied

Question 3

**In the past few weeks, including now, have you been turning to others for guidance? (i.e. advice, information, solutions to problems, etc.)**

(Please underline the appropriate response)

not at all      once or twice      about once      several times      about every  
a week      a week      day

**Who are these people?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

no one 1) \_\_\_\_\_ 6) \_\_\_\_\_  
2) \_\_\_\_\_ 7) \_\_\_\_\_  
3) \_\_\_\_\_ 8) \_\_\_\_\_  
4) \_\_\_\_\_ 9) \_\_\_\_\_  
5) \_\_\_\_\_

**How satisfied are you with the amount of guidance you are receiving?** (Please underline the appropriate response)

6- very satisfied      3- a little dissatisfied  
5- fairly satisfied      2- fairly dissatisfied  
4- a little satisfied      1- very dissatisfied

**How satisfied are you with the kind or quality of guidance that you are receiving?** (Please underline the appropriate response)

6- very satisfied      3- a little dissatisfied  
5- fairly satisfied      2- fairly dissatisfied  
4- a little satisfied      1- very dissatisfied

Question 4

**In the past few weeks, including now, have other people been depending on you for their well-being and care?**

(please underline the appropriate response)

not at all      once or twice      about once      several times      about every  
   a week                      a week                      day

**Who needs your care?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

no one    1) \_\_\_\_\_                      6) \_\_\_\_\_  
                 2) \_\_\_\_\_                      7) \_\_\_\_\_  
                 3) \_\_\_\_\_                      8) \_\_\_\_\_  
                 4) \_\_\_\_\_                      9) \_\_\_\_\_  
                 5) \_\_\_\_\_

**How satisfied are you with the amount of care required of you?** (Please underline the appropriate response)

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

**Would you prefer more or less of this in your life, or is it about right?** (Please tick the appropriate response)

\_\_\_\_\_ MORE

\_\_\_\_\_ ABOUT RIGHT

\_\_\_\_\_ LESS

Question 5

**In the past few weeks, including now, have you been spending time socialising with people? (i.e. recreation, shopping, chatting, visiting, etc.)** (Please underline the appropriate response)

not at all      once or twice      about once      several times      about every  
a week                      a week                      day

**With whom do you socialise?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

no one    1) \_\_\_\_\_                      6) \_\_\_\_\_  
              2) \_\_\_\_\_                      7) \_\_\_\_\_  
              3) \_\_\_\_\_                      8) \_\_\_\_\_  
              4) \_\_\_\_\_                      9) \_\_\_\_\_  
              5) \_\_\_\_\_

**How satisfied are you with the amount of socialising that you do?** (Please underline the appropriate response)

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                    2- fairly dissatisfied  
4- a little satisfied                  1- very dissatisfied

**How satisfied are you with the kind or quality of socialising that you do?** (Please underline the appropriate response)

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                    2- fairly dissatisfied  
4- a little satisfied                  1- very dissatisfied

Question 6

**In the past few weeks, including now, has anyone been giving you feedback about what you are doing? (i.e. praise, compliments, criticism, blame, etc.)** (Please underline the appropriate response)

not at all      once or twice      about once      several times      about every  
a week      a week      day

**From whom do you get feedback?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

no one    1) \_\_\_\_\_      6) \_\_\_\_\_  
            2) \_\_\_\_\_      7) \_\_\_\_\_  
            3) \_\_\_\_\_      8) \_\_\_\_\_  
            4) \_\_\_\_\_      9) \_\_\_\_\_  
            5) \_\_\_\_\_

**How satisfied are you with the amount of feedback you are receiving?** (Please underline the appropriate response)

6- very satisfied      3- a little dissatisfied  
5- fairly satisfied      2- fairly dissatisfied  
4- a little satisfied      1- very dissatisfied

**How satisfied are you with the kind of feedback that you are getting?** (Please underline the appropriate response)

6- very satisfied      3- a little dissatisfied  
5- fairly satisfied      2- fairly dissatisfied  
4- a little satisfied      1- very dissatisfied

## Prenatal Inventory of Socially Supportive Behaviours

آپکے بچے کی پیدائش سے دوسروں نے آپ کو جو مدد اور تعاون ملتا رہا اسکے متعلق مندرجہ ذیل سوالات آپ سے پوچھے جاتے ہیں۔ بچے کی پیدائش کے بعد جو لوگ آپ کی مدد کرتے رہے ہیں۔ اور آپکی زندگی کو خوشگوار بناتے رہے ہیں۔ ہم ان کے بارے میں جاننا چاہتے ہیں۔ آپکی کارکردگی کے بارے میں ہم آپ کو ایک لسٹ فراہم کر رہے ہیں۔ جس سے آپکو معلوم ہو گا۔ کہ آپکی کارکردگی اور آپ کے ساتھ کارکردگی ان پچھلے ہفتوں میں کیسی رہی؟۔

یہاں ہر سوال کے تین حصے ہیں۔ اور درج ذیل پر مشتمل ہیں۔

- 1 پچھلے ہفتوں میں یہ سرگرمیاں کتنی دفعہ پیش آئیں؟۔
- 2 آپکے ساتھ پیش آنے والے لوگوں سے آپکا رشتہ کیا تھا؟۔
- 3 آپ خود کو ملنے والی مدد سے کس قدر مطمئن ہیں؟۔

مثال۔

ان پچھلے ہفتوں سے اب تک جو آپ کر رہی ہیں، کیا لوگ شخص اس پر تبصرہ کر رہا ہے؟  
(یعنی تعریف، تحسین، تنقید، الزام وغیرہ) ممبران کر کے مناسب جواب پر دائرہ لکھیں۔

بالکل نہیں ایک یا دو بار، ہفتے میں ایک بار، ہفتے میں کئی بار، تقریباً روزانہ

آپ پر تبصرہ کون کر رہا ہے؟۔ ممبرانی کر کے ان لوگوں سے اپنی شنائی یا رشتہ داری تحریر کریں۔  
اگر ان میں سے کوئی بھی نہ ہو تو یہ بھی ظاہر کریں۔ ہر سوال کے آگے نو سے زیادہ جواب مت دیجئے۔  
کوئی نہیں۔

- |         |                   |
|---------|-------------------|
| _____ 6 | 1 - T.N. بڑی بہن۔ |
| _____ 7 | 2 - B.H. دوست۔    |
| _____ 8 | 3 - S.H. ماں۔     |
| _____ 9 | 4 - R.S. شوہر۔    |
| _____ 5 |                   |

آپ پر جتنا تبصرہ کیا گیا، اسے ممبران سے آپ کس قدر مطمئن ہیں۔

- |                          |                      |
|--------------------------|----------------------|
| 3 - تھوڑی غیر مطمئن۔     | 6 - بہت زیادہ مطمئن۔ |
| 2 - کسی حد تک غیر مطمئن۔ | 5 - کسی حد تک مطمئن۔ |
| 1 - بالکل غیر مطمئن۔     | 4 - کچھ مطمئن۔       |



اس تجربہ کی جو کچھ اور قیصر سے آپ کس قدر مطمئن ہیں۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

سوال نمبر 1

گزشتہ چند ہفتوں کے دوران ابھی تک کیا آپ عملی طور پر دوسروں سے ان کی خدمات اور مدد حاصل

کرتی رہی ہیں؟ (مثلاً، گھریلو کام کاج، مقررہ کام مالی امداد وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

کس نے مدد کی مہربانی کر کے ان لوگوں سے شنائی یا رشتہ دہی لگیے۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر

کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

آپ کو جتنی تقویت مل رہی ہے اس سے آپ کس قدر مطمئن ہیں۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

آپ کو جو مدد ملی اس کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

## سوال نمبر 2

گزشتہ کچھ مہنتوں کے دوران کیا آپ جذباتی طور پر دوسروں سے ان کی خدمات اور امداد حاصل کرتی رہی

ہیں؟۔ (مثلاً ہمدردی، اتفاق رائے، تیمارداری، طحارس، بندھانا وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ کو کس نے یہ جذباتی سہارے دیے۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ داری لکھیے۔ اگر ان میں سے

کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

_____ 6	_____ 1
_____ 7	_____ 2
_____ 8	_____ 3
_____ 9	_____ 4
	_____ 5

آپ کو کتنا جذباتی سہارا ملتا ہے۔ اس سے آپ کس قدر مطمئن تھیں۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

آپ کو جو جذباتی سہارا ملا۔ اس کی خوبی اور قسم سے آپ کس قدر مطمئن تھیں۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

### سوال نمبر 3

گزشتہ چند ہفتوں سے آج تک کیا آپ رہنمائی کھٹے دوسروں سے رجوع کرتی رہی ہیں؟۔ (مثلاً نصیحت

۲ اطلاع مسائل کا حل وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ کو کس نے رہنمائی دی۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہی لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

آپ کو جتنی رہنمائی مل رہی ہے۔ اس سے آپ کس قدر مطمئن ہیں۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |
- آپ کو جو رہنمائی ملی۔ اس کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں۔
- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

#### سوال نمبر 4

گزشتہ چند ہفتوں سے دوسروں نے آپ پر انحصار کیا ہے؟ مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

کون آپ پر انحصار کرتا ہے؟ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ داری لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

دوسرے لوگ جو آپ کی توجہ چاہتے ہیں۔ اس پر آپ کس قدر مطمئن ہیں؟

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

کیا یہ درست ہے کہ آپ اس کی پیشی کے سلسلہ کو اپنی زندگی میں ترجیح دیں گی۔ درست جواب صحیح کے نشان سے نکل کریں۔

\_\_\_\_\_ زیادہ

\_\_\_\_\_ تقریباً صحیح

\_\_\_\_\_ کم

## سوال نمبر 5

گزشتہ چند ہفتوں میں کیا آپ دوسروں سے میل ملاپ کرتی ہیں؟۔ (مثلاً: تفریح، خرید و فروخت، کپ شپ، لڑانا، ملاقات کیلئے جانا وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے۔

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ کے سماجی تعلقات کن لوگوں سے ہیں۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہری لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعدلات دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |

آپ نے جتنا میل ملاپ کیا ہے؟ اس میں تلب سے آپ کس قدر مطمئن ہیں؟

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

میل ملاپ کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں؟

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

## سوال نمبر 6

گزشتہ چند ہفتوں میں کیا آپ جو کچھ کر رہی ہیں کیا کوئی شخص اس پر تبصرہ کر رہا ہے؟ (مثلاً:

تعریف، ستائش، تنقید، الزام وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے۔

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ پر تبصرہ کون کر رہا ہے؟ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہی لکھیے۔ اگر ان میں سے کوئی نہیں

تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |

5- آپ نے جتنا تبصرہ کیا گیا ہے اس تبصرہ سے آپ کس قدر مطمئن ہیں؟

- |                         |                     |
|-------------------------|---------------------|
| 3- تھوڑی غیر مطمئن۔     | 6- بہت زیادہ مطمئن۔ |
| 2- کسی حد تک غیر مطمئن۔ | 5- کسی حد تک مطمئن۔ |
| 1- بالکل غیر مطمئن۔     | 4- کچھ مطمئن۔       |

اس تبصرہ کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں؟

- |                         |                     |
|-------------------------|---------------------|
| 3- تھوڑی غیر مطمئن۔     | 6- بہت زیادہ مطمئن۔ |
| 2- کسی حد تک غیر مطمئن۔ | 5- کسی حد تک مطمئن۔ |
| 1- بالکل غیر مطمئن۔     | 4- کچھ مطمئن۔       |

## Appendix 7A

### SIX WEEK POSTNATAL INVENTORY OF SOCIALLY SUPPORTIVE BEHAVIOURS

The following questions ask you about the support or help that you received during the **6 week period after the birth of your child**. We are interested in learning about the ways in which you feel that others have helped or tried to make your life more pleasant in the 6 week period after the birth of your child. You will find a list of activities that others may have done for you, to you, or with you in the 6 week period. There are three sections for each question, these involve:

- 1- how often these activities occurred over the 6 weeks;
- 2- the relationship to you of the people involved;
- 3- a rating of your satisfaction with the support.

#### EXAMPLE

**In the 6 weeks after the birth of your baby, did anyone give you feedback about what you were doing? (i.e. praise, compliments, criticism, blame, etc.)** (please underline the appropriate response)

not at all      once or twice      about once      several times      about every  
   a week                      a week                      day

**From whom did you get feedback?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

no one    1) T.N. (older sister)                      6) \_\_\_\_\_  
                 2) B.H. (friend)                              7) \_\_\_\_\_  
                 3) S.H. (mother)                              8) \_\_\_\_\_  
                 4) R.S. (husband)                            9) \_\_\_\_\_  
                 5) \_\_\_\_\_

**How satisfied were you with the amount of feedback you received?** (Please underline the appropriate response)

6- very satisfied                              3- a little dissatisfied  
5- fairly satisfied                            2- fairly dissatisfied  
4- a little satisfied                            1- very dissatisfied

**How satisfied were you with the kind of feedback that you got?** (Please underline the appropriate response)

6- very satisfied                              3- a little dissatisfied  
5- fairly satisfied                            2- fairly dissatisfied  
4- a little satisfied                            1- very dissatisfied

**In the 6 weeks after the birth of your baby, did you get practical assistance or services from others? (i.e. chores, tasks, finances, etc.) (Please underline the appropriate response)**

**Who provided this help?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

**How satisfied were you with the amount of assistance that you received?**  
(Please underline the appropriate response).

6- very satisfied  
5- fairly satisfied  
4- a little satisfied  
3- a little dissatisfied  
2- fairly dissatisfied  
1- very dissatisfied

**How satisfied were you with the kind or quality of assistance that you received?**  
(Please underline the appropriate response).

6- very satisfied	3- a little dissatisfied
5- fairly satisfied	2- fairly dissatisfied
4- a little satisfied	1- very dissatisfied



**In the 6 weeks after the birth of your baby, did you get emotional support from others around you? (i.e. sympathy, understanding, caring, reassurance, etc.)**  
(Please underline the appropriate response)

**Who provided this emotional support?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

**How satisfied were you with the amount of emotional support that you received?**  
(Please underline the appropriate response)

**How satisfied were you with the kind or quality of emotional support that you received? (Please underline the appropriate response).**

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

**In the 6 weeks after the birth of your baby, did you turn to others for guidance?  
(i.e. advice, information, solutions to problems, etc.)**

not at all	once or twice	about once	several times	about every
		a week	a week	day

no one 1) \_\_\_\_\_ 6) \_\_\_\_\_

2) \_\_\_\_\_ 7) \_\_\_\_\_

3) \_\_\_\_\_ 8) \_\_\_\_\_

4) \_\_\_\_\_ 9) \_\_\_\_\_

5) \_\_\_\_\_

6- very satisfied  
5- fairly satisfied  
4- a little satisfied  
3- a little dissatisfied  
2- fairly dissatisfied  
1- very dissatisfied

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

**In the 6 weeks after the birth of your baby, did other people depend on you for their well-being and care?**

not at all	once or twice	about once	several times	about every
		a week	a week	day

no one 1) \_\_\_\_\_ 6) \_\_\_\_\_  
2) \_\_\_\_\_ 7) \_\_\_\_\_  
3) \_\_\_\_\_ 8) \_\_\_\_\_  
4) \_\_\_\_\_ 9) \_\_\_\_\_  
5) \_\_\_\_\_

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

**MORE**

## ABOUT RIGHT

LESS

**In the 6 weeks after the birth of your baby, did you spend time socialising with people? (i.e. recreation, shopping, chatting, visiting, etc.) (Please underline the appropriate response)**

**With whom did you socialise?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

**How satisfied were you with the amount of socialising that you did? (Please underline the appropriate response)**

**How satisfied were you with the kind or quality of socialising that you did? (Please underline the appropriate response)**

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

**In the 6 weeks after the birth of your baby, did anyone give you feedback about what you were doing? (i.e. praise, compliments, criticism, blame, etc.) (Please underline the appropriate response)**

**From whom did you get feedback?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

**How satisfied were you with the amount of feedback you received?** (Please underline the appropriate response)

**How satisfied were you with the kind of feedback that you got?** (Please underline the appropriate response).

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

## Appendix 7B

### Six Week Postnatal Inventory of Socially Supportive Behaviours

آپکے بچے کی میڈائنس کے چھ ہفتے کے اندر دوسروں سے آپ کو جو مدد اور تعاون ملتا رہا اسکے متعلق مندرجہ ذیل سوالات آپ سے پوچھے جاتے ہیں۔ بچے کی میڈائنس کے چھ ہفتوں میں جو لوگ آپ کی مدد کرتے رہے ہیں۔ اور آپکی زندگی کو خوشگوار بناتے رہے ہیں۔ ہم ان کے بارے میں جاننا چاہتے ہیں۔ آپکی کالہ کردگی کے بارے میں ہم آپ کو ایک لسٹ فراہم کر رہے ہیں۔ جس سے آپکو معلوم ہو گا۔ کہ آپکی کالہ کردگی اور آپ کے ساتھ کالہ کردگی ان چھ ہفتوں میں کیسی رہی؟۔

یہاں ہر سوال کے تین حصے ہیں۔ اور درج ذیل پر مشتمل ہیں۔

- 1 چھ ہفتوں میں یہ سرگرمیاں کتنی دفعہ پیش آئیں؟۔
- 2 آپکے ساتھ پیش آنے والے لوگوں سے آپکا رشتہ کیا تھا؟۔
- 3 آپ خود کو ملنے والی مدد سے کس قدر مطمئن ہیں؟۔

### مثال۔

ان چھ ہفتوں سے اب تک جو آپ کر رہی ہیں۔ کیا کوئی شخص اس پر تبصرہ کر رہا ہے؟  
(یعنی تعریف، تحسین، تنقید، اہام وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے۔  
بالکل نہیں ایک یا دو بار ہفتے میں ایک بار ہفتے میں کئی بار تقریباً روزانہ  
آپ پر تبصرہ کون کر رہا ہے؟۔ مہربانی کر کے ان لوگوں سے اپنی شناسائی یا رشتہ مدی تحریر کریں۔  
اگر ان میں سے کوئی بھی نہ ہو تو یہ بھی ظاہر کریں۔ ہر سوال کے آگے نو سے زیادہ جواب مت دیجئے۔  
کوئی نہیں۔

- |         |                   |
|---------|-------------------|
| _____ 6 | 1 - T.N. بڑی بہن۔ |
| _____ 7 | 2 - B.H. دوست۔    |
| _____ 8 | 3 - S.H. ماں۔     |
| _____ 9 | 4 - R.S. شوہر۔    |
| _____ 5 |                   |

- آپ پر جتنا تبصرہ کیا گیا، اس تبصرہ سے آپ کس قدر مطمئن ہیں۔
- |                          |                      |
|--------------------------|----------------------|
| 3 - تھوڑی غیر مطمئن۔     | 6 - بہت زیادہ مطمئن۔ |
| 2 - کسی حد تک غیر مطمئن۔ | 5 - کسی حد تک مطمئن۔ |
| 1 - بالکل غیر مطمئن۔     | 4 - کچھ مطمئن۔       |

- اس تبصرے کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں۔
- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

سوال نمبر 1

بچے کی میڈائٹس کے چھ ہفتوں کے دوران کیا آپ عملی طور پر دوسروں سے ان کی خدمات اور مدد حاصل کرتی رہی ہیں؟ (مثلاً، گھریلو کام کاج، مقررہ کام، ملٹی مدد وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

کس نے مدد کی مہربانی کر کے ان لوگوں سے شائستگی یا رشتہ داری کیے۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |           |           |
|-----------|-----------|
| _____ 1 - | _____ 6 - |
| _____ 2 - | _____ 7 - |
| _____ 3 - | _____ 8 - |
| _____ 4 - | _____ 9 - |
| _____ 5 - |           |

- آپ کو کتنی تقویت مل رہی ہے اس سے آپ کس قدر مطمئن ہیں۔
- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |
- آپ کو جو مدد ملی اس کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں۔
- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

## سوال نمبر 2

بچے کی پیدائش کے چھ ہفتوں کے دوران کیا آپ جذباتی طور پر دوسروں سے ان کی خدمات اور مدد حاصل کرتی رہی ہیں؟۔ (مثلاً ہمدردی، اتفاق رائے، تہمداری، محاسن، بندھناؤ وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ کو کس نے یہ جذباتی سہارے دیے۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ داری لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

- آپ کو جتنا جذباتی سہارا ملا ہے۔ اس سے آپ کس قدر مطمئن تھیں۔
- 6۔ بہت زیادہ مطمئن۔ 3۔ تھوڑی غیر مطمئن۔
- 5۔ کسی حد تک مطمئن۔ 2۔ کسی حد تک غیر مطمئن۔
- 4۔ کچھ مطمئن۔ 1۔ بالکل غیر مطمئن۔
- آپ کو جو جذباتی سہارا ملا۔ اس کی خوبی اور قسم سے آپ کس قدر مطمئن تھیں۔
- 6۔ بہت زیادہ مطمئن۔ 3۔ تھوڑی غیر مطمئن۔
- 5۔ کسی حد تک مطمئن۔ 2۔ کسی حد تک غیر مطمئن۔
- 4۔ کچھ مطمئن۔ 1۔ بالکل غیر مطمئن۔



### سوال نمبر 3

بچے کی ولادت سے چھ مہینے تک کیا آپ رہنمائی کیلئے دوسروں سے رجوع کرتی رہی ہیں؟۔ (مثلاً: نصیحت،

اطلاع، مسائل کا حل وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ مہینے میں ایک بار۔ مہینے میں کئی بار۔ تقریباً روزانہ۔

آپ کو کس نے رہنمائی دی۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہی لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ

بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

آپ کو جو رہنمائی ملی۔ اس سے آپ کس قدر مطمئن تھیں۔

- |                         |                     |
|-------------------------|---------------------|
| 3۔ تھوڑی غیر مطمئن۔     | 6۔ بہت زیادہ مطمئن۔ |
| 2۔ کسی حد تک غیر مطمئن۔ | 5۔ کسی حد تک مطمئن۔ |
| 1۔ بالکل غیر مطمئن۔     | 4۔ کچھ مطمئن۔       |

آپ کو جو رہنمائی ملی۔ اس کی خوبی اور قسم سے آپ کس قدر مطمئن تھیں۔

- |                         |                     |
|-------------------------|---------------------|
| 3۔ تھوڑی غیر مطمئن۔     | 6۔ بہت زیادہ مطمئن۔ |
| 2۔ کسی حد تک غیر مطمئن۔ | 5۔ کسی حد تک مطمئن۔ |
| 1۔ بالکل غیر مطمئن۔     | 4۔ کچھ مطمئن۔       |

#### سول نمبر 4

آپ کے بچے کی میڈائنز کے ہمہ مہنے بعد تک دوسروں نے آپ پر انحصار کیا ہے؟۔ مہربانی کر کے مناسب جواب پر دائرہ لگائیے۔

بالکل نہیں۔ ایک یا دو بار۔ مہنے میں ایک بار۔ مہنے میں کئی بار۔ تقریباً روزانہ۔

کون آپ پر انحصار کرتا رہا ہے؟۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہی لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سول میں نو سے زیادہ تعدلات دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

دوسرے لوگ جو آپ کی توجہ چاہتے تھے۔ اس پر آپ کس قدر مطمئن تھیں؟۔

- |                               |                           |
|-------------------------------|---------------------------|
| _____ 3۔ تھوڑی غیر مطمئن۔     | _____ 6۔ بہت زیادہ مطمئن۔ |
| _____ 2۔ کسی حد تک غیر مطمئن۔ | _____ 5۔ کسی حد تک مطمئن۔ |
| _____ 1۔ بالکل غیر مطمئن۔     | _____ 4۔ کچھ مطمئن۔       |

کیا یہ درست ہے کہ آپ اس کی پیشی کے سلسلہ کو اپنی زندگی میں ترجیح دیں گی۔ درست جواب صحیح کے نشان سے ٹک کریں۔

\_\_\_\_\_ زیادہ

\_\_\_\_\_ تقریباً صحیح

\_\_\_\_\_ کم

## سول نمبر 5

بچے کی ولادت سے چھ ہفتے تک کیا آپ دوسروں سے میل ملاپ کرتی تھیں؟۔ (مثلاً: قریب، خرید و

فروخت، کپ شپ، لواٹھ، ملاقات کیلئے جانا وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے۔

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ کے سماجی تعلقات کن لوگوں سے تھے۔ مہربانی کر کے ان لوگوں سے ششماہی یا رشتہ دہی لکھیے۔ اگر ان میں سے

کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سول میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |

آپ نے جتنا میل ملاپ کیا؟  
اس میل ملاپ سے آپ کس قدر مطمئن تھیں؟۔

- |                         |                     |
|-------------------------|---------------------|
| 3۔ تھوڑی غیر مطمئن۔     | 6۔ بہت زیادہ مطمئن۔ |
| 2۔ کسی حد تک غیر مطمئن۔ | 5۔ کسی حد تک مطمئن۔ |
| 1۔ بالکل غیر مطمئن۔     | 4۔ کچھ مطمئن۔       |

میل ملاپ کی خوبی اور قسم سے آپ کس قدر مطمئن تھیں؟۔

- |                         |                     |
|-------------------------|---------------------|
| 3۔ تھوڑی غیر مطمئن۔     | 6۔ بہت زیادہ مطمئن۔ |
| 2۔ کسی حد تک غیر مطمئن۔ | 5۔ کسی حد تک مطمئن۔ |
| 1۔ بالکل غیر مطمئن۔     | 4۔ کچھ مطمئن۔       |

## سول نمبر 6

آپ بچے کی پیدائش کے ہم ہفتے بعد تک جو کچھ کر رہی تھیں۔ کیا لڑکے شخصی اس پر تبصرہ کرتا تھا؟

ہے؟۔ (مثلاً تعریف، ستائش، تنقید، الزام وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے۔

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ پر تبصرہ کون کرتا تھا ہے؟۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہی لکھیے۔ اگر ان میں سے کوئی

نہیں تو یہ بھی ظاہر کیجیے۔ ہر سول میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |

5 آپ پر جتنا تبصرہ کیا گیا مضمئن تھیں؟۔ اس پر تبصرہ سے آپ کس قدر مضمئن تھیں؟۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مضمئن۔ | 3۔ تھوڑی غیر مضمئن۔     |
| 5۔ کسی حد تک مضمئن۔ | 2۔ کسی حد تک غیر مضمئن۔ |
| 4۔ کچھ مضمئن۔       | 1۔ بالکل غیر مضمئن۔     |

اس تبصرہ کی خوبی اور قسم سے آپ کس قدر مضمئن تھیں؟۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مضمئن۔ | 3۔ تھوڑی غیر مضمئن۔     |
| 5۔ کسی حد تک مضمئن۔ | 2۔ کسی حد تک غیر مضمئن۔ |
| 4۔ کچھ مضمئن۔       | 1۔ بالکل غیر مضمئن۔     |

## EIGHT WEEK POSTNATAL INVENTORY OF SOCIALLY SUPPORTIVE BEHAVIOURS

The following questions ask you about the support or help that you received **after the 6 week period since the birth of your child**. We are interested in learning about the ways in which you feel that others have helped or tried to make your life more pleasant in the past 2 weeks of your postnatal period. You will find a list of activities that others may have done for you, to you, or with you over the past 2 weeks, including now.

**There are three sections for each question, these involve:**

- 1- how often these activities occurred over the 2 weeks, including now;
- 2- the relationship to you of the people involved;
- 3- a rating of your satisfaction with the support.

### EXAMPLE

**In the past 2 weeks, including now, has anyone been giving you feedback about what you are doing? (i.e. praise, compliments, criticism, blame, etc.) (Please underline the appropriate response)**

not at all	<u>once or twice</u>	about once a week	several times a week	about every day
------------	----------------------	----------------------	-------------------------	--------------------

**From whom do you get feedback?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

no one    1) T.N. (older sister)                  6) \_\_\_\_\_  
               2) B.H. (friend)                      7) \_\_\_\_\_  
               3) S.H (mother)                     8) \_\_\_\_\_  
               4) R.S. (husband)                 9) \_\_\_\_\_  
               5) \_\_\_\_\_

**How satisfied are you with the amount of feedback you are receiving?** (Please underline the appropriate response)

6- very satisfied  
5- fairly satisfied  
4- a little satisfied  
3- a little dissatisfied  
2- fairly dissatisfied  
1- very dissatisfied

**How satisfied are you with the kinds of feedback that you receive?** (Please underline the appropriate response)

6- very satisfied  
5- fairly satisfied  
4- a little satisfied  
3- a little dissatisfied  
2- fairly dissatisfied  
1- very dissatisfied

Question 1

**In the past 2 weeks, including now, have you been getting practical assistance or services from others ? (i.e. chores, tasks, finances, etc.)** (Please underline the appropriate response)

not at all      once or twice      about once      several times      about every  
   a week                      a week                      day

**Who provides this help?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

no one    1) \_\_\_\_\_                      6) \_\_\_\_\_  
                 2) \_\_\_\_\_                      7) \_\_\_\_\_  
                 3) \_\_\_\_\_                      8) \_\_\_\_\_  
                 4) \_\_\_\_\_                      9) \_\_\_\_\_  
                 5) \_\_\_\_\_

**How satisfied are you with the amount of assistance that you are receiving?**  
(Please underline the appropriate response)

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

**How satisfied were you with the kind or quality of assistance that you are receiving?** (Please underline the appropriate response)

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

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not at all	once or twice	about once	several times	about every
		a week	a week	day

no one 1) \_\_\_\_\_ 6) \_\_\_\_\_

2) \_\_\_\_\_ 7) \_\_\_\_\_

3) \_\_\_\_\_ 8) \_\_\_\_\_

4) \_\_\_\_\_ 9) \_\_\_\_\_

5) \_\_\_\_\_

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

6- very satisfied                      3- a little dissatisfied  
5- fairly satisfied                      2- fairly dissatisfied  
4- a little satisfied                      1- very dissatisfied

Question 3

**In the past 2 weeks, including now, have you been turning to others for guidance?  
(i.e. advice, information, solutions to problems, etc.)**  
(please underline the appropriate response)

not at all	once or twice	about once	several times	about every
		a week	a week	day

**Who are these people?** Please indicate the initials and the relationship of these people.  
If there is no one, then please indicate this. Do not list more than nine people per question.

no one	1) _____	6) _____
	2) _____	7) _____
	3) _____	8) _____
	4) _____	9) _____
	5) _____	

**How satisfied are you with the amount of guidance you are receiving?** (Please underline the appropriate response)

6- very satisfied	3- a little dissatisfied
5- fairly satisfied	2- fairly dissatisfied
4- a little satisfied	1- very dissatisfied

**How satisfied are you with the kind or quality of guidance that you are receiving?**  
(Please underline the appropriate response)

6- very satisfied	3- a little dissatisfied
5- fairly satisfied	2- fairly dissatisfied
4- a little satisfied	1- very dissatisfied



1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

(please underline the appropriate response)

no one

1) _____	6) _____
2) _____	7) _____
3) _____	8) _____
4) _____	9) _____
5) _____	

6- very satisfied  
5- fairly satisfied  
4- a little satisfied  
3- a little dissatisfied  
2- fairly dissatisfied  
1- very dissatisfied

**MORE**

                     ABOUT RIGHT

\_\_\_\_\_ LESS

Question 5

**In the past 2 weeks, including now, have you been spending time socialising with people? (i.e. recreation, shopping, chatting, visiting, etc.)** (Please underline the appropriate response)

not at all      once or twice      about once      several times      about every  
a week      a week      day

**With whom do you socialise?** Please indicate the initials and the relationship of these people. If there is no one, then please indicate this. Do not list more than nine people per question.

no one 1) \_\_\_\_\_ 6) \_\_\_\_\_  
2) \_\_\_\_\_ 7) \_\_\_\_\_  
3) \_\_\_\_\_ 8) \_\_\_\_\_  
4) \_\_\_\_\_ 9) \_\_\_\_\_  
5) \_\_\_\_\_

**How satisfied are you with the amount of socialising that you do?** (Please underline the appropriate response)

6- very satisfied      3- a little dissatisfied  
5- fairly satisfied      2- fairly dissatisfied  
4- a little satisfied      1- very dissatisfied

**How satisfied are you with the kind or quality of socialising that you do?** (Please underline the appropriate response)

6- very satisfied      3- a little dissatisfied  
5- fairly satisfied      2- fairly dissatisfied  
4- a little satisfied      1- very dissatisfied

1990

## Eight Week Postnatal Inventory of Socially Supportive Behaviours

آپکے بچے کی پیدائش کے چھ مہینے کے بعد دوسروں سے آپ کو جو مدد اور تعاون ملتا رہا اسکے متعلق مندرجہ ذیل سوالات آپ سے پوچھے جاتے ہیں۔ بچے کی پیدائش کے آخری دو مہینوں میں (ساتویں اور آٹھویں مہینے) میں جو لوگ آپ کی مدد کرتے رہے ہیں۔ اور آپکی زندگی کو خوشگوار بناتے رہے ہیں۔ ہم ان کے بارے میں جاننا چاہتے ہیں۔ آپکی کارکردگی کے بارے میں ہم آپ کو ایک لسٹ فراہم کر رہے ہیں۔ جس سے آپکو معلوم ہو گا۔ کہ آپکی کارکردگی اور آپ کے ساتھ کارکردگی ان دو مہینوں میں کیسی رہی؟۔

یہاں ہر سوال کے تین حصے ہیں۔ اور درج ذیل پر مشتمل ہیں۔

- 1 دو مہینوں میں یہ سرگرمیاں کتنی دفعہ پیش آئیں؟۔
- 2 آپکے ساتھ پیش آنے والے لوگوں سے آپکا رشتہ کیا تھا؟۔
- 3 آپ خود کو ملنے والی مدد سے کس قدر مطمئن ہیں؟۔

## مثال۔

گذشتہ دو مہینوں سے اب تک جو آپ کر رہی ہیں۔ کیا کوئی شخص اس پر تبصرہ کر رہا ہے؟

(یعنی تعریف، تحسین، تنقید، الزام وغیرہ) ممبرانی کر کے مناسب جواب پر دائرہ لگائیے۔

بالکل نہیں ایک یا دو بار، مہینے میں ایک بار، مہینے میں کئی بار، تقریباً روزانہ

آپ پر تبصرہ کون کر رہا ہے؟۔ ممبرانی کر کے ان لوگوں سے اپنی شناسائی یا رشتہ دہی تحریر کریں۔

اگر ان میں سے کوئی بھی نہ ہو تو یہ بھی ظاہر کریں۔ ہر سوال کے آگے نوے زیادہ جواب مت دیجئے۔

کوئی نہیں۔

\_\_\_\_\_ 6 T.N. - 1 بڑی بہن۔

\_\_\_\_\_ 7 B.H. - 2 دوست۔

\_\_\_\_\_ 8 S.H. - 3 ماں۔

\_\_\_\_\_ 9 R.S. - 4 شوہر۔

\_\_\_\_\_ 5

آپ پر تبصرہ کیا گیا، اس تبصرے آپ کس قدر مطمئن ہیں۔

3۔ تھوڑی غیر مطمئن۔ 6۔ بہت زیادہ مطمئن۔

2۔ کسی حد تک غیر مطمئن۔ 5۔ کسی حد تک مطمئن۔

1۔ بالکل غیر مطمئن۔ 4۔ کچھ مطمئن۔

- اپس تبصرہ کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں۔
- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

سوال نمبر 1

گزشتہ دو ہفتوں کے دوران اسی تک کیا آپ عملی طور پر دوسروں سے ان کی خدمات اور امداد حاصل کرتی رہی ہیں؟ (مثلاً گھریلو کام کاج، مقررہ کام مالی امداد وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

کس نے مدد کی مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہی لکھی۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعلیمات دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

- آپ کو جتنی تقویت مل رہی ہے اس سے آپ کس قدر مطمئن ہیں۔
- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |
- آپ کو جو امداد ملی اس کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں۔
- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

## سوال نمبر 2

گزشتہ دو مفتوں سے آج تک کیا آپ جذباتی طور پر دوسروں سے ان کی خدمات اور مدد حاصل کرتی رہی

ہیں؟۔ (مثلاً ہمدردی، اتفاق رائے، تیمارداری، طحارس، بندھانا وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ کو کس نے یہ جذباتی سہارے دیے۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ داری لکھیے۔ اگر ان میں سے

کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

آپ کو جتنا جذباتی سہارا ملتا رہا ہے۔ اس سے آپ کس قدر مطمئن تھیں۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

آپ کو جو جذباتی سہارا ملا۔ اس کی خوبی اور قسم سے آپ کس قدر مطمئن تھیں۔

- |                     |                         |
|---------------------|-------------------------|
| 6۔ بہت زیادہ مطمئن۔ | 3۔ تھوڑی غیر مطمئن۔     |
| 5۔ کسی حد تک مطمئن۔ | 2۔ کسی حد تک غیر مطمئن۔ |
| 4۔ کچھ مطمئن۔       | 1۔ بالکل غیر مطمئن۔     |

### سوال نمبر 3

گزشتہ دو وقتوں سے کب تک کیا آپ رہنمائی کھٹے دوسروں سے رجوع کرتی رہی ہیں؟۔ (مثلاً: نصیحت،

اطلاع، مسائل کا حل وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ کو کس نے رہنمائی دی۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہی لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ

بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیتیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

آپ کو جتنی رہنمائی مل رہی ہے۔ اس سے آپ کس قدر مطمئن ہیں۔

- |                                |                            |
|--------------------------------|----------------------------|
| _____ 3 - تھوڑی غیر مطمئن۔     | _____ 6 - بہت زیادہ مطمئن۔ |
| _____ 2 - کسی حد تک غیر مطمئن۔ | _____ 5 - کسی حد تک مطمئن۔ |
| _____ 1 - بالکل غیر مطمئن۔     | _____ 4 - کچھ مطمئن۔       |

آپ کو جو رہنمائی ملی۔ اس کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں۔

- |                                |                            |
|--------------------------------|----------------------------|
| _____ 3 - تھوڑی غیر مطمئن۔     | _____ 6 - بہت زیادہ مطمئن۔ |
| _____ 2 - کسی حد تک غیر مطمئن۔ | _____ 5 - کسی حد تک مطمئن۔ |
| _____ 1 - بالکل غیر مطمئن۔     | _____ 4 - کچھ مطمئن۔       |

#### سوال نمبر 4

گزشتہ دو مفتوں سے دوسروں نے آپ پر انحصار کیا ہے؟ مہربانی کر کے مناسب جواب پر دائرہ لگائیے

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

کون آپ پر انحصار کرتا ہے؟ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہی لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ

بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |
|         | _____ 5 |

دوسرے لوگ جو آپ کی توجہ چاہتے ہیں۔ اس پر آپ کس قدر مطمئن ہیں؟

6۔ بہت زیادہ مطمئن۔ 3۔ تھوڑی غیر مطمئن۔

5۔ کسی حد تک مطمئن۔ 2۔ کسی حد تک غیر مطمئن۔

4۔ کچھ مطمئن۔ 1۔ بالکل غیر مطمئن۔

کیا یہ درست ہے کہ آپ اس کمی پیشی کے سلسلہ کو اپنی زندگی میں ترجیح دیں گی۔ درست جواب صحیح کے نشان

سے ٹک کریں۔

\_\_\_\_\_ زیادہ

\_\_\_\_\_ تقریباً صحیح

\_\_\_\_\_ کم



## سوال نمبر 5

گزشتہ دو مہینوں میں کیا آپ دوسروں سے میل ملاپ کرتے ہیں؟۔ (مثلاً: تفریح، خرید و فروخت، کپ شپ لوانا، ملاقات کیلئے جانا وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے۔

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ کے سماجی تعلقات کن لوگوں سے ہیں۔ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ داری لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |

آپ نے جتنا میل ملاپ کیا، اس میل ملاپ سے آپ کس قدر مطمئن ہیں؟۔

- |                         |                     |
|-------------------------|---------------------|
| 3۔ تھوڑی غیر مطمئن۔     | 6۔ بہت زیادہ مطمئن۔ |
| 2۔ کسی حد تک غیر مطمئن۔ | 5۔ کسی حد تک مطمئن۔ |
| 1۔ بالکل غیر مطمئن۔     | 4۔ کچھ مطمئن۔       |

میل ملاپ کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں؟۔

- |                         |                     |
|-------------------------|---------------------|
| 3۔ تھوڑی غیر مطمئن۔     | 6۔ بہت زیادہ مطمئن۔ |
| 2۔ کسی حد تک غیر مطمئن۔ | 5۔ کسی حد تک مطمئن۔ |
| 1۔ بالکل غیر مطمئن۔     | 4۔ کچھ مطمئن۔       |

## سوال نمبر 6

گذشتہ دو ہفتوں میں کیا آپ جو کچھ کر رہی ہیں کیا کوئی شخص اس پر تبصرہ کر رہا ہے؟ (مثلاً: تعریف، ستائش، تنقید، الزام وغیرہ) مہربانی کر کے مناسب جواب پر دائرہ لگائیے۔

بالکل نہیں۔ ایک یا دو بار۔ ہفتے میں ایک بار۔ ہفتے میں کئی بار۔ تقریباً روزانہ۔

آپ پر تبصرہ کون کر رہا ہے؟ مہربانی کر کے ان لوگوں سے شناسائی یا رشتہ دہی لکھیے۔ اگر ان میں سے کوئی نہیں تو یہ بھی ظاہر کیجیے۔ ہر سوال میں نو سے زیادہ تعداد مت دیجیے۔

کوئی نہیں۔

- |         |         |
|---------|---------|
| _____ 6 | _____ 1 |
| _____ 7 | _____ 2 |
| _____ 8 | _____ 3 |
| _____ 9 | _____ 4 |

5- آپ پر جتنا تبصرہ کیا گیا، اس تبصرہ سے آپ کس قدر مطمئن ہیں؟

- |                     |                         |
|---------------------|-------------------------|
| 6- بہت زیادہ مطمئن۔ | 3- تھوڑی غیر مطمئن۔     |
| 5- کسی حد تک مطمئن۔ | 2- کسی حد تک غیر مطمئن۔ |
| 4- کچھ مطمئن۔       | 1- بالکل غیر مطمئن۔     |
- اس تبصرہ کی خوبی اور قسم سے آپ کس قدر مطمئن ہیں؟
- |                     |                         |
|---------------------|-------------------------|
| 6- بہت زیادہ مطمئن۔ | 3- تھوڑی غیر مطمئن۔     |
| 5- کسی حد تک مطمئن۔ | 2- کسی حد تک غیر مطمئن۔ |
| 4- کچھ مطمئن۔       | 1- بالکل غیر مطمئن۔     |

## **Appendix 9A**

### **ANTENATAL INTERVIEW QUESTIONS**

*I'd like to talk to you about your pregnancy to get a better idea about how you are feeling and coping with everything. I'd also like to tape record our interview for later reference. The purpose of this talk is to try and get a full picture of how your pregnancy has progressed and how you feel about it.*

#### **CONCEPTION**

1. What were your feelings when you found out that you were pregnant?
2. How did you break the news of your pregnancy?  
PROMPTS: Who did you tell first?  
When did you break the news?  
Did you have any reservations about telling others that you were pregnant?
3. Had you given much consideration to having children before you became pregnant?
4. Were you working when you found out that you were pregnant? If, YES, then did you continue working, or change your work routine because you were pregnant?
5. What would you say were your reasons for wanting to have a baby?
6. What were your husband's/partner's feelings about the news of your pregnancy?

#### **PREGNANCY**

7. How would you say that you have coped with your pregnancy thus far?
8. Have you had any kind of help from others in dealing with your pregnancy?  
PROMPTS: Help with household chores?
9. Do you feel that you have had enough support from people around you?  
PROMPTS: emotional support?  
practical support?  
advice and information?
10. Who would you say has helped you most throughout your pregnancy?  
PROMPTS: partner?  
mother/female relative?

friends/acquaintances?

What kind of help did they provide?

11. Do you feel that people around you have confidence in your abilities?

12. Do you spend time with others who share the same interests as you?

13. Are your relationships providing you with the kind of emotional security that you want?

14. Are there other people who depend on you for help?

15. If you wanted to know something relating to your pregnancy, how would you get this information?

PROMPTS: Ask hospital staff?

Consult a book etc.?

Ask a friend, or member of family?

16. What have your rest patterns been like?

17. How do you feel about the way that your pregnancy has been handled by others around you?

18. Have you altered your diet in any way since becoming pregnant?

PROMPTS: Eating more fruit and veg, etc.

Taking vitamin and iron supplements etc.

Have you avoided eating certain foods?

b. Why have you (not) changed your eating habits?

PROMPTS: On the basis of doctor's/midwife's advice?

Advice from mother or other relative?

19. Are you aware of any activities that are encouraged or discouraged during pregnancy?

PROMPTS: Any superstitions about pregnancy?

Any "old wives' tales"?

Based on medical advice?

20. Have you altered your activities during pregnancy on the basis of "old wives' tales", or other superstitions, and why?

21. In what ways has being pregnant affected you?

PROMPTS: Changes in social activities?

Mood changes?  
Energy and motivation?

22. What would you say were the good points, if any, of your pregnancy?

23. What would you say were the bad points, if any, of your pregnancy?

### **ABOUT THE BIRTH**

24. How do you feel about giving birth?

PROMPTS: Are you nervous? Do you feel prepared?

25. Do you plan to have any person with you during labour?

PROMPTS: why do you (not) want someone with you?

Who would you want there?

26. How do you feel about taking painkilling drugs during labour?

27. Would you rather have a natural delivery or a caesarean section?

28. How would you feel if your labour had to be induced?

29. Did you consider the possibility of having a home birth?

25. Do you have any preference about whether the staff are male or female?

30. Would you find it more helpful to have your own GP. or midwife at the birth?

31. Do you feel as though you could cope with a long labour?

32. Ideally, how long would you like to stay in hospital?

PROMPTS: prefer an early/late discharge. why?

### **ABOUT THE BABY**

33. Do you have any preference about the sex of your baby?

34. Have you thought of any baby names yet?

35. How well do you think that you will cope with the demands of childcare?

PROMPTS: are you confident? Are you apprehensive?

36. Do you have any concerns and worries about motherhood?

## Appendix 9B

### Antenatal Interview Questions

اس گفتگو کا مقصد یہ ہے کہ حاملہ ہونے کے بعد آپ جس دور سے گزری ہیں۔ ان عوامل کے بارے میں آپ کیا محسوس کرتی ہیں؟۔ میں ان تمام حالات کو پیش نظر رکھنا چاہتی ہوں۔ کہ جن عوامل سے آپ گزر رہی ہیں۔

### (تعقلات)

- 1 - آپ کے حاملہ ہونے کے بعد آپ کے کیا احساسات تھے؟۔
- 2 - آپ نے اپنے حاملہ ہونے کی خبر کس طرح پہنچائی؟۔

### (ترغیبات)

- آپ نے پہلے کس کو بتایا؟۔
- آپ نے یہ خبر کب پہنچائی؟۔
- کیا آپ نے دوسروں کو اپنے حاملہ ہونے کے بارے میں بتانے میں ہچکچاہٹ محسوس کی؟۔
- 3 - کیا آپ حاملہ ہونے سے پہلے یہ سوچتی تھیں۔ کہ آپ کے بچے ہونے چاہئیں؟۔
- 4 - جب آپ حاملہ ہوئیں۔ تو کیا آپ ملازمت بدلتی تھیں؟۔
- 5 - اگر ہاں تو کیا آپ ملازمت کرتی ہیں؟۔ اور کیا آپ نے اپنے حاملہ ہونے کی وجہ سے اپنے کاموں میں تبدیلی کی؟۔
- 6 - آپ کے حاملہ ہونے کی خبر سن کر آپ کے شوہر / دوست کے کیا تاثرات تھے؟۔

### حاملہ

- 7 - حاملہ ہونے سے اس وقت تک آپ نے صورت حال کا مقابلہ کس طریقے سے کیا؟۔
- 8 - کیا آپ حاملہ ہونے کے دوران دوسروں سے کوئی مدد لیتی رہی ہیں؟۔

### ترغیبات

- کھریلو کام کاج میں مدد۔

کیسے محسوس کرتے ہیں کہ

9 - کیا آپ؟ ارد گرد کے لوگوں سے کافی مدد مل رہی ہے؟

## ترغیبات

- جذباتی مدد؟

- عملی مدد؟

- نصیحت اور اطلاع؟

10 - آپ کے حامد ہونے کے دوران آپکی سب سے زیادہ مدد کس نے کی؟

## ترغیبات

ساتھی

۔ سال / زمانہ رشتہ دار

۔ دوست / شناسا لوگ - کس قسم کی مدد دیتے تھے؟

11 - کیا آپ سے ملنے والے آپ کی صلاحیتوں کے بارے میں پر اعتماد ہیں؟

12 - جن لوگوں کی دلچسپیاں آپ ہی کی طرح کی ہیں۔ کیا آپ ان لوگوں کے ساتھ وقت گزارتی ہیں؟

13 - کیا آپ کے عزیز واقارب آپ کو جذباتی سہارا دے رہے ہیں؟

14 - کیا کچھ لوگ ایسے بھی ہیں جو آپ پر مدد کھینچنے انحصار کر رہے ہوں؟

15 - اگر آپ اپنے حامد ہونے کے بارے میں کچھ جاننا چاہتی ہوں تو آپ یہ معلومات کیسے حاصل کریں گی؟

## ترغیبات

۔ ہسپتال کے عملہ سے پوچھیں گی۔

۔ کوئی کتاب دیکھیں گی۔

۔ دوست یا خاندان کے فرد سے پوچھیں گی۔

16 - آپ کا آرام کرنے کا طریقہ کار کیا ہے؟

17 - آپکے حامد ہونے کے بعد آپکے ملنے والوں کا آپکے ساتھ جو سلوک رہا ہے۔ انکے بارے میں آپکے احساسات کیا ہیں؟

18 - آپ نے حاملہ ہونے کے بعد اپنی خوراک میں کسی قسم کی تبدیلی کی ہے؟

## ترغیبات

— سبزیاں اور پھل زیادہ کھانا۔

— وٹامن یا آئرن کھانا وغیرہ۔

— کیا آپ نے کچھ کھانے سے پرہیز کیا؟

18b - آپ نے اپنے کھانے کی عادات میں تبدیلی کیوں نہیں کی؟ / کی؟

## ترغیبات

— ڈاکٹر یا ڈوائف کے مشورہ پر۔

— ماں یا رشتہ داروں کے مشورہ پر۔

19 - کیا آپ جانتی ہیں آپ کے حمل پر کس بات کا اچھا یا بُرا اثر ہو سکتا ہے؟

## ترغیبات

— حاملہ ہونے کے بارے میں کوئی توہمات۔

— بڑی بوڑھیوں کی کہات کے مطابق۔

— ڈاکٹری نصیحت۔

20 - کیا آپ نے بڑی بوڑھیوں کی کہات پر اثر لیا ہے؟ کیا آپ ان کے بات سے جانتی ہیں؟

کوئی تبدیلی کی ہے؟ اگر کی ہے تو کیوں؟

21 - اس حمل نے آپ پر کیا اثر کیا ہے؟

## ترغیبات

— سماجی سرگرمیوں میں تبدیلی۔

— موڈ میں تبدیلی۔

— طاقت اور محرمات۔

22 - اگر آپ کے حمل کے بارے میں اچھے نکات یا تاثرات ہیں۔ آپ ان کے متعلق کیا کہیں گی؟

23 - اگر آپ کے حمل کے بارے میں برے نکات یا تاثرات ہیں۔ آپ ان کے متعلق کیا کہیں گی؟



## پیدائش کے سلسلے میں۔

24 - پیدائش کے سلسلے میں آپ کیا محسوس کرتی ہیں؟۔

## ترغیبات

۔ کیا آپ خوفزدہ ہیں؟۔

۔ کیا آپ اپنے آپ کو تیار محسوس کرتی ہیں؟۔

25 - کیا آپ نے پیدائش کے وقت کسی کو اپنے ساتھ رکھنے کا فیصلہ کیا ہے؟۔

## ترغیبات

۔ آپ کسی کو اپنے ساتھ کیوں نہیں رکھنا چاہتیں؟۔

۔ آپ کس کو اپنے ساتھ رکھنا چاہتی ہیں؟۔

26 - کیا آپ دردزہ کے وقت درد ختم کرنے والی ادویات کھانا پسند کریں گی؟۔

27 - کیا آپ قدرتی پیدائش کو ترجیح دیں گی یا لٹرن کو؟۔

28 - اگر آپ کو دردزہ کی ترغیب دی جانے تو آپ کیسا محسوس کریں گی؟۔

29 - کیا آپ نے کبھی گھریلو پیدائش ہونے کے متعلق سوچا ہے؟۔

30 - کیا آپ اس بات کو ترجیح دیں گی کہ ہسپتال کا عملہ مرد ہو یا عورت؟۔

31 - کیا آپ وقت پیدائش اپنے فیملی ڈاکٹر یا دینی کو بہت زیادہ مددگار سمجھتی ہیں؟۔

32 - کیا آپ محسوس کرتی ہیں کہ آپ زیادہ دیر تک دردزہ برداشت کر سکتی ہیں؟۔

33 - تصوراتی طور پر آپ کتنی دیر ہسپتال میں رہنا پسند کریں گی؟۔

## ترغیبات

## (بچے کے متعلق)

- 34 - کیا آپ اپنے بچے کی جنس کے بارے میں ترجیح دیتی ہیں؟
- 35 - کیا آپ نے اپنے بچے کے نام کے بارے میں اُمی تک سوچا ہے؟
- 36 - کیا آپ سوچتی ہیں کہ بچہ کی ضروریات اور نگہداشت سے آپ بخوبی نہٹ سکتی ہیں؟

## ترغیبات

- کیا آپ پر امید ہیں؟
- کیا آپ خوفزدہ ہیں؟
- 37 - کیا آپ کو مادریت کے بارے میں کوئی فکر اور تشویش ہے؟

## **Appendix 10A**

### **POSTNATAL INTERVIEW QUESTIONS (Time 2).**

*We are interested in learning more about mothers' activities during the postnatal period. As part of this study I would like to ask you about the period of time since the birth of your baby.*

1. Could you describe your birth experience for me?

PROMPTS: Where were you when you went into labour?

How long was the labour?

Was the labour induced?

Who was with you during the birth?

Did the midwife deliver the baby, or was a doctor called in?

Were you given painkilling drugs?

What kind of delivery did you have?

Did it go as expected?

How did you feel during labour and after?

2. Did you have a baby boy/girl? Would you or your husband/partner rather have had a boy/girl (as appropriate).

3. How was your stay in hospital?

PROMPTS: How long did you stay?

Who came to visit you while you were in hospital?

How did you feel about the care that you received in hospital?

Did you want to go home as soon as possible, and why?

4. How did you get home from the hospital?

PROMPTS: Did someone collect you?

Who came home with you?

5. How did you feel about coming home after the birth of your baby?

PROMPTS: pleased/relieved?

nervous/apprehensive?

why did you feel this way?

6. Describe what happened when you came home from the hospital.

PROMPTS: Did friends and/or family come to your home to see you?

Did you have help from anyone? If so, then who?

7. Could you describe your routine in the weeks since you have come home from the hospital?

PROMPTS: How often are you breast feeding/bottle-feeding?

When do you wake up?

Do you try to catch up on lost sleep during the day?

How do you cope with household chores?

Does anyone stay with you or come to your home to help you?

8. Since having your baby, have you been to stay with family?

PROMPTS: would you have liked to do this?

would this have been possible?

9. Has anyone (family/friends) come to help you since you had your baby?

10. Are you happy with the amount and quality of help that you get?

PROMPTS: would you expect more or less?

11. How long would you say that a mother needs to rest and recover after the birth of a baby, and why?

12. Are you aware of anything that a new mother should avoid doing?

PROMPTS: Based on superstitions/medical knowledge?

Why do you think this is?

13. Are you aware of anything that a new mother is actively encouraged to do?

PROMPTS: Based on superstitions/medical knowledge?

Why do you think this is?

14. Are you aware of any foods that are recommended or prohibited in the period after the birth of a child?

PROMPTS: Based on advice from friends/relatives?

Based on medical advice?

15. Have you altered your diet in any way since the birth of your baby?

PROMPTS: Are you avoiding any foods, and why?

Are you actively eating certain foods, and why?

16. Since the birth of your baby, have you remained confined to your home for any length of time?

PROMPTS: Why?

If YES, then how long did you stay at home?

If YES, then when did this occur?

If NO, would you have liked to stay at home?

17. Since you have had your baby, what have your rest patterns been like?

PROMPTS: Have you been able to have a period of complete rest?

Do you just try and rest as much as you can when you have the chance?

Have you had help from others that would allow you to rest?

18. In the weeks since the birth of your baby, have you had any help with tasks, etc.?

PROMPTS: If YES, who provided this help?

If YES, what kind of help?

If YES, then when did you receive help?

19. In what ways has the birth of your baby been celebrated or recognised?

PROMPTS: Gifts and cards?

Religious ceremony?

When did these events occur?

Who participated?

20. What name have you chosen for your baby, and why?

PROMPTS: will you have any religious naming ceremony?

who chose the baby's name?

21. How do you feel about the care and attention that you have been getting since the birth of the baby, (compared to before)?

PROMPTS: Do you think that you are getting enough?

Do you think that the baby has become the focus of attention?

Do you feel neglected in any way?

22. Have you been able to get help you need from others around you?

PROMPTS: What kind of help?

Did you ask for the help or was it offered?

Who were the sources of this help?

Did you expect the response that you got?

23. If you had a problem or needed advice, would you be able to rely on others for that help?

24. Do you manage to spend time with others who share your interests?

25. Do you feel that people around you appreciate your abilities and skills?

26. Who are the people who rely on you for their well-being?

27. Are your relationships providing you with the emotional security and well-being that you need?

28. Have you had any conflicts concerning childcare with family or friends?

29. Have you experienced any strain in your relationship with your husband/partner since you went into hospital to have your baby?

30. Are you receiving enough support or attention from your husband/partner?

31. Do you feel overwhelmed by the demands of caring for your baby?

32. How have you been coping with feeding your baby?

33. What about dealing with baby's crying?

34. Do you worry that your baby has health problems?

35. Have you managed to establish regular nap times and bedtime for your baby?

36. Do you feel trapped or confined?

37. Has your house been more disorganised than usual?
38. Do you miss the lifestyle that you had before your baby was born?
39. Are there any other situations that have proved stressful or upsetting for you since the birth of your baby?
40. What would you say have been the good points as regards the weeks since you had your baby?
41. Are you working/thinking about going back to work/thinking about getting work?

## Postnatal Interview Questions (Time 2)

بچے کی پیدائش کے بعد ماؤں کی کارکردگی کیاری ہے؟ ہم یہ جاننے میں خاصی دلچسپی رکھتے ہیں۔ اس مطالعہ کے سلسلہ میں میں آپ سے سوالات کہ آپ سے بچے کی پیدائش کے زمانے کے پوچھنا چاہوں گی؟  
1۔ کیا آپ پیدائش کے تجربے کو مجھے بتا سکیں گی؟

### ترغیبات

- جب آپ کو درد زہ ہوا آپ کہاں تھیں؟
- درد زہ کتنا عرصہ رہا؟
- کیا درد زہ بڑھ گیا؟
- پیدائش کے وقت آپ کے ساتھ کون تھا؟
- کیا ڈوائف (دلی) نے بچہ پیدا کیا۔ یا کوئی ڈاکٹر بلایا گیا؟
- کیا آپ کو مسکن (سکون بخش) دوائیں دی گئیں؟
- کس قسم کی ولادت ہوئی؟
- کیا یہ معمول کے مطابق تھی؟
- درد زہ کے درمیان میں اور بعد میں کیسا محسوس کیا؟
- 2۔ آپ کے بیٹا پیدا ہوا یا بیٹی آپ کے شوہر / آپ کو بیٹا / بیٹی پسند تھی؟
- 3۔ ہسپتال میں قیام کیسا رہا؟

### ترغیبات

- آپ کتنا عرصہ رہیں؟
- ہسپتال میں قیام کے دوران آپ سے کون ملے آیا؟
- آپ کو جو تحفظ ہسپتال میں ملا اسکے بارے میں آپکا کیا خیال ہے؟
- کیا آپ نے گھر جانے کی جلد کوشش کی اور کیوں؟
- 4۔ آپ ہسپتال سے گھر کیسے آئیں؟

### ترغیبات

- کیا کوئی آپ کو لے کر آیا؟
- آپ کے ساتھ گھر کون آیا؟
- 5۔ بچے کی پیدائش کے بعد آپ نے گھر آنے پر کیسا محسوس کیا؟

### ترغیبات

- خوشی یا محنتکارا۔
- اضطراب / گھبراہٹ / تشویش۔
- آپ نے ایسا کیوں محسوس کیا؟



13- کیا آپ کو کسی ایسی بات کا علم ہے کہ ایک نئی ماں کو مستعدی کے ساتھ کام کرنے کے لئے تیار کیا جائے؟

## ترغیبات

- وہم پرستی کی بنیاد پر / طبی معلومات۔
- آپ اس کے بارے میں کیوں سوچتے ہیں؟
- 14- آپ کو بچے کی پیدائش کے بعد کسی قسم کی خوراک منع قرار دی گئی۔ یا ضروری قرار دی گئی۔

## ترغیبات

- دوستوں یا رشتہ داروں کا مشورہ۔
- طبی مشورہ۔ ڈاکٹر کا مشورہ؟
- 15- بچے کی پیدائش کے بعد آپ نے کسی خوراک میں تبدیلی کی؟

## ترغیبات

- اگر نئی خوراک کھانا شروع کی تو کیوں؟
- اگر کسی خوراک کو چھوڑا تو کیوں؟
- 16- بچے کی پیدائش کے بعد آپ کچھ عرصہ گھر میں مقید رہی ہیں؟
- کیوں؟
- اگر ہاں، تو کتنا عرصہ گھر میں ٹھہریں؟
- اگر ہاں، یہ واقعہ کب پیش آیا؟
- اگر نہیں، تو کیا آپ اپنی مرضی سے گھر پر رہنا چاہتی تھیں؟
- 17- پیدائش کے بعد، آپ کا آرام کرنے کا طریقہ کلا کیا تھا؟

## ترغیبات

- کیا مکمل وقفے کے ساتھ، آپ نے موقع ملنے پر آرام کیا؟
- کیا موقع ملنے پر آپ نے زیادہ آرام کی کوشش کی؟
- کیا دوسرے لوگوں نے آپ کی آرام کھٹے مدد کی؟
- 18- بچے کی پیدائش کے جھنڈوں بعد آپ نے کسی سے مقررہ کام کھٹے مدد لی؟

## ترغیبات

- اگر ہاں، تو کس نے مدد کی؟
- اگر ہاں، تو مدد کس قسم کی تھی؟
- آپ نے کس وقت مدد لی؟

19 - آپ کے بچے کی پیدائش کی رسومات اور شناخت کن طریقوں سے کی گئی؟۔

## ترغیبات

۔۔ تحائف اور کارڈ۔

۔۔ مذہبی رسومات۔

۔۔ یہ واقعات کب پیش آئے۔

۔۔ کس کس نے حصہ لیا؟۔

20 - آپ نے بچے کا نام کیا رکھا؟۔

## ترغیبات

۔۔ کیا آپ نے نام رکھنے کی کوئی رسم یا کی؟۔

۔۔ بچے کا نام کس نے رکھا؟۔

21 - بچے کی پیدائش سے پہلے اور بعد جو توجہ اور نگہداشت جو آپ کو دی گئی۔ اس کے بارے میں آپ کا کیا خیال ہے؟۔

## ترغیبات۔

۔۔ کیا آپ کے خیال میں آپ کو مناسب توجہ مل رہی ہے؟۔

۔۔ کیا آپ کے خیال میں بچہ لوگوں کی توجہ کا مرکز بنا ہوا ہے۔

۔۔ کیا آپ خود کو نظر انداز ہوتا ہوا محسوس کرتی ہیں؟۔

22 - کیا آپ اپنے ساتھ رہنے والے لوگوں سے مدد لینے میں کامیاب رہی ہیں؟۔

## ترغیبات

۔۔ تعاون کی قسم کیا تھی؟۔

۔۔ کیا آپ کی اپنی خواہش تھی یا پیش کی گئی تھی؟۔

۔۔ اس تعاون کے ذرائع کیا تھے؟۔

۔۔ کیا آپ کو اپنی امید کے مطابق رد عمل ملا؟۔

23 - کیا کوئی مسئلہ پیش آنے پر یا ضرورت پڑنے پر آپ کو دوسروں کی مدد پر انحصار کرنا پڑا؟۔

24 - جو لوگ آپ کی فلاح و بہبود میں حصہ لیں کیا آپ ان کے ساتھ وقت گزارنے کا اہتمام کرتی ہیں؟۔

25 - کیا آپ کے ساتھ رہنے والے لوگ آپ کی قابلیت اور حسن تدبیر کی قدر کرتے ہیں؟۔

- 26 - وہ کون لوگ ہیں۔ جو اپنی فلاح کیلئے آپ پر انحصار کرتے ہیں؟
- 27 - کیا آپ کے عزیز واقارب آپ کی ضرورت کے مطابق جذباتی سہارے اور فلاح و بہبود میں حصہ لیتے ہیں؟
- 28 - کیا آپ کی اپنے خاندان اور دوستوں کے ساتھ بچے کی نگہداشت پر کوئی کشمکش رہی ہے؟
- 29 - جب آپ بچے کی پیدائش کے سلسلہ میں ہسپتال گئیں۔ تو کیا آپ کے شوہر / ساتھی سے تعلقات میں کسی قسم کی کچاواٹ محسوس ہوئی؟
- 30 - کیا آپ کو اپنے شوہر یا ساتھی کی طرف سے کافی توجہ اور تعاون مل رہا ہے؟
- 31 - کیا آپ بچے کی نگہداشت کے سلسلہ میں اپنے آپ کو بے بس محسوس کرتی ہیں؟
- 32 - آپ اپنے بچے کی غذا کو کیسے نباہ رہی ہیں؟
- 33 - آپ بچے کے رونے دھونے کو کیسے نبھاتی ہیں؟
- 34 - کیا آپ اپنے بچے کی جسمانی حالت کے بارے میں فکر مند ہوتی ہیں؟
- 35 - کیا آپ نے بچے کے مسلسل اونٹھنے (تھوڑی نیند) اور سونے کے اوقات مقرر کر دیئے ہیں؟
- 36 - کیا آپ سمجھتی ہیں کہ آپ مقید ہو گئی ہیں؟ یا بندھ گئی ہیں؟
- 37 - کیا آپ کا گھر پہلے کی نسبت بہت زیادہ بے ترتیب ہو گیا ہے؟
- 38 - کیا آپ اپنے بچے کی پیدائش کے قبل کے رہن سہن کو یاد کرتی ہیں؟
- 39 - بچے کی پیدائش سے اب تک کیا ایسے حالات پیدا ہوئے جو مشکلات اور الجھن کا باعث بنیں؟
- 41 - بچے کی پیدائش سے اب تک کے بارے میں آپ اپنے اچھے تاثرات کے بارے میں کیا کہیں گی؟
- 42 - کیا آپ ملازمت کر رہی ہیں؟ ملازمت پر دوبارہ جانے کا سوچ رہی ہیں؟ / ملازمت تلاش کرنے کے بارے میں غور کر رہی ہیں؟

## **Appendix 11A**

### **POSTNATAL INTERVIEW QUESTIONS (Time 3)**

*As you already know, we are interested in learning more about mothers' activities in the postnatal period. As part of this study I would like to ask you some more questions about how you are coping with motherhood.*

1. Thinking back, could you describe your routine during the first 6 weeks after the birth of your baby?

PROMPTS: How often were you breastfeeding/bottlefeeding

How much rest were you getting?

How were you coping with household chores?

How much help were you getting?

What kind of help were you getting?

Did you change your diet in any way?

2. Could you describe your routine over the last 2 weeks?

PROMPTS: How often are you breastfeeding/bottlefeeding

How much rest?

Coping with household chores?

How much help are you getting?

2. How does this compare with your routine in the first 6 weeks after the birth of your baby?

PROMPTS: in what ways were the first 6 weeks different?

3. Have you been staying with family at any point since we last met?

PROMPTS: if NO - would it have been possible for you to stay with family?

- Would you have liked to stay with family?

if YES- did this help you?

- how long did you stay?

- with whom?

- when and why did you leave?

4. Are you getting the same amount of help and support now, as you did in the first weeks after your baby was born?

PROMPTS: is it more/less/same as before?

who is helping you?

what kind of help are you getting?

5. Have you been able to get the help you need from others around you?

PROMPTS: What kind of help?

Did you ask for the help or was it offered?

Who were the sources of this help?

Did you expect the response that you got?

6. If you had a problem or needed advice, would you be able to rely on others for that help?

7. Do you manage to spend time with others who share your interests, i.e. socialise?

8. Do you feel that people around you appreciate your abilities and skills?

9. Who are the people who rely on you for their well-being?

10. Are your relationships providing you with the emotional security and well-being that you need?

11. Have you had any conflicts concerning childcare with family or friends?

12. Have you experienced any strain in your relationship with your husband/partner since you went into hospital to have your baby?

13. Are you receiving enough support or attention from your husband/partner?

14. Do you feel overwhelmed by the demands of caring for your baby?

15. How have you been coping with feeding your baby?

16. What about dealing with baby's crying?

17. Do you worry that your baby has health problems?

18. Have you managed to establish regular nap times and bedtime for your baby?

19. Do you feel trapped or confined?

20. Has your house been more disorganised than usual?
21. Do you miss the lifestyle that you had before your baby was born?
22. How well do you feel that you are coping with childcare now, as compared to before?
23. Are there any other situations that have proved stressful or upsetting for you since our last meeting?
24. What would you say have been the good points as regards the last 2 weeks?
25. Are you working/thinking about going back to work/thinking about getting work?

### Postnatal Interview Questions (Time 3)

- بچے کی پیدائش کے بعد ماؤں کی کارکردگی کیاری ہے؟ ہم یہ جاننے میں خاصی دلچسپی رکھتے ہیں۔ اس مطالعہ کے سلسلہ میں آپ سے مزید سوالات کہ آپ ماں بننے کے بعد کس طرح حالت سے نہٹ رہی ہیں؟
- 1 کیا آپ ماضی کو سوچ کر بچہ پیدا ہونے کے چھ ہفتہ بعد اپنے معمولات بیان کر سکتی ہیں؟

### ترغیبات

- 1 - آپ کتنی بار بچے کو اپنا یا بوتل کا دودھ پلا رہی تھیں؟
  - 2 - آپ کتنا آرام کر رہی تھیں؟
  - 3 - آپ گھریلو کام کاج کو کس طرح پنہاری تھیں؟
  - 4 - آپ کو کتنی مدد مل رہی تھی؟
  - 5 - آپ کو کس قسم کی مدد مل رہی تھی؟
  - 6 - کیا آپ نے ہنسی غذا کسی طرح سے تبدیل کی؟
- 2 - کیا آپ اپنے گزشتہ دو ہفتوں کے معمولات بیان کر سکیں گی؟

### ترغیبات

- 1 - آپ کتنی بار اپنا دودھ پلاتی ہیں اور کتنی بار بوتل سے؟
  - 2 - آپ کتنا آرام کرتی ہیں؟
  - 3 - آپ گھر کے کاموں سے کس طرح نہٹتی ہیں؟
  - 4 -
- 3 - بچے کی پیدائش کے چھ ہفتوں میں اور پہلے کے معمولات کا کیسے موازنہ کریں گی؟

### ترغیبات

- 1 - پہلے چھ ہفتوں کے درمیان کتنی عدم مطابقت رہی؟
- 4 - گزشتہ ملاقات سے اس وقت تک کیا آپ کہیں بھی اپنے خاندان کے ساتھ رہ رہی ہیں؟

### ترغیبات

- 1 - اگر نہیں، تو کیا آپ کا اپنے خاندان کے ساتھ رہنا ممکن تھا؟
- 2 - کیا آپ خاندان والوں کے ساتھ رہنا پسند کریں گی؟
- 3 - اگر ہاں، تو کیا یہ مدد گار ثابت ہو گا؟
- 4 - آپ کتنا عرصہ رہیں گی؟
- 5 - آپ نے کب اور کیوں چھوڑا؟

5 - بچے کی پیدائش کے پہلے مفتوں میں جس طرح سے مدد اور تعاون حاصل رہا، کیا اب بھی ویسے ہی ہے؟

## ترغیبات

1 - یہ کم / زیادہ / پہلے جتنا ہی ہے۔

2 - آپکی مدد کون کر رہا ہے؟

3 - آپ کو کس قسم کی مدد مل رہی ہے؟

6 - کیا آپ لوگوں سے مدد لینے میں کامیاب رہی ہیں؟

## ترغیبات

1 - تعاون کی قسم کیا تھی؟

2 - کیا آپ کی اپنی خواہش تھی یا پیش کی گئی تھی؟

3 - اس تعاون کے ذرائع کیا تھے؟

4 - کیا آپ کو اپنی امید کے مطابق رد عمل ملا؟

7 - کیا کوئی مسئلہ پیش آنے پر یا ضرورت پڑنے پر آپ کو دوسروں کی مدد پر انحصار کرنا پڑا؟

8 - جو لوگ آپ کی فلاح و بہبود میں حصہ لیں کیا آپ ان کے ساتھ وقت گزارنے کا اہتمام کرتی ہیں؟

9 - کیا آپ کے ساتھ رہنے والے لوگ آپ کی قابلیت اور حسن تدبیر کی قدر کرتے ہیں؟

10 - وہ کون لوگ ہیں۔ جو اپنی فلاح کھلنے آپ پر انحصار کرتے ہیں؟

11 - کیا آپ کے عزیز واقارب آپ کی ضرورت کے مطابق جذباتی سہارے اور فلاح و بہبود میں حصہ لیتے ہیں؟

12 - کیا آپ کی اپنے خاندان اور دوستوں کے ساتھ بچے کی نگہداشت پر کوئی کشمکش رہی ہے؟

13 - جب سے آپ بچے کی پیدائش کے سلسلہ میں ہسپتال گئیں۔ تو کیا آپ کے شوہر / ساتھی سے تعلقات میں کسی قسم

کی کھچاوت محسوس ہوئی۔

14 - کیا آپ کو اپنے شوہر یا ساتھی کی طرف سے کافی توجہ اور تعاون مل رہا ہے؟

15 - کیا آپ بچے کی نگہداشت کے سلسلہ میں اپنے آپ کو بے بس محسوس کرتی ہیں؟

16 - آپ اپنے بچے کی غذا کو کیسے نباہ رہی ہیں؟



- 17 - آپ بچے کے رونے دھونے کو کیسے نبھاتی ہیں؟
- 18 - کیا آپ اپنے بچے کی جسمانی حالت کے بارے میں فکر مند ہوتی ہیں؟
- 19 - کیا آپ نے بچے کے مسلسل اونٹننے (تھوڑی نیند) اور سونے کے اوقات مقرر کر دیئے ہیں؟
- 20 - کیا آپ سمجھتی ہیں کہ آپ مقید ہو گئی ہیں؟ یا بندھ گئی ہیں؟
- 21 - کیا آپ کا گھر پہلے کی نسبت بہت زیادہ بے ترتیب ہو گیا ہے؟
- 22 - کیا آپ اپنے بچے کی پیدائش کے قبل کے رہن سہن کو یاد کرتی ہیں؟
- 23 - کیا آپ محسوس کرتی ہیں کہ آپ بچے کی نمکداشت پہلے کی نسبت بہتر کر رہی ہیں؟
- 24 - ہماری گزشتہ ملاقات سے اب تک کیا ایسے حالات پیدا ہوئے جو مشکلات اور الجھن کا باعث ہوں؟
- 25 - گزشتہ دو ہفتوں کے بارے میں آپ اپنے اچھے تاثرات کے بارے میں کیا کہیں گی؟
- 26 - کیا آپ ملازمت کر رہی ہیں؟ / ملازمت پر دوبارہ جانے کا سوچ رہی ہیں؟ / ملازمت تلاش کرنے کے بارے میں غور کر رہی ہیں؟

## Appendix 12

### THE VICTORIA INFIRMARY NHS TRUST

**NAME OF ETHICS COMMITTEE:** VICTORIA INFIRMARY NHS TRUST

**ADDRESS OF ETHICS COMMITTEE:** LANGSIDE ROAD,  
GLASGOW G42 9TY

<u>MEMBER'S NAME</u>	<u>OCCUPATION</u>	<u>AFFILIATIONS</u>
♦ Kenneth Cochran	Consultant Gastroenterologist	VI Trust
♦ Brian Bingham	Consultant ENT Surgeon	VI Trust
♦ William Carswell	Lawyer (Retired)	
♦ John Calder	Consultant Radiologist	VI Trust
Alexander Cooper	Consultant Psychiatrist	CMH Trust
Brian Cowan	Consultant Anaesthetist	VI Trust
♦ Margaret Macdonald	Clinical Pharmacist	VI Trust
Ronald MacLean	General Practitioner	
♦ Sir Andrew Sloan	Retired Chief Constable	
♦ Margaret Smith	Director of Nursing Services	VI Trust

**INVESTIGATOR'S NAME:** DR R MOHAMMED

**INVESTIGATOR'S ADDRESS:** DEPT OF PSYCHOLOGY  
UNIVERSITY OF GLASGOW

**PROTOCOL TITLE:** SOCIAL SUPPORT, DEPRESSION AND ATTRIBUTIONAL  
STYLE IN PRIMIPAROUS WOMEN

**FULL STUDY NO:**

**DOCUMENTS REVIEWED:** (Please indicate with a tick)

Full Protocol	( X )
Standard Submission Form	( X )
Patient Information Sheet	( X )
Written Patient Consent Form	( X )
Clinical Trial Exemption Certificate (if appropriate)	( )
Patient Questionnaire (if appropriate)	( X )

Approval is given to conduct the clinical trial:

**NAME:** MARY G HILTON

**TITLE:** SECRETARY - ETHICS COMMITTEE

**SIGNATURE:** M. Hilton

**DATE:** 7/2/95

♦ Present at meeting on 18.1.95 at which approval was given.

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## Appendix 13

**Means and standard deviations \* for SPS scores based on 'depressed' and 'non depressed' groups on BDI for Scottish subjects**

SPS scores	categories of BDI: 'depressed' and 'non depressed'					
	'depressed'			'non depressed'		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>global SPS</b>	83.35 (5.69)	81.92 (6.93)	84.38 (6.59)	84.74 (6.38)	88.61 (4.48)	89.70 (5.26)
<b>reliable alliance</b>	15.47 (1.23)	15.08 (1.44)	15.23 (1.30)	15.16 (1.26)	15.52 (1.04)	15.48 (0.99)
<b>attachment</b>	14.59 (1.66)	13.92 (1.44)	14.54 (1.71)	15.00 (1.20)	15.57 (0.73)	15.39 (1.03)
<b>guidance</b>	15.18 (1.19)	13.92 (1.38)	14.54 (1.61)	14.68 (1.45)	15.43 (0.99)	15.57 (0.94)
<b>nurturance</b>	12.53 (2.32)	13.54 (1.85)	14.15 (1.91)	13.21 (1.65)	14.22 (2.04)	14.87 (1.32)
<b>social integration</b>	13.18 (1.47)	12.69 (1.55)	13.31 (1.55)	13.84 (1.42)	14.22 (1.54)	14.39 (1.44)
<b>reassure. of worth</b>	12.41 (1.50)	12.77 (1.42)	12.62 (1.19)	12.84 (1.64)	13.65 (1.34)	14.04 (1.74)

**Means and standard deviations \* for SPS scores based on 'depressed' and 'non depressed' groups on BDI for Pakistani subjects**

SPS scores	categories of BDI: 'depressed' and 'non depressed'					
	'depressed'			'non depressed'		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>global SPS</b>	86.96 (5.30)	84.11 (7.84)	82.00 (2.44)	87.33 (7.47)	87.14 (7.13)	87.67 (5.73)
<b>reliable alliance</b>	15.63 (0.92)	14.89 (1.68)	13.83 (3.63)	14.73 (1.62)	15.24 (1.61)	14.57 (1.72)
<b>attachment</b>	14.92 (1.38)	14.94 (2.01)	15.06 (1.47)	15.13 (1.51)	15.38 (0.80)	15.33 (0.80)
<b>guidance</b>	15.13 (1.26)	14.72 (1.74)	13.94 (2.29)	15.27 (1.39)	15.24 (1.51)	15.33 (1.02)
<b>nurturance</b>	15.46 (0.88)	15.72 (0.46)	15.67 (0.69)	15.20 (1.21)	15.57 (1.75)	15.86 (0.36)
<b>social integration</b>	13.67 (2.14)	12.44 (2.77)	12.33 (2.68)	13.80 (2.11)	12.52 (2.32)	13.67 (1.93)
<b>reassurance of worth</b>	12.17 (2.41)	10.94 (2.44)	11.17 (1.76)	13.20 (2.27)	13.19 (2.29)	12.90 (2.19)

\* standard deviations in parentheses

## Appendix 14

**Means and standard deviations \* for reliable alliance ISSB scores based on low and high cluster categories of the BDI for Scottish subjects**

	cluster categories of the BDI					
	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>ISSB reliable alliance</b>						
<b>frequency</b>	4.00 (1.55)	4.29 (0.76)	3.00 (1.00)	4.07 (1.10)	4.17 (0.85)	3.86 (1.22)
<b>total network</b>	2.14 (0.90)	2.29 (1.50)	2.86 (1.34)	3.52 (2.13)	3.07 (1.51)	2.28 (1.19)
<b>family network</b>	2.14 (0.90)	2.14 (1.21)	2.57 (0.98)	2.86 (1.73)	2.69 (1.31)	2.17 (1.10)
<b>other network</b>	0.00 (0.00)	0.14 (0.38)	0.29 (0.49)	0.66 (1.14)	0.38 (0.68)	0.10 (0.31)
<b>amount satisfaction</b>	5.29 (0.76)	5.29 (0.49)	5.29 (0.49)	5.62 (0.56)	5.48 (0.74)	5.34 (0.86)
<b>quality satisfaction</b>	5.29 (0.76)	5.14 (0.69)	5.14 (0.69)	5.59 (0.57)	5.45 (0.69)	5.28 (0.92)

**Means and standard deviations \* for reliable alliance ISSB scores based on low and high cluster categories of the BDI for Pakistani subjects**

	cluster categories of the BDI					
	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>ISSB reliable alliance</b>						
<b>frequency</b>	4.71 (0.99)	5.00 (0.00)	3.47 (1.91)	4.27 (1.49)	4.95 (0.21)	3.36 (1.87)
<b>total network</b>	2.71 (2.11)	2.29 (1.49)	1.24 (1.52)	2.23 (1.80)	1.77 (0.69)	1.59 (2.09)
<b>family network</b>	2.71 (2.11)	2.29 (1.49)	1.24 (1.52)	2.14 (1.81)	1.73 (0.70)	1.55 (2.11)
<b>other network</b>	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.09 (0.43)	0.05 (0.21)	0.05 (0.21)
<b>amount satisfaction</b>	5.41 (0.87)	5.53 (0.62)	5.12 (0.93)	5.27 (1.20)	5.68 (0.48)	5.27 (0.98)
<b>quality satisfaction</b>	5.47 (0.87)	5.00 (1.22)	4.94 (1.14)	5.41 (1.10)	5.59 (0.50)	5.32 (0.89)

\* standard deviations in parentheses

## Appendix 15

**Means and standard deviations \* for attachment ISSB scores based on low and high cluster categories of the BDI for Scottish subjects**

ISSB attachment	cluster categories of the BDI					
	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>frequency</b>	4.29 (0.49)	4.14 (0.38)	3.14 (0.90)	3.97 (1.21)	3.93 (1.03)	3.76 (1.21)
<b>total network</b>	4.00 (2.38)	3.43 (1.40)	2.57 (0.79)	3.59 (2.04)	3.24 (1.66)	2.76 (1.77)
<b>family network</b>	2.71 (1.50)	2.14 (0.90)	2.14 (0.90)	2.76 (1.62)	2.52 (1.12)	2.17 (1.17)
<b>other network</b>	1.29 (1.25)	1.29 (1.60)	0.43 (0.53)	0.83 (1.68)	0.72 (0.88)	0.59 (0.94)
<b>amount satisfaction</b>	4.86 (0.69)	4.86 (0.90)	4.71 (0.95)	5.66 (0.61)	5.34 (0.86)	5.48 (0.69)
<b>quality satisfaction</b>	5.14 (0.38)	5.00 (1.00)	4.57 (1.27)	5.52 (0.69)	5.41 (0.78)	5.48 (0.78)

**Means and standard deviations \* for attachment ISSB scores based on low and high cluster categories of the BDI for Pakistani subjects**

ISSB attachment	cluster categories of the BDI					
	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>frequency</b>	4.53 (1.07)	4.12 (1.41)	3.18 (1.51)	4.55 (0.80)	4.73 (0.55)	3.82 (1.30)
<b>total network</b>	3.18 (2.30)	2.94 (1.95)	1.94 (1.52)	3.32 (2.06)	2.68 (1.81)	2.18 (2.48)
<b>family network</b>	2.82 (2.48)	2.65 (2.09)	1.76 (1.44)	3.00 (2.12)	2.36 (1.62)	2.14 (2.51)
<b>other network</b>	0.35 (0.86)	0.29 (0.77)	0.18 (0.73)	0.32 (0.72)	0.09 (0.29)	0.05 (0.21)
<b>amount satisfaction</b>	5.65 (0.79)	5.12 (1.45)	5.00 (0.93)	5.77 (0.43)	5.54 (0.67)	5.14 (1.04)
<b>quality satisfaction</b>	5.41 (1.06)	4.88 (0.37)	5.59 (0.62)	5.73 (0.46)	5.68 (0.48)	5.32 (1.04)

\* standard deviations in parentheses

## Appendix 16

**Means and standard deviations \* for guidance ISSB scores based on low and high cluster categories of the BDI for Scottish subjects**

cluster categories of the BDI						
ISSB guidance	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
frequency	3.29 (0.76)	2.86 (0.90)	2.86 (0.90)	2.83 (1.10)	3.03 (0.98)	2.62 (1.08)
total network	2.86 (1.07)	3.29 (1.70)	2.71 (1.25)	3.03 (1.59)	3.00 (1.34)	2.31 (1.17)
family network	1.43 (0.79)	1.43 (1.13)	1.29 (0.95)	1.86 (1.46)	1.83 (1.23)	1.66 (1.23)
other network	1.43 (1.72)	2.14 (1.34)	1.43 (1.13)	1.17 (1.07)	1.17 (1.26)	0.66 (0.67)
amount satisfaction	5.00 (0.00)	4.71 (0.95)	5.00 (0.58)	5.45 (0.51)	5.48 (0.63)	5.38 (0.62)
quality satisfaction	4.86 (0.38)	4.71 (1.25)	4.71 (1.25)	5.31 (0.54)	5.38 (0.62)	5.38 (0.62)

**Means and standard deviations \* for guidance ISSB scores based on low and high cluster categories of the BDI for Pakistani subjects**

cluster categories of the BDI						
ISSB guidance	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
frequency	2.76 (1.44)	2.24 (1.30)	2.00 (0.71)	2.23 (0.97)	2.09 (1.38)	2.45 (1.34)
total network	1.82 (1.38)	1.06 (1.30)	1.06 (0.66)	1.77 (1.57)	0.86 (1.04)	1.32 (1.32)
family network	1.06 (1.43)	1.00 (1.27)	0.94 (0.66)	1.50 (1.30)	0.77 (1.02)	1.23 (1.19)
other network	0.76 (1.09)	0.06 (0.24)	0.12 (0.49)	0.27 (0.55)	0.09 (0.29)	0.09 (0.29)
amount satisfaction	5.41 (0.87)	5.59 (0.71)	5.00 (1.37)	5.73 (0.70)	5.77 (0.43)	5.45 (0.80)
quality satisfaction	5.00 (1.58)	5.65 (0.70)	4.88 (1.50)	5.73 (0.70)	5.68 (0.57)	5.45 (0.80)

\* standard deviations in parentheses

## Appendix 17

**Means and standard deviations \* for nurturance ISSB scores based on low and high cluster categories of the BDI for Scottish subjects**

cluster categories of the BDI						
ISSB nurturance	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
frequency	3.14 (1.86)	5.00 (0.00)	5.00 (0.00)	3.10 (1.82)	5.00 (0.00)	5.00 (0.00)
total network	1.43 (1.72)	2.71 (2.36)	3.00 (2.31)	1.17 (1.17)	2.38 (1.12)	2.52 (1.02)
family network	1.29 (1.70)	2.71 (2.36)	3.00 (2.31)	1.17 (1.17)	2.38 (1.12)	2.52 (1.02)
other network	0.14 (0.38)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
amount satisfaction	5.14 (1.07)	4.57 (1.27)	4.71 (1.50)	5.38 (0.86)	5.17 (0.93)	5.38 (0.68)
quality satisfaction	no quality satisfaction measures assessed for nurturance					

**Means and standard deviations \* for nurturance ISSB scores based on low and high cluster categories of the BDI for Pakistani subjects**

cluster categories of the BDI						
ISSB nurturance	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
frequency	4.88 (0.08)	4.94 (0.24)	5.00 (0.00)	4.55 (1.10)	4.95 (0.21)	4.95 (0.21)
total network	4.76 (2.73)	3.29 (2.26)	4.05 (2.22)	4.32 (2.64)	3.09 (1.87)	4.68 (1.89)
family network	4.76 (2.73)	3.29 (2.26)	4.05 (2.22)	4.36 (2.56)	3.09 (1.87)	4.59 (1.97)
other network	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.05 (0.21)	0.00 (0.00)	0.09 (0.43)
amount satisfaction	4.35 (1.66)	4.65 (1.46)	4.65 (1.17)	5.45 (0.80)	5.32 (1.00)	5.27 (0.77)
quality satisfaction	no quality satisfaction measures assessed for nurturance					

\* standard deviations in parentheses

## Appendix 18

**Means and standard deviations \* for social integration ISSB scores based on low and high cluster categories of the BDI for Scottish subjects**

	cluster categories of the BDI					
	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>ISSB social integration</b>						
<b>frequency</b>	3.29 (0.95)	3.43 (0.79)	3.57 (1.13)	4.03 (0.68)	3.97 (0.82)	3.76 (1.06)
<b>total network</b>	4.71 (1.98)	5.43 (2.82)	4.57 (2.57)	5.41 (1.50)	5.83 (2.05)	4.55 (2.10)
<b>family network</b>	2.14 (1.57)	3.43 (0.87)	2.86 (2.27)	3.10 (1.45)	3.17 (1.75)	2.66 (1.59)
<b>other network</b>	2.57 (1.72)	2.00 (1.63)	1.71 (1.25)	2.31 (1.61)	2.66 (1.74)	2.03 (1.43)
<b>amount satisfaction</b>	4.71 (0.95)	5.00 (0.58)	4.86 (0.69)	5.24 (0.79)	5.34 (0.86)	5.10 (0.82)
<b>quality satisfaction</b>	4.71 (0.76)	4.71 (0.95)	4.57 (0.98)	5.45 (0.69)	5.34 (0.55)	5.14 (0.79)

**Means and standard deviations \* for social integration ISSB scores based on low and high cluster categories of the BDI for Pakistani subjects**

	cluster categories of the BDI					
	High			Low		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>ISSB social integration</b>						
<b>frequency</b>	2.94 (1.56)	1.41 (1.00)	2.18 (1.13)	2.95 (1.50)	1.86 (1.32)	3.27 (1.32)
<b>total network</b>	2.76 (3.00)	1.24 (2.97)	2.65 (2.52)	3.27 (2.59)	1.82 (3.05)	4.45 (2.58)
<b>family network</b>	2.29 (3.04)	1.06 (2.99)	2.18 (2.48)	2.82 (2.56)	1.41 (2.67)	3.77 (2.84)
<b>other network</b>	0.47 (1.07)	0.18 (0.53)	0.47 (0.72)	0.45 (0.86)	0.41 (0.85)	0.64 (1.09)
<b>amount satisfaction</b>	5.35 (0.86)	4.82 (1.29)	4.65 (1.41)	5.45 (0.80)	5.00 (1.27)	5.14 (0.89)
<b>quality satisfaction</b>	5.76 (0.44)	5.06 (1.09)	5.18 (1.47)	5.36 (0.66)	5.14 (1.28)	5.64 (0.73)

\* standard deviations in parentheses



## Appendix 19

**Means and standard deviations \* for reassurance of worth ISSB scores based on low and high cluster categories of the BDI for Scottish subjects**

	cluster categories of the BDI					
	High (n=7)			Low (n=29)		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>ISSB reassurance of worth</b>						
<b>frequency</b>	2.71 (1.25)	3.14 (0.90)	3.43 (0.98)	3.34 (1.17)	3.28 (1.25)	3.10 (1.26)
<b>total network</b>	2.29 (1.50)	4.00 (2.31)	3.43 (1.27)	2.59 (1.24)	2.97 (1.90)	2.45 (1.35)
<b>family network</b>	1.71 (1.50)	2.86 (2.12)	3.00 (1.00)	1.93 (0.88)	2.24 (1.15)	1.97 (1.15)
<b>other network</b>	0.57 (0.98)	1.14 (0.69)	0.43 (0.53)	0.66 (0.97)	0.72 (1.13)	0.48 (0.83)
<b>amount satisfaction</b>	3.71 (0.95)	4.57 (0.98)	4.71 (0.95)	5.07 (0.70)	5.14 (0.83)	5.10 (0.82)
<b>quality satisfaction</b>	3.86 (1.21)	4.57 (1.27)	4.57 (1.27)	4.83 (0.89)	5.00 (1.07)	4.97 (1.02)

**Means and standard deviations \* for reassurance of worth ISSB scores based on low and high cluster categories of the BDI for Pakistani subjects**

	cluster categories of the BDI					
	High (n=17)			Low (n=22)		
	time 1	time 2	time 3	time 1	time 2	time 3
<b>ISSB reassurance of worth</b>						
<b>frequency</b>	3.18 (1.91)	3.71 (1.86)	2.65 (1.66)	3.91 (1.51)	3.50 (1.79)	3.27 (1.67)
<b>total network</b>	2.35 (2.57)	2.41 (1.91)	1.71 (2.11)	2.91 (2.67)	2.18 (2.34)	2.05 (2.06)
<b>family network</b>	2.18 (2.60)	2.35 (1.84)	1.71 (2.11)	2.59 (2.52)	2.09 (2.31)	1.77 (1.90)
<b>other network</b>	0.18 (0.53)	0.06 (0.24)	0.00 (0.00)	0.32 (0.84)	0.09 (0.43)	0.27 (0.93)
<b>amount satisfaction</b>	5.41 (0.87)	4.29 (1.79)	3.88 (1.80)	5.14 (1.04)	4.73 (1.49)	4.86 (1.46)
<b>quality satisfaction</b>	5.47 (0.87)	4.18 (1.70)	3.71 (1.93)	4.95 (1.09)	4.68 (1.49)	4.86 (1.46)

\* standard deviations in parentheses

