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# **The Importance of Relationships in Facilitating Service Development: Learning from Early Experience**

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Submitted in fulfilment of the requirements for the Degree of PhD by  
Published Work

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## Abstract

This essay brings together nine publications relevant to service development and delivery in NHS liaison psychiatry and infant mental health services. Key theoretical concepts are introduced to provide a framework for my thinking as I present publications in chronological order. The research studies presented include both quantitative and qualitative methodologies. Overall the thesis represents a mixed methodological approach to the topic of service development and delivery from a relational perspective and informed by our understanding of early child development.

Part 1 focuses on my early research in both adult and child psychiatry liaison in general hospitals, where the findings supported the hypothesis that good interprofessional relationships can lead to more appropriate referrals. Retrospective analyses of referral patterns documented change over time: the service for adults received an increased number of referrals of patients who had not harmed themselves and this was associated with an increase in the diagnosis of potentially treatable psychiatric conditions. A similar shift in the pattern of referrals to a child psychiatry liaison service was observed, with children being increasingly referred for psychological help in relation to their management of physical illness or for investigation of non-organic physical problems.

In Part 2, two publications describing parent-infant relationships are discussed. In the first of these papers, this relationship was examined in the context of infants' admissions to neonatal intensive care. The narratives of mothers are described, with attention paid to the ways in which their stories were told as well as to the emerging themes, which included the ways in which the current experiences of all participants are both shaped by, and shape, other relationships, and past experience and beliefs. These *reflexive loops* are similar to those described by attachment theorists in relation to the continual re-shaping of *inner working models*. The second of these papers examines the usefulness of psychoanalytic infant observation and its potential to be used in both quantitative and qualitative research.

Recent research related to infant mental health service development and access are presented in Part 3. A needs assessment exercise carried out in one health board

found that infants and their parents, or parents-to-be, were less likely to be referred to specialist services or receive enhanced health visiting services if they lived in areas of socioeconomic deprivation. This finding was discussed with professionals who were interviewed about their views on infant mental health both individually and in purposively paired focus groups. Thematic analysis identified issues related to perceived barriers and enablers to service development, and to systems and gaps. The latter themes were also examined through the lens of candidacy which allowed an exploration of patients' journeys into services. Babies rely on others to access services and may be disadvantaged if key family members *and* professionals do not appreciate the value of an infant mental health service offering early support and intervention. In a further study, a sample of general practitioners working in the most deprived areas of Scotland described, in qualitative interviews, how they valued the development of infant mental health services and encouraged good communication and professional relationships to support this.

Underpinning this essay is the theme of early development and it is proposed that learning from and building upon what we know about the development of early relationships can inform service development. Good relationships at all levels are fundamental to successful and sustainable service development and delivery.

# Contents

Abstract	2
Contents	4
List of Figures and Tables	6
Acknowledgements	7
List of Published Works to be Considered	9
Introduction	11
Mixed Methods Research	12
Theoretical Background	15
Mental Health and Access to Mental Health Services	15
Infant Mental Health	18
Developmental Psychology	19
Attachment	20
Systems Thinking	22
Narrative	23
The Coordinated Management of Meaning	24
Publications Part 1: Building Relationships to Develop Liaison Services	26
Publication 1	26
Publication 2	27
Publication 3	27
Commentary	28

## **Contents (continued)**

Publications Part 2: Studying Early Relationships	29
Publication 4	29
Data from Interviews with Mothers	31
Psychoanalytic Infant Observations	35
Publication 5	35
Commentary	38
Publications Part 3	39
Needs Assessment	40
Publication 6	40
Professionals' Perceptions	41
Publication 7	43
Publication 8	44
Deep End GPs' Views	47
Publication 9	47
Commentary	48
Conclusion	49
Postscript	53
References	54
Appendix 1 - Publications of Anne McFadyen	61
Appendix 2 - Additional referenced publications by Anne McFadyen	65
Appendix 3 - Extract from McFadyen (1994)	66
Appendix 4 – Author's declaration and co-authors' confirmations	76

# List of Figures and Tables

## Figures

Figure 1	List of Papers by Methodology	14
Figure 2	The Scottish Model of Infant Participation	16
Figure 3	The CMM Model as represented by 5 levels of context	24
Figure 4	Conceptual model for hierarchy of meaning analysis	30
Figure 5	A representation of the relationships under investigation	31
Figure 6	The Infant Mental Health System in Scotland	39
Figure 7	Overview of thematic analysis and sub-themes	42
Figure 8	Modified candidacy framework	45
Figure 9	<i>Systems and Gaps in Current Service</i> represented according to the candidacy model	46
Figure 10	Relationships in context: Adviser and student	53

## Table

Table 1	Themes from mothers' narrative accounts	34
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Finally, thanks to my bemused but supportive sons and close friends.

## List of Published Works to be Considered:

For ease of access, pdf versions have been inserted in this table, and at the relevant part of the explanatory essay. For Publication 6, this is of the submitted version; the published version can be accessed via the link to *Perspectives in Infant Mental Health*.

Paper Number	Publication
1	Brown A (now <b>McFadyen</b> ) & Cooper, AF (1987) The impact of a liaison psychiatry service on patterns of referral in a general hospital. <i>British Journal of Psychiatry</i> , <b>150</b> , 83-87. <a href="https://doi.org/10.1192/bjp.150.1.83">https://doi.org/10.1192/bjp.150.1.83</a>
2	<b>McFadyen, A</b> , Broster, G & Black, D (1991) The impact of a child psychiatry liaison service on patterns of referral. <i>British Journal of Psychiatry</i> , <b>158</b> , 93-96. <a href="https://doi.org/10.1192/bjp.158.1.93">https://doi.org/10.1192/bjp.158.1.93</a>
3	Black, D, <b>McFadyen, A</b> & Broster, G (1990) The development of a liaison service. <i>Archives of Disease in Childhood</i> , <b>65</b> , 1373-1375. <a href="https://adc.bmj.com/content/65/12/1373">https://adc.bmj.com/content/65/12/1373</a>
4	<b>McFadyen A</b> (1997a) Making sense of the experience of neonatal intensive care. In <i>Multiple Voices: Narrative in Systemic Family Psychotherapy</i> . Eds R Papadopoulos and J Byng-Hall, London: Duckworth. ISBN 0 7156 2777 5
5	<b>McFadyen, A</b> , Canham, H & Youell, B (1999) Rating infant observation. It is possible? <i>International Journal of Infant Observation and its Applications</i> , <b>2</b> , 66-80. <a href="https://doi.org/10.1080/13698039908405031">https://doi.org/10.1080/13698039908405031</a>

## List of Published Works to be Considered (continued)

Paper Number	Publication
6	Galloway, S, Minnis, H & <b>McFadyen, A</b> (2022) Social Inequality and Infant Wellbeing in one area of Scotland. <i>Perspectives in Infant Mental Health</i> , <b>30(1)</b> , 21-28. <a href="https://perspectives.waimh.org/2022/07/15/social-inequality-and-infant-wellbeing-in-one-area-of-scotland/">https://perspectives.waimh.org/2022/07/15/social-inequality-and-infant-wellbeing-in-one-area-of-scotland/</a>
7	Weaver, A, Dawson, A, Murphy, F, Phang, F, Turner, F, <b>McFadyen, A*</b> , & Minnis, H* (*joint senior authors) (2022) Prioritising Infant Mental Health: A Qualitative Study Examining Perceived Barriers and Enablers to Infant Mental Health Service Development in Scotland. <i>Perspectives in Infant Mental Health</i> , <b>30(1)</b> , 37-42. <a href="https://perspectives.waimh.org/2022/07/01/prioritising-infant-mental-health-a-qualitative-study-examining-perceived-barriers-and-enablers-to-infant-mental-health-service-development-in-scotland/">https://perspectives.waimh.org/2022/07/01/prioritising-infant-mental-health-a-qualitative-study-examining-perceived-barriers-and-enablers-to-infant-mental-health-service-development-in-scotland/</a>
8	Phang, F, Weaver, A, Blane, D, Murphy, F, Dawson, A, Hall, S, DeNatale, A, Minnis, H, <b>McFadyen, A</b> , (2023) Using the Candidacy Framework to Conceptualise Systems and Gaps when Developing Infant Mental Health (IMH) Services in Scotland: A Qualitative Study. <i>Infant Mental Health Journal</i> . <a href="https://doi.org/10.1002/imhj.22072">https://doi.org/10.1002/imhj.22072</a>
9	De Natale, A, Hall, S, <b>McFadyen, A</b> , Minnis, H & Blane, D “Breaking the cycle”: A Qualitative Study Exploring General Practitioners’ Views of Infant Mental Health. <i>British Journal of General Practice Open</i> <a href="https://doi.org/10.3399/BJGPO.2023.0009">https://doi.org/10.3399/BJGPO.2023.0009</a>

## Introduction

*“Come at the world creatively, create the world;  
it is only what you create that has meaning for you”.*

*(Winnicott, 1968:23)*

This essay presents key findings from publications spanning a period of 36 years. All relate to mental health systems and the facilitative processes and challenges implicit in their development and delivery. Key theoretical concepts inform the discussion throughout. These are presented both here and in the following chapter.

In **Publications Part 1: Building Relationships to Develop Liaison Services**, I present three papers documenting the impact of service reorganisation on the pattern of referrals to psychiatric liaison teams. Themes relevant to later service development work in infant mental health (IMH) are identified. The functioning of these health systems both affect and are affected by relationships at many levels: between professionals, between professionals and patients, and within patients’ families.

In **Publications Part 2: Studying Early Relationships**, I discuss two aspects of a research study about the experience of infants and their parents and carers in the context of admission to a special care baby unit. A systems model supports the validity of different theoretical perspectives and of each participant’s experience. The latter is explored further in the second paper referenced which asks if it is possible to rate the psychoanalytic observations of infants.

In relation to the development of IMH services, **Publications Part 3: Infant Mental Health Service Development and Access** includes the presentation of research findings about professionals’ perceptions alongside an exploration of the issues surrounding access to services which is influenced by factors ranging from the societal to the personal.

Together, the nine papers presented here support the thesis that good relationships, at all levels, are fundamental to successful and sustainable service development and delivery.

## Mixed Methods Research

Overall, this essay constitutes a mixed methods approach to research. This term refers to studies in which data are collected by a variety of means, and according to Sandelowski et al (2012) “are derived from human subjects (via interviews, questionnaires, observations, laboratory assays, etc.)”. Two publications cited here include multiple methods of data collection (4,5).

Dixon-Woods et al (2005) have suggested that “current methods for evidence synthesising ---- favour quantitative forms of evidence only”. They propose that:

“Policy makers seeking to understand barriers to access to healthcare will need to draw on qualitative evidence --- as well as quantitative evidence.”

(Dixon-Woods et al, 2005: 45)

Research involving the integration of quantitative and qualitative research has become increasingly common in recent years but according to Bryman (2006), it has been “taken over by a formalized approach which is especially apparent in the discussion and proliferation of typologies”. He posited that the move to give types of mixed methods research specific names was intended to “convey[s] a sense of the rigour of the research.” The danger here perhaps is that this ‘naming’ appears to support the view that positivist quantitative research is of higher value than an interpretive approach. However, his ultimate position appears to be that a legitimate function of a mixed methods approach is to triangulate, namely, to seek different perspectives on the same issue or research question. “Ensuring methodological integrity requires attention to three methods (qualitative, quantitative, and mixed methods)” (Creamer, 2018) with the resulting data contributing to stronger conclusions than the use of one method alone. The third category is important in itself, as is “seeking information about unanticipated outcomes” which Creamer sees as an intentional and legitimate act.

Sandelowski et al (2012) have also discussed the challenges of synthesising research findings and refer to how different approaches can be seen as reflecting different “defining logics”, exemplified by *aggregation* (“the assimilation of findings”), *configuration* (“the assembly of ‘thematically dissimilar’ findings”) and *interpretation*

(subjective explanation of meaning). Referring to “the binary that continues to bind”, they reflected that:

“The default to the qualitative/quantitative binary is evident in the persistent alignment of aggregation of findings with positivism and the quantitative reduction of data, and of interpretation of findings with constructivism and the qualitative amplification of data.” Sandelowski et al (2012: 319)

They proposed that each (aggregation and interpretation) entailed the other and saw the “interpretive gesture” as “present in even the most ‘quantitative’ of research synthesis efforts”.

This retrospective appraisal of some of my published work reflects an appreciation of the value inherent in examining mental health services and their development from these different perspectives, illustrating how each approach to science facilitates the other to create a fuller picture of the topic. My own journey as a researcher has encompassed quantitative and qualitative methodologies and this thesis also supports the systems proposition that the whole is more than the sum of its parts (von Bertalanffy, 1968).

Considering which publications to include was challenging. I have selected 9 publications from 35, 21 of which were peer-reviewed (see Appendix 1). Here I focus on those most relevant to service development and delivery. In keeping with my constructivist philosophy, some of my writing has included information about my personal history (to contextualise my account of the narratives of others). Early publications cited (1,2) are more aligned to an *old science* approach, that is, research methods which yield “quantitative evidence (hard and objective)” (Levin, 2014). Later publications reflect a more qualitative (*new science*) approach.

Figure 1 maps research methodology to the publications chosen. Additional publications by me which are referred to in this essay are listed in Appendix 2.

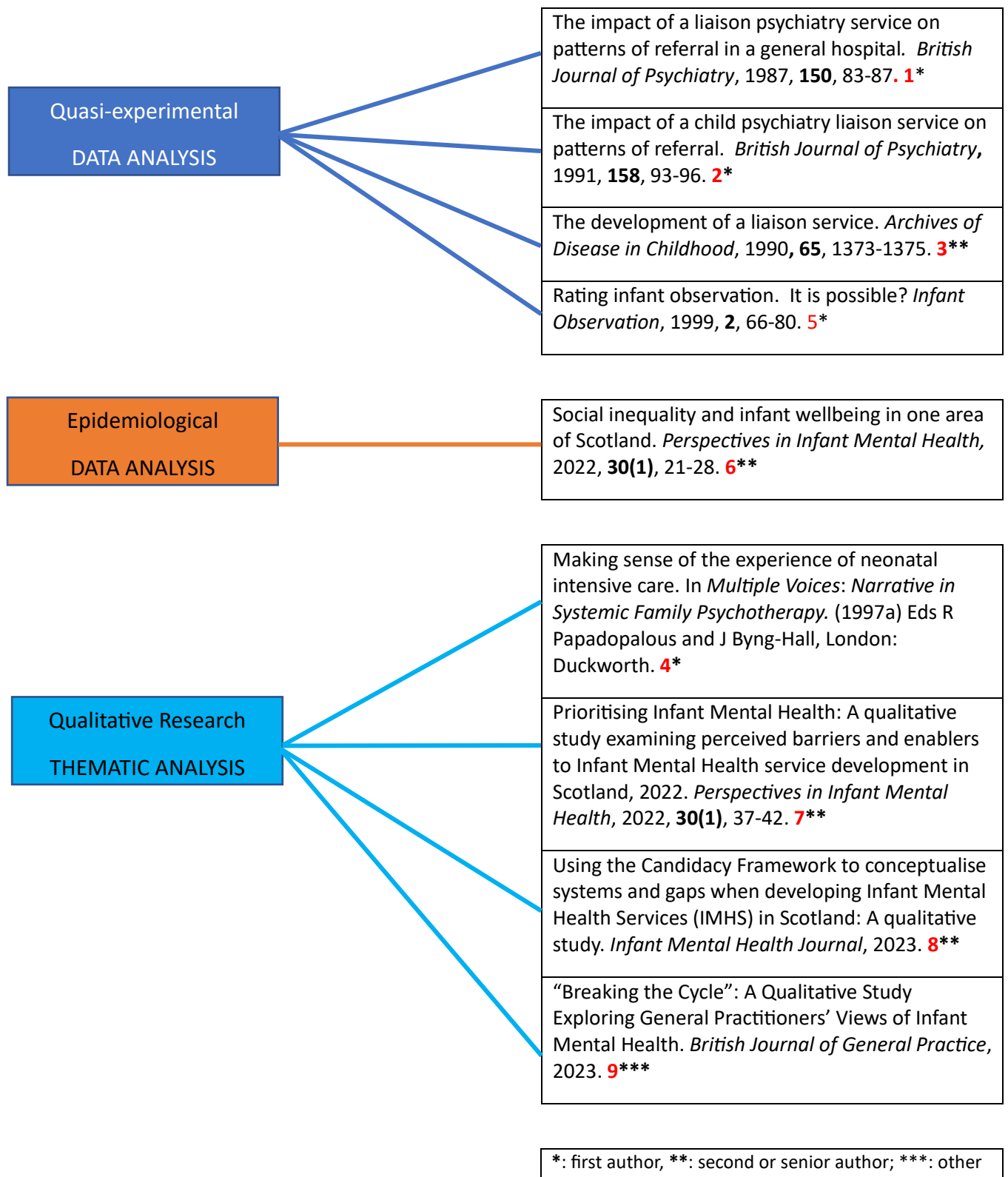


Figure 1: List of Papers by Methodology.

## **Theoretical Background**

Here I present some definitions and discuss key theoretical ideas which underpin my conceptualisation of developing relationships. These include developing infant-parent relationships, relationships within health systems, and those between health systems, patients, and their families.

### **Mental Health and Access to Mental Health Services**

The World Health Organisation (WHO) defines mental health as “a state of mental well-being that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community” (WHO, 2023). It is not simply the absence of mental health conditions or psychiatric illness.

At their best, mental health services provide treatment for often complex clinical presentations, facilitating second order change (addressing the underlying reasons for distress or disorder) rather than only alleviating symptoms (first order change). However, access to mental health services can be difficult for several reasons, including a local or national imbalance between demand and capacity, and the stigma associated with mental health conditions. Historically, investment in mental health services has been less than for physical health services, and there have been calls for parity of esteem. “Parity of esteem means equal access to effective care and treatment, equal efforts to improve the quality of care, equal status within health care education and practice, equally high aspirations for service users and equal status in the measurement of health outcomes” (Kings Fund, 2018).

Service development faces many challenges including resources, workforce and attitudes. In arguing for values-based and evidence-based practice, Fulford (2011) has drawn attention to the diversity of values held and advocated for partnership between service users, practitioners and policy makers. He has proposed that “three keys” are required:

- “1. Active participation of the service user concerned in a shared understanding with service providers and where appropriate with their carers;
2. Input from different provider perspectives within a multidisciplinary



approach;

3. A person-centred focus that builds on the strengths, resiliencies and aspirations of the individual service user as well as identifying his or her needs and challenges”. (Fulford, 2011:984)

This approach has the potential to address “issues of power and control implicit in the social organisation which separate families with their problems from therapists with their (value-laden) knowledge and solutions” (McFadyen, 1997b).

An example of work to facilitate coproduction in IMH services is given in McFadyen et al (2022). Drawing on the experience of those involved in early years work (Arnott & Wall, 2022) and the good practice reported by Lundy (2007) and others, a Scottish Government Group which I chaired developed the Scottish Model of Infant Participation (see Figure 2). Based on Article 12 of the United Nations Convention on the Rights of the Child (UNICEF, 1989), this model attends to the 4 domains proposed by Lundy: Space, Voice, Audience, and Influence. It underpins the Scottish Government’s Voice of the Infant Best Practice Guidelines and Infant Pledge (2023).

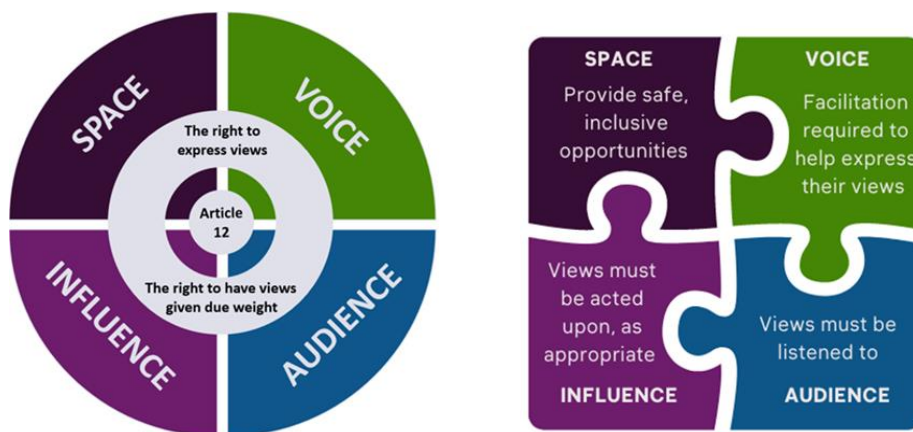


Figure 2: The Scottish Model of Infant Participation (McFadyen et al, 2022).

Gaining access to specialist services usually depends on referral by a primary care practitioner. A shared understanding between primary and secondary providers is essential for pathways into care to work effectively. This will involve shared beliefs and values, clear communication and trust. Trust is not often referred to in literature about service development yet, as will be shown, the nature of relationships between referrers and providers is a key factor in ensuring that outcomes are satisfactory.

From the patient's perspective, trust is important, and in particular '**epistemic trust**,' that is "trust in the authenticity and personal relevance of interpersonally transmitted knowledge" (Fonagy & Campbell, 2017). In relation to therapeutic engagement, those labelled as "hard to reach" may be "simply showing an adaptation to a social environment where information from attachment figures was likely to be misleading" (Fonagy & Campbell, 2017). Adding this explanation to our understanding of the barriers faced by patients seen as needing, but not accessing, services has the potential to improve service delivery.

The concept of "candidacy" (Dixon-Woods et al, 2006) is explored in **Publication 8**. This framework provides a way to conceptualise patients' journeys, recognising that their identification as a candidate for a particular service is structurally, culturally, organisationally and professionally constructed. The complex systemic factors contributing to ease of access are organised into inter-related contextual layers (micro, meso and macro). Wider socioeconomic and environmental issues also contribute to access challenges (see **Publication 6**).

"Nearly nine out of ten people with mental health problems say that stigma and discrimination have a negative effect on their lives" (Mental Health Foundation, 2023). **Stigma** (negative attitude) and **discrimination** (negative treatment) continue to exist despite the recognised high prevalence of mental health problems and attempts to improve public awareness and understanding. Other protected characteristics may also contribute to stigma and discrimination, and may compound mental health stigma (Minnis, 2021). Recognising and addressing this intersectionality is crucial to ensure that services are delivered equitably.

The case has been well made for mental health to be supported in infancy, for example by WHO (2018) and Hogg & Moody (2023), yet it remains the case that babies are stigmatised by virtue of their age and a societal lack of awareness of their capabilities, often resulting in a denial of their rights to services. Infant Mental Health is discussed in the next section.

## Infant Mental Health

**Infant Mental Health** is the developing capacity of the child “to experience, regulate and express emotions, form close and secure relationships, and explore the environment and learn” (Zero to Three, 2001). It concerns both “being and becoming mentally healthy” (Hogg & Moody, 2023).

Importantly, this development requires a close, attuned relationship with a primary caregiver, most often their mother. When this is not present, babies’ development is significantly affected, and they are more likely to experience mental distress and disorder and to have mental health difficulties later in life.

Like child mental health problems, infants’ emotional difficulties “can be understood only within the framework of many layered contexts, ranging from the molecular through to the societal” (McFadyen & Roberts, 1997). Both genetic and environmental factors are important with the latter including the in-utero environment and conditions surrounding their birth, the care they receive, their home environment and wider socioeconomic factors. Some babies’ genetic vulnerabilities or physical status will make them more challenging to care for.

The time from conception until the age of 2 years is the most important for ensuring that the baby’s brain and mind develop optimally. During this period “more than 1 million new neural connections form every second” (Centre on the Developing Child, 2023).

Berens and Nelson (2019) have summarised the many research studies which have contributed to our understanding of functional brain development. This happens sequentially from the brainstem regulatory systems essential for life, through to emotion and memory in the limbic system to the development of cortical functions such as empathy, decision-making, logic and reasoning. Early relationships affect brain circuitry as neuronal pathways are laid down in response to interactions with the world. Over time the neural pathways used most are made stronger and faster through myelination while others are pruned back as the brain responds and adapts to its environment.

Integrating knowledge about **neurobiological** processes with the explanations proposed by other disciplines such as **psychoanalysis** and **developmental**

**psychology** supports a fuller model of explanation about emotional and cognitive development and functioning. Historically those approaching the topic from a developmental psychology perspective were often distant from those coming from a psychoanalytic perspective. These differences largely reflected the primary purpose and the populations being investigated. Psychoanalytic theories about infancy were developed through naturalistic and clinical observations as well as from data acquired during the treatment of older children and adults:

“States of mind are seen as deriving from the impact of a present situation on a mind already patterned by previous experiences, each of which has left some residue.” (Gosling, 1968:1)

An account of relevant **psychoanalytic theories** is given in McFadyen (1994:10-19) (see Appendix 3).

### **Developmental Psychology**

In the context of a societal shift in attitudes towards children, research in the 1970s began to focus on infancy. Developmental psychologists adopted an experimental stance to examining dyadic interaction and moved from studying the impact of caregiver behaviour on infants to an approach which focused more on the effect of the baby on their caregiver, and the relationship. The need “to look beyond the characteristics of the parent and infant in order to understand what transpires between them” (Belsky & Isabella, 1988) coincided with research evidencing the baby’s capacities from birth and before debunking ideas that babies were unable to engage with the world. Stern (1977) described the ‘discovery’ that “the infant comes into the world bringing formidable capabilities to establish human relatedness” as significant. He described babies’ abilities to cue us into what they are thinking and feeling through their behaviour including their body movements, vocalisations and gaze.

Brazelton and Cramer described “six characteristics of parent-infant interaction – **synchrony, symmetry, contingency, entrainment, games (play) and autonomy**” (1990). They conceptualised the dance between infant and adult and broke it down into component steps. By helping the infant to self-regulate, pay attention and

prolong attention, adults facilitate “**synchronous communication**”. This is supported in a symmetric dialogue between parent and infant. **Contingency** is central to this communication, referring to babies’ realisation that their actions have consequences. It “requires availability on the mother’s part” (Brazelton and Cramer 1990). **Agency** is closely linked to contingency and refers to the infant’s capacity to have an effect on other people or objects.

**Reciprocity** between infant and caregiver is essential for the development of communication, with the process by which meaningful interaction evolves relating to each one’s interpretation and fit with their partner’s actions. The **rhythmicity** of interaction seems to be as important, if not more important, in the development of the relationship than each participant’s contribution (Brazelton et al, 1974).

## **Attachment**

The work of John Bowlby began to bridge the theories of psychoanalysts with those originating in ethology (Bowlby, 1953). His seminal publication, *Attachment* (Bowlby, 1969) integrated and developed some key ideas from these fields. He summarised the principal propositions of **Attachment Theory** in a later paper:

1. “Emotionally significant bonds between individuals have basic survival functions and therefore primary status.
  2. They can be understood by postulating cybernetic systems situated within the CNS [central nervous system] of each partner that have the effect of maintaining proximity or ready accessibility of each partner to the other.
  3. In order for the systems to operate efficiently, each partner builds in his or her mind **working models** of self and of other and of the patterns of interaction that have developed between them.
  4. Present knowledge requires that a theory of developmental pathways should replace theories that invoke specific phases of development in which it is postulated a person may become fixated and/or to which he or she may regress”.
- (Bowlby, 1988:2)

Here, Bowlby has used the language of systems to describe the relationship between infant and carer, and links this to neurobiology. He also appears to have been implicitly critical of some aspects of psychoanalytic theory.

Developing Bowlby's ideas further, Sroufe referred to the complex relationship between contextual levels and drew attention to the **reflexivity** which permits re-storying:

**“Inner working models** are constructed over time and are continually elaborated and, at times, fundamentally changed. At the same time, inner working models influence both the child's experience and how these experiences are processed”. (Sroufe, 1988:24)

The concept of reflexivity is further explored in the following section on **Systems Thinking** where the **Coordinated Management of Meaning**, a method for conceptualising contextual levels and their relationships, is presented.

## Systems Thinking

**General system theory** (von Bertalanffy, 1968) refers to the study of how separate but interdependent parts of an organism or non-living functional unit relate to each other to maintain a steady state. A key premise is that the whole is more than simply the sum of its parts, with the properties of the whole deriving “from the properties of the *relationships* between the parts, interacting with the properties of the parts to mutually define each other” (Gorell-Barnes, 1985).

Systems are characterised by feedback loops which seek to maintain an optimal state of functioning and maintain homeostasis, for example, the hypothalamic-pituitary-adrenal axis controlling our response to stress or the thermostatic control of a central heating system. The Government Office for Science (2022) describe systems thinking as “a framework for seeing the interconnections in a system and a discipline for seeing and understanding the whole system; the ‘structures’ that underlie complex situations.”

Families, hospitals and neighbourhoods can all be described as **social systems** (Parsons, 1951) comprised of a complex arrangement of elements, including individuals and their beliefs (Luhmann, 2012).

In McFadyen (1997b) I explored our understanding of systemic and psychoanalytic therapies (and the theories which inform them) through the lens of postmodernism: “at its simplest, the term refers to the embracing of a ‘new science’ perspective, namely the idea that all ‘knowledge’ is relational.” The influence of **constructivism** and **social construction** theory fostered a change in perspective:

“From an ‘observed system’ reality (the notion that we can know the objective truth about others and the world) to an ‘observing system’ reality (the notion that we can only know our own construction of others and the world)”.

(Hoffman 1988:110).

This was supported by an approach to understanding which includes *not knowing* and *reflexivity* (Pocock, 2006). In relation to systemic research, Minuchin (1988) proposed that “the systemic researcher might also direct more attention to process,” while Cecchin (1987) invited us to maintain a curious position. In relation to the study of human behaviour, Bruner (1990) called for “venture beyond the conventional aims

of positivist science with its ideals of *reductionism, causal explanation and prediction*". These moves towards a constructivist and systemic approach to research were historically antithetical to the view that an experimental approach was superior to a descriptive one.

The validity of mixed methods methodologies is supported by a constructivist position which acknowledges the subjectivity inherent in the interpretation of *any* data. Any formulation of quantitative or qualitative research findings, or clinical stories about patients and their families is inevitably a co-constructed narrative influenced by the beliefs and experiences of the researcher/clinician.

## **Narrative**

The use of **narrative** and **discourse analysis** in research can be seen to epitomize a *new science* approach. Narratives are stories, often shared with others and used to make sense of our experience. They exist in a context which includes time, place and person, and the larger network of stories which both influence and are influenced by current experience and personal and family or institutional beliefs. Sluzki (1992) referred to an "ecology of stories":

"Our social world is constituted in and through a network of multiple stories or narratives (the 'story' that our social world is constructed in or through multiple stories or narratives being one of them)".

(Sluzki, 1992:218).

In *Acts of Meaning* Bruner (1990) explored the importance of language in shaping the meaning we ascribe to our experience.

"Whatever view one might take of historical forces, they were converted into human meanings, into language, into narratives, and found their way into the minds of men and women".

(Bruner, 1990:137).

Reflexive thematic analysis (Braun & Clark, 2006) used in **Publications 7, 8 and 9** is a qualitative research method which provides a framework for the analysis of narratives.



## The Coordinated Management of Meaning

Bateson (1972, 1979) proposed that there were layers of context which influenced each other. This concept of circularity was closely linked to the idea that information was 'news of a difference' and that the meaning of any communication was that ascribed by the receiver.

Developing this theory further, Cronen et al (1982) considered **reflexivity** in "systems of social meaning and action" and presented the **Coordinated Management of Meaning (CMM)** as a model by which to conceptualise the structural complexities of hierarchical systems. Two definitions underpin this theory:

1. "Hierarchical Relationship: Two units of meaning are in a hierarchical relationship when one unit forms the context for interpreting the meaning and function of the other".
2. "Reflexive Loops: Reflexivity exists whenever two elements in a hierarchy are so organised that each is simultaneously the context for and within the context of the other".

(Cronen et al, 1982:95)

Cronen and Pearce (1985) referred to embedded levels of context, the number of which were not fixed. In their analysis of family processes they typically employed five levels (see Figure 3). In search of a short-hand way of explaining cause and effect from the perspective of a systemic epistemology, they coined the phrase "**ambifinal** cause, --- one whose 'effects' are 'context dependant' or 'contingent' on the state of the system in which it occurs." This permits the use of a 'both/and' explanation of cause and action as opposed to an 'either/or' one.

FAMILY MYTH	refers to	high order general conceptions of how society, personal roles and family relationships work.
LIFE-SCRIPTING		a person's conception of self in social action.
RELATIONSHIP		a conception of how and on what terms two or more persons engage.
EPISODE		conceptions of patterns of reciprocated acts.
SPEECH ACTS		the relational meanings of verbal and non-verbal messages.

Figure 3: The CMM Model as represented by 5 levels of context (Cronen & Pearce, 1985:72).

Reflexivity permits bidirectional influence, and “reflexive loops are intrinsic to social interaction” (Cronen et al, 1982). The proposal that not all paradoxes are problematic (it is possible to hold two positions at once) is fundamental to the theory. If no change in interpretation occurs regardless of which level is regarded as ‘higher’ then a “**charmed loop**” is said to exist (see Postscript). However if the interpretation is different depending on which level is the context for the other then the loop is considered “**strange**” or “**paradoxical**”. A familiar example is found in a bedtime scene in the film *Mary Poppins*: the words sung tell the children *not* to go to sleep while the melody is that of a lullaby. The higher context here is the tune; the children fall asleep; the results would have been different if the higher context was the wording.

Adopting a CMM lens can help the organisation and relative understanding of the significance of the themes arising in qualitative research and supports the integration of different theoretical models. However it does not deal with how to organise data when two or more systems collide, for example, when the family as a system interacts with other social systems such as health or social services. A model, described in **Publication 4**, was proposed to examine the effects of relationships in one system to relationships in another and generate hypotheses about the relationship of one system to the other (Figure 5: p31). This developed the CMM model to embrace different levels of context in parallel but interacting systems.

In the next section, I return to my early research studying the development of liaison psychiatry services, which typically bring together clinicians involved in physical health care with clinicians whose primary focus is on mental wellbeing.

## **Publications Part 1: Building Relationships to Develop Liaison Services**

The studies reported here in adult and paediatric liaison services in district general hospitals are characterized by the recognition that active relationship-building and education of referrers is crucial. Both services had been reorganised to ensure that this could happen, with single consultant-led teams being easily located, approachable and responsive.

### **Publication 1**

“Reorganisation of the liaison psychiatry service to a general hospital provided a natural experiment” to study its impact on patterns of referral (Brown & Cooper, 1987). The most striking finding of this retrospective analysis of referrals to the psychiatric liaison service was the significant increase in the referral rate of medical and surgical inpatients who were not involved in acts of deliberate self-harm ( $p < 0.01$ ). The rise in referral rate was associated with an increase in the diagnosis of potentially treatable conditions such as depressive illness and neurotic disorders.

The establishment and delivery of the service by one consultant psychiatrist and his trainee fostered the development of continuity in the relationships between the psychiatry team and physicians and surgeons. This was associated with the referral of patients whose difficulties were characterised by either an emotional response to physical illness or a more complex relationship between psyche and soma which had led to their presentation. Results suggest changes were “related to the interaction between the reorganised liaison service and the referring departments.” This was characterised by “improved professional relationships, an increased awareness of the importance of psychological factors in physical illness and a more well defined and realistic expectation of the service provided.”

## Publication 2

A similar research methodology was used to study the impact of the reorganisation of a paediatric-psychiatry liaison service. In this case, the team included a range of professionals (the multidisciplinary team) who came to be well known to their colleagues in paediatric services. A similar shift in pattern of referrals was observed and again appeared to reflect an improved understanding of the relationship between physical and mental health.

A total of 55% of referrals were of inpatients on the paediatric ward; other inpatients made up 12.5%. 67% of all referrals were from paediatricians. Of the children who had not harmed themselves, most were referred either for help with the management of physical illness or for investigation of a non-organic physical complaint. The main finding was that these referrals increased significantly in contrast to both the total number of referrals and the number of cases of self-harm ( $p < 0.005$ ).

## Publication 3

This paper reflects on ways in which good relationships across specialties were built and helped paediatric colleagues to develop a deeper understanding of the psychological aspects of illness. The need to take a systemic approach was emphasised:

“Systemic thinking has aided our understanding of processes and contributed to our management of both organically and non-organically induced physical complaints.”  
(Black et al, 1990: 1373)

The possible reasons for the findings reported in **Publication 2** were explored including obstacles to liaison and possible ways of overcoming these. Paediatricians' beliefs about the characteristics of child psychiatrists were thought to influence their use of, and participation in, a liaison service. A mismatch in expectations around timing of response and subsequent communication was thought to present further challenges. One of the obstacles to liaison may be the overzealous approach of

colleagues who hold a specific and narrow point of view about their role. There is a need to “actively reach out” but also to keep one’s distance (Greene, 1984).

However, effective and timely interventions improve confidence in a new service, and lead to improved relationships.

The importance of reciprocity and fit are apparent, with respect for the knowledge and expectations of the other, and timeliness being seen as crucial. Being in tune with each other, or attunement as it is referred to in early relationships, is essential if good interprofessional relationships are to be established, maintained, and developed.

## **Commentary**

These papers report on research conducted over 30 years ago, since when designated liaison psychiatry services have been established in many UK general hospitals. Retrospective data collection from written case notes meant that the recording proforma were informed by consideration of what was possible. While the source of referrals, demographic characteristics and disposal were relatively easy to ascertain, diagnoses were made by the clinician-researcher based on clinical information recorded. A prospective study would have supported more systematic data collection. The wider recognition that liaison services were valuable may have also contributed to the increase in the numbers of appropriate referrals.

Although the value of a systems perspective was acknowledged in **Publications 2** and **3**, it was limited to the family. My curiosity about wider systems led me to explore relationships between family and professionals within a neonatal unit (NNU) (**4**). This is described in the next section.

## Publications Part 2: Studying Early Relationships

### Publication 4

**Publication 4** is an abridged account of a research project which was conducted as part of an MSc in Systemic Therapy. It extends the work reported in Part 1 by examining how the relationship between family and hospital affect and are affected by the mother-infant relationship. The study set out to examine developing mother-infant relationships in the context of neonatal intensive care. This account used the lens of narrative as a theoretical construct and described its use as a research tool.

“The potential of narrative to be used therapeutically and for research purposes seems essentially to hinge on the idea that the story told is only one of a number of possible stories which could be told.” (McFadyen, 1997a:151).

The reality of there being many stories led to an exploration of the mothers' stories in the context of a wider investigation which also examined the experiences of babies and staff.

The aims of this investigation were:

1. To examine developing mother baby relationships in the context of the neonate's admission to a neonatal unit.
2. To consider the influence of other specified relationships on that relationship, and to consider the influence of the developing mother-baby relationship on those relationships.
3. To consider the role of family, cultural and organisational beliefs about childcare, prematurity and the role of medical intervention in relation to the first two aims.

A fourth aim was to reflect on the use of the method of psychoanalytic infant observation as research tool. I report on this briefly here and in **Publication 5** describe research which explored this methodology further.

The project used mixed methodologies including semi-structured interviews with data collected being subjected to thematic analysis. Figure 4 details the conceptual model used to link the areas of enquiry to the research method used. Each level of information is seen as “a place marker for a complex of information at a particular level of abstraction” (Cronen & Pearce, 1985).

LEVEL	HOSPITAL	FAMILY	RESEARCH TOOL
3	Beliefs about prematurity that inform practice. Hospital policy. Philosophy of NNU	Beliefs about childcare, prematurity, hospitals, previous experience, role of medical intervention	Semi-structured interviews with hospital staff (consultant paediatrician and senior nurse) and parent
2	Beliefs about this mother-baby and her family	Beliefs about this baby, its care by its mother and by staff, this mother-baby relationship and family relationships	Semi-structured interviews with key nurses and parent
1	What happens at the relationship level? Between mother and baby, nurse and mother, nurse and baby, father and mother and father and baby		Infant Observation and supervision: Rating Scale

Figure 4: Conceptual model for hierarchy of meaning analysis.

As presented earlier, the Coordinated Management of Meaning is characterised by a hierarchical relationship between “units of meaning” and reflexive loops which exist “whenever two elements in a hierarchy” are both the context for and within the context of the other” (Cronen et al, 1982). The development of the CMM model to embrace different levels of context in parallel but interacting systems is represented diagrammatically in Figure 5. This offered the opportunity to examine many hypotheses about the effect of relationships upon other relationships. One example was my hypothesis that a nurse’s actions as she supported a mother to care for her baby were influenced by her beliefs about that mother and her relationship with the baby, while simultaneously her experience of that mother and baby might shape or alter her beliefs.

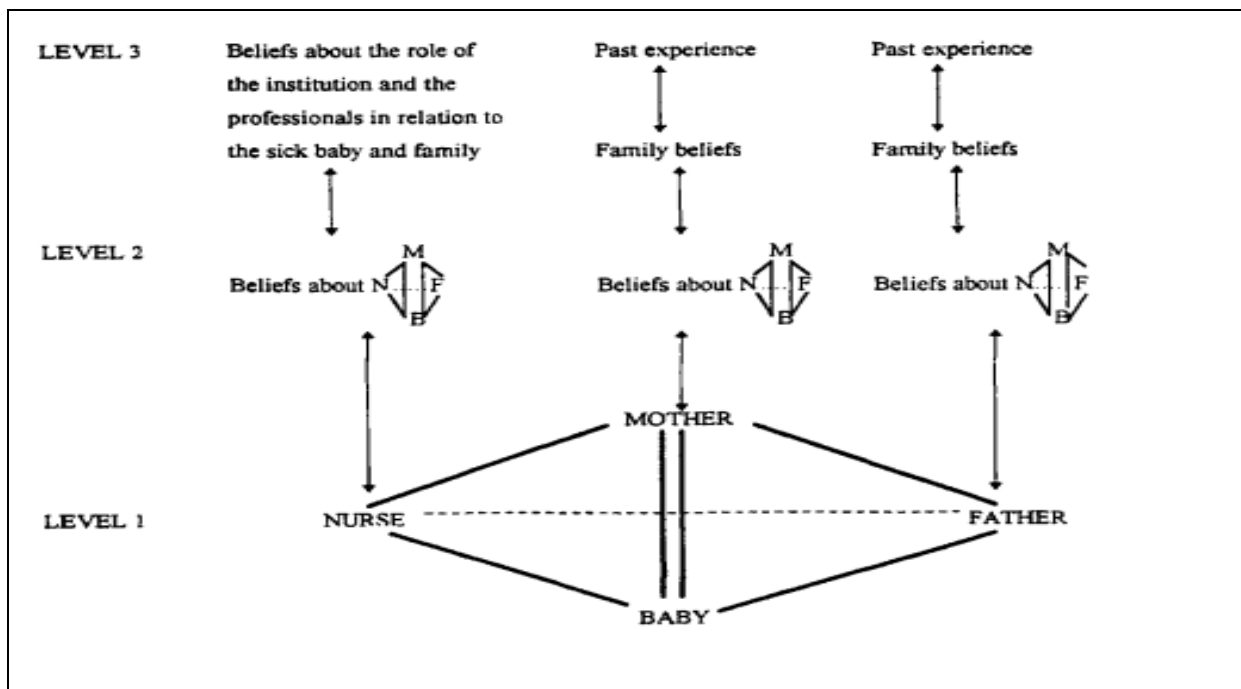


Figure 5: A representation of the relationships under investigation (McFadyen, 1997a).

### Data from Interviews with Mothers

I conducted a pilot observation and interview with a recently discharged mother-baby couple to test the methodology. I then recruited 4 babies, recently born and admitted to the NNU, and their mothers. I drew on data collected from all 5 women. The semi-structured interviews with staff and mothers consisted of 10 stem questions and addressed all contextual levels, including giving them the opportunity to comment on my observations of their own and their baby's behaviour in 4 out of the 5 cases. These reflections drew on my impressions following at least 4 one-hour observations made weekly from a few days after their birth. These had been presented to and discussed with my psychoanalytic observation supervisor, a senior child psychotherapist.

The participant's response to stem questions was followed up by supplementary questions in a manner akin to the use of *circular questioning* in systemic therapy. Palazzoli et al (1980) refer to circularity as "the capacity of the therapist to conduct his investigation on the basis of feedback from the family in response to the information he solicits about relationships." Tomm (1985) differentiated *descriptive* and *reflexive circular questions*, describing the former as seeking to lead to an understanding of the system, also noting that "it is impossible to ask a question



without having some effect.” This may be true in relation to both individual interviews and focus groups. Turner-Halliday et al (2018) reported a strengthening of professional relationships following qualitative consultation involving both methods.

The impact of this kind of research on participants is perhaps something which should be made more explicit both when qualitative research is reported *and* when consent is sought. Burck (2005) observed that “an interview does not just elicit a story already known, but often contributes to a new account” and noted that “research interviews can sometimes have therapeutic effects (or indeed damaging ones).” Husband (2020) has also drawn attention to potential ethical issues related to informed consent and the need to consider “participant wellbeing”.

In this publication I presented thoughts about the process, and themes from the interviews with mothers conducted a month after the baby’s birth, lasting up to 3 hours, and followed-up several months later. As I commented, “both the content of their stories, and the way in which they were told seemed important” (McFadyen, 1997a).

After introductions, I asked ‘Can you tell me what happened?’. Three out of five women offered an almost uninterrupted (and uninteruptable) account which included information about their past experiences, families, and belief systems. Here, I think we can see how difficult it is to differentiate research from clinical support in the context of traumatic experience and life-threatening illness. This resonates with observations made about issues relating to the clinical-research interface (McFadyen & Altschuler, 1992). As a researcher, I was not part of the clinical team and as such may have had “a degree of detachment from the clinical and emotive issues” and “from the assumptions and presumptions made, and probably freely discussed, by the clinical team.” Nonetheless, the research interview may provide “a forum for first catharsis”. Further, it might trigger, in the subjects, powerful feelings which may have “implications for the existing relationships with the clinicians.” The researcher who is clinically trained (as I was) may be better placed to contain certain difficult feelings and maintain a neutral stance, but also may be challenged as to how to stick to the research protocol.

Another important process observation related to where the subjects chose to begin their story. According to White and Epston (1990) “narrative incorporates the

temporal dimension” and “requires the location of events in cross-time patterns”. In 3 out of 5 cases, their accounts began prior to the conception of the index baby and related to a previous pregnancy. One began by describing events 5 weeks before delivery when she had to be admitted to hospital and one began with the unexpected labour which had led to her baby’s premature birth. In this respect it appeared that most had immediately sought to contextualise their current situation, and I remained unclear about whether this was for my benefit or represented their own attempt to make sense of what had happened. This might be described as a constitutive act, but as a researcher it did not seem appropriate to clarify this.

“Since the stories that persons have about their lives determine both the ascription of meaning to experience and the selection of those aspects of experience that are to be given expression, these stories are constitutive or shaping of person’s lives.” (White & Epston, 1990: 40)

They also compared their experience with past experiences, in one case of their own premature beginning and the consequences of that. Similarly, their experience of illness and hospitals (whether directly or via a relative’s experience) and views about healthcare professionals were offered freely. Here it seemed that they were both making sense of how they were coping with their current situation and seeking to look back in a different way in the light of what was happening in the present.

The themes arising from the interviews related both to the participants’ actual experience; to their perceptions which often appeared to be influenced by past experience, by family relationships and beliefs; and by their relationships with hospital staff. The account reported in **Publication 4** is *my* account and interpretation, interspersed with direct quotations, and in this respect represent a co-construction of sorts. The addition of some details of my personal context supports the reflection that it is as much my story as it is theirs. This accords with White and Epston’s view that:

“The narrative mode redefines the relationship between the observer and the subject. Both “observer” and “subject” are placed in the “scientific” story being performed, in which the observer has been accorded the role of privileged author in its construction.” (White & Epston, 1990: 82)

This version of the ‘research report’ was tailored to fit with the expectations of the editors as they presented the work of the Systems Group at the Tavistock Clinic which sought to explore the use of narrative in systemic family psychotherapy. For the purposes of this essay, I have grouped together the themes identified in Table 1.

Major Theme	Associated Minor Themes
Labour	Fear for their own lives Lack of preparedness for the birth of a live baby Past experience of and anticipation of loss
Their baby	Baby’s positive attributes Belief that their babies recognised them through voice and touch Belief that talking and singing to their baby was important for their survival Fear of future disability or death Ownership and identity
Hospital experience	Positive about support from staff Feeling judged or approved/disapproved of Communication challenges Suspicion based on past experience Doing things the ‘hospital’ way
Family experience and beliefs	Lack of partner or wider family support Childhood experiences and relationship with own parents Religious or higher order beliefs

Table 1: Themes from mothers’ narrative accounts.

Although only a small number of research participants were interviewed, the data collected was rich. A fuller account is given in McFadyen (1994:107-115). The

women offered extensive information about the areas under enquiry. I asked about fathers and had intended to include them in both the observational part of the study and the interviews. However, they were not present. One woman had a partner who attended her interview, but he was not the father of the baby.

### **Psychoanalytic Infant Observations**

As part of this MSc project, I devised and tested a 7-item 'Mother-child relationship scale'. I selected observations from all 4 babies studied, with one baby being included at two time points (Day 7 and Day 103). I completed the scale as did my supervisor and two additional senior child psychotherapists independently. There was 100% agreement in the score given for the three babies where just one observation had been provided. It was notable that in the NNU context the ratings were strongly based on the mother's actions. These babies, being very premature and limited in their movements by technical support in their incubators, were not letting us know as much about how they were feeling as babies born at term, or older infants would have.

The next paper reports on the development of this work in relation to the observation of an older infant born at term.

### **Publication 5**

**Publication 5** describes a pilot project conducted by me and two child psychotherapists which explored the usefulness of rating infant observations.

Psychoanalytic infant observation is required as part of the training of child psychotherapists and psychoanalysts and has been adapted to inform the training of other professionals, for example, child psychiatrists (McFadyen, 1991) and social workers (Shulman, 2019).

“Infant observation has had two main functions:

1. to help students to learn about infants and their development;
2. to help students to develop their capacities to look at and experience in a particular sort of way, that is to develop the capacity to not know. Waddell (1988) has likened this to Keats’s notion of “negative capability” – the capacity ‘to be in doubts and uncertainties, not to reach after irritable fact and reason’.”

(McFadyen et al, 1999:66).

Students carry out a one-hour observation of a baby in the home weekly for two years. The observations are discussed in a seminar group led by a child psychotherapist or psychoanalyst, and it is here that impressions are explored and discussed, and further enquiries can be made of the observer.

The aim of the project was to address the question: “What level of agreement will be reached when a number of individuals and groups are asked to make inferences about the emotional development and relationships of one infant using the same piece of observational material?” (McFadyen et al, 1999). We were also interested in finding out what factors might account for any differences. In undertaking this project we recognised that we were taking an essentially subjective method of data collection and applying a more traditionally reductive approach to it.

The paper describes issues arising as we developed our methodology, which involved selecting a piece of observation, developing a semi-structured questionnaire and rating scale, and identifying participants. We asked participants to move through three phases of reporting: first to share their impressions and thinking in an unstructured account; second, to complete a questionnaire comprising 7 items; and third, to score an 8-item rating scale. Ratings comprised a score of between 1 and 5 based on the strength of evidence to support statements about the baby, the mother and the relationship. Raters were also asked to give feedback about their experience of participating in the exercise.

The observation chosen was of a baby aged 7-9 months, an age when the infant-mother couple might be dealing with key developmental issues such as increasing mobility and independence, weaning and separation and the development of ‘object permanence’, the baby’s realisation that things continue to exist even when they

cannot be sensed (Bentovim, 1979). In Stern's words (1985), the baby is developing a sense of "a subjective self".

The 22 returns from 6 groups included our own responses. Other individual participants were teachers of infant observation. Five of the groups, including one for psychoanalysts in training, were infant observation seminar groups. The sixth group, a multidisciplinary child and adolescent mental health clinical team, appeared to find the exercise most difficult to complete, failing to provide an account of initial impressions and only rating 7 of the 8 rating scale items.

The results are presented in the paper across the three dimensions moving from unstructured 'initial thoughts' through results from the questionnaire to the rating scale. Sole respondents reported missing others with which to discuss their impressions, while both group and individual respondents missed the presence of the observer. Nonetheless, the similarities in the way in which the task was approached were striking with reports notably using very little jargon, commenting on the same areas of development, and often exploring the potential symbolic meaning of the baby's actions. Similarly the responses to the questionnaire were remarkably consistent with all describing both adaptive and less adaptive behaviours and presenting a balanced view of both mother and child and their relationship.

With regard to the rating scale, the level of complete agreement for median scores ranging from 36-64% while agreement within one point ranged from 51-91%. Four of the eight items showed high levels of agreement with 81-91% being within one point of each other. Two items showed a low level of agreement with 59-64% being within one point. Interestingly these questions were about the mother and the couple rather than the individual baby.

In our consideration of the results we further explored reliability and internal consistency. Despite participants having had no training about how to complete the exercise, the level of agreement was surprisingly high. Excluding the 7 respondents who were outliers improved levels of agreement but without further refinement the scale was not considered suitable for use in systematic research. Nonetheless, the scale had good internal consistency with a Cronbach Alpha Coefficient of 0.7-0.8.

## Commentary

Both projects reported here used a mixed methods methodology. **Publication 4** focussed on narratives elicited through semi-structured interviews and did not report on infant observations carried out. However these did inform the interviews (“I asked mothers about some aspects of their own and the infant’s behaviour as I had observed it” (McFadyen, 1997a)).

The project described in **Publication 5** sought data from participants in three ways. All provided valuable information about the subject infant-mother couple with consistency in all three sections about their views of this baby’s development, but less agreement about maternal function and the relationship. It represented a bold endeavour, namely, to apply quantitative research methods to a method of information-gathering involving process-recording of the observation and the subjective experience of the observer. The study used only one observation of one baby and therefore was a snapshot of a particular stage of development of that child and mother. Predictive validity was not addressed here though respondents did make some predictions about development.

Both narrative and infant observation are characterised by inherent subjectivity with stories reported representing a co-construction and written observational material often acknowledging the observer’s own feelings.

Capturing and recording the baby’s experience in different ways helps us to focus on their contribution to their developing relationships and reminds us that they too are part of the wider system. Holding infants’ capabilities in mind could be considered essential for those who are building IMH services and in the next section the views of stakeholders, reported in **Publications 7** and **8**, reflect their concern that this is not always the case.

## Publications Part 3: Infant Mental Health Service Development and Access

In 2019, the Scottish Government made a commitment to develop perinatal and infant mental health services. While funding was almost exclusively for health services, it was recognised that infant mental health and wellbeing is attended to by family members, those working in universal services, other health, early years and social work settings, the third sector and specialist services. Funding was directed to 4 areas, specialist IMH services, perinatal MH services, maternal and neonatal psychological intervention teams and the third sector. The IMH system is represented diagrammatically in Figure 6.

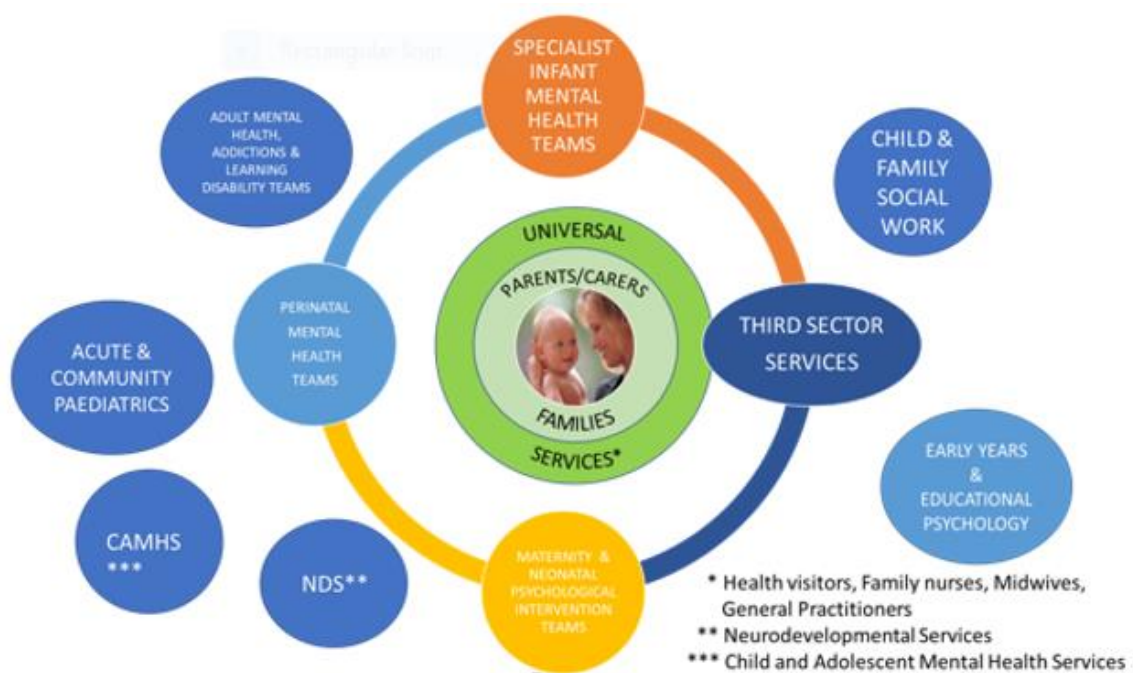


Figure 6: The Infant Mental Health System in Scotland (adapted from McFadyen, 2021).

A phased approach to IMH service development was adopted; and “health boards were asked to identify their state of readiness and bid for funds” (McFadyen, 2021). Two boards received first-wave funding and I joined a small number of colleagues, as a research supervisor, to focus our research efforts in one of these boards.



In this part of the essay, the publications chosen document some of the challenges and opportunities in developing IMH services. Included are a report of a needs assessment exercise (6), two papers drawing on data collected from professionals involved in service development in the same health board (7,8), and a paper examining the views of Deep End GPs, namely those working in the most deprived areas of Scotland (9).

## Needs Assessment

### Publication 6

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Routine data collected locally and nationally was examined to assess the level of need for a designated IMH service. It was drawn from woman and infant-focused services so did not provide information about fathers or others in the household. Nonetheless, it has the potential to inform public health and clinical service initiatives. Even though collected, this data is rarely analysed, and the opportunities afforded by data linkage are not often realised. In this respect the study was unique in Scotland as it presented “the results of an analysis of risks and concerns, and use of services, as these relate to the socioeconomic circumstances of families” (Galloway et al, 2022), through linkage to the Scottish Index of Multiple Deprivation (Scottish Government, 2020).

The findings are discussed in more detail in a fuller report (Galloway et al, 2021). We found that there was a complex interplay between risk factors with expectant mothers in the most deprived areas being more likely to:

- have had an acute psychiatric admission in the last ten years;
- have a family history of mental illness;
- have a history of substance use;
- be under 20 years of age.

Deprivation was also associated with infants having a high rate of admission to neonatal care and being presented to out-of-hours or emergency services. A further finding was that although many more children in deprived areas were identified as

having problems at their 27-month check by health visitors, in deprived areas fewer were accorded 'enhanced status' (additional input to address developmental issues).

These women and children were rarely referred to specialist services and we found that the highest rate of referral to perinatal mental health services was from one of the least deprived areas in the health board. Receiving input from family nurses (technically part of universal services) was the exception but it is important to note that only first-time expectant mothers under 20 would qualify for family nurse partnership input (Scottish Government, 2019).

There appeared "to be evidence of an inverse care law" (Hart, 1971) which we suggested was worthy of further exploration. We speculated that "the presence of multiple difficulties, some of which will be difficult to mitigate, [might] discourage midwives and health visitors from providing more intensive input or making specialist referrals" (Galloway et al, 2022). We also drew attention to some broader systemic factors such as the quality and consistency of relationships locally and knowledge and skills in relation to IMH. These were explored further in the qualitative research reported next.

## **Professionals' Perceptions**

Having identified a gap in the literature, we agreed to try to answer the following research questions:

*"Why is it challenging to build IMH services, despite the fact that we know that the baby's brain is developing so rapidly?"*

*"How does the professional and personal experience of stakeholders influence views about new IMH services?"*

Methodology is described in **Publications 7 and 8**. Data was collected via semi-structured interviews with 13 professionals, purposively chosen from the local multi-agency IMH stakeholders group whose task was to advise on the development of the new service. A former GP, recently retired from a public health position, was interviewed later. The initial thematic analysis of this data using Braun & Clark's (2006) method revealed six main themes: *Barriers to change*, *Enabling factors*,

Systems, Gaps in current service, Training and education, and Professional and personal interest. Sub-themes in each category were also identified (see Figure 7).

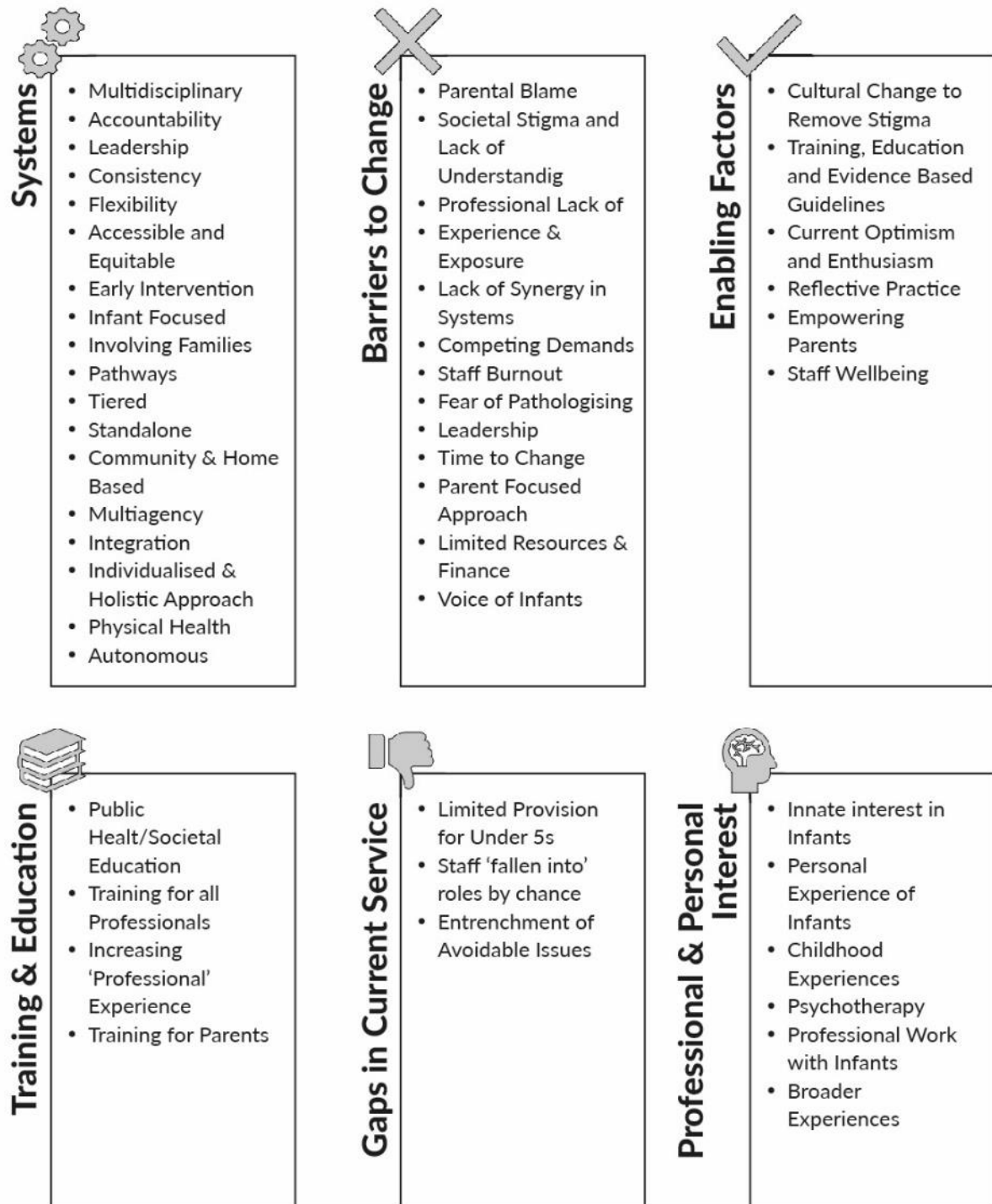


Figure 7: Overview of thematic analysis and sub-themes (Weaver et al, 2022).

A decision was taken to report the findings in three separate publications, focussing on first, Barriers and Enablers (7); second, Systems and Gaps (8); and third, Training

and education and its interface with Professional and personal factors (submitted). This allowed our junior colleagues to have the opportunity for authorship and proved to be a systematic way to deal with the wealth of information which participants had provided.

## **Publication 7**

Historically, IMH service development has been hard to sustain in Scotland, as elsewhere, but the recent commitment to its funding has presented an opportunity to embed permanent services across the country. The perceived barriers identified by professionals in this study were familiar with most having been reported in the literature (Nelson & Mann, 2011; Egger & Angold, 2006). Awareness of these may help to anticipate the challenges involved in setting up and sustaining services.

*Societal stigma and lack of understanding* was mentioned by all participants and some of the detail of this perceived barrier resonates with others mentioned, namely *parent-focused approach, fear of pathologizing* and *voice of infants*. It was concerning to find that participants believed that there was a lack of understanding among professionals as well as among the public. This theme was explored further in the third paper, with participants' past professional and personal experience appearing to be relevant.

Most participants thought that many people were not able to accept the idea that babies might require mental health services and felt that their parents and carers were more often the focus of clinical sessions, with the baby being overlooked. As reported earlier, babies do communicate and interact but because they do not do this in words, their communications are often overlooked.

*Competing demands* for professionals were identified. Previously attempts have been made to incorporate IMH services within Child and Adolescent Mental Health Services (CAMHS) where it is easy to understand that even though a baby may be in crisis, when faced with adolescents who have self-harmed or are suicidal, the immediate demand on professional time is to ensure that these older children are assessed and treated. As stated by a local authority worker:

*“If you have concerns about an infant but there’s a child who’s displaying suicidal tendencies then you’re going to respond to that immediate need.”*

(Weaver et al, 2022)

The current funding model has sought to tackle this problem by ring-fencing the IMH allocation.

Previous literature had not identified enablers of service development. Participants, as members of the local stakeholder group, were biased in favour of the value inherent in IMH services. This was evident in their positivity and enthusiasm which was accompanied by proposed actions to improve the quality of services and support their development. These included training for professionals, the use of evidence-based guidelines and awareness-raising campaigns to tackle stigma. Staff support to improve wellbeing and avoid burnout, and making time for reflective practice, were seen as essential. While “the importance of working with parents in a non-judgmental, non-threatening way, and ensuring practical supports such as finance and help with access, was emphasised” (Weaver et al, 2022), collaboration with parents and carers fell short of co-production.

Systemic issues identified in **Publication 7** are explored in more depth in **Publication 8**.

## **Publication 8**

This account reports and synthesises what we learned about *Systems and Gaps in Current Service*. It adds to the previous publication by including independently analysed data from focus groups, each comprising two professionals purposively paired to explore their differing perspectives. In our attempt to make sense of this data we drew on the Candidacy model (Dixon-Woods et al, 2006) which proposes “over-lapping stages in the process of negotiating candidacy that are suggestive of a journey into and through services” (see Figure 8).

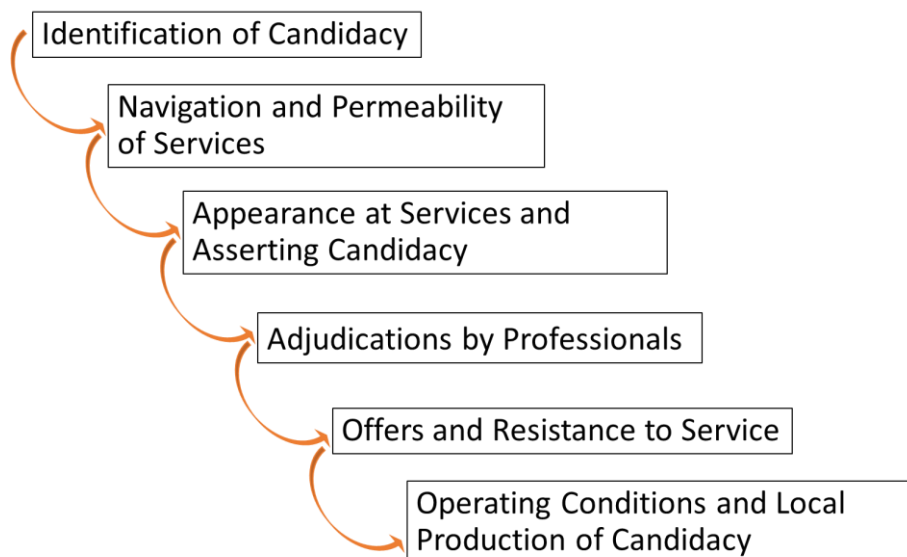


Figure 8: Modified candidacy framework used with permission from Dixon-Woods et al. 2006 (Phang et al, 2023)

“Our youngest citizens depend on others to access services, thus the concept depends on their parents, carers and involved professionals understanding the purpose and value of intervention. It may be that these adults genuinely do not realise that their infants need a service and have a right to access it.”  
 (Phang et al, 2023)

Our questions were about service development and functioning, and responses reflected participants’ concerns that the service reach infants most in need. In this respect some of the barriers to service development presented in **Publication 7** were also presented as barriers to access for those in need. This resonated with the findings reported in **Publication 6** which found evidence of “unequal access to services” (Galloway et al, 2022). In retrospect, the ‘adjudications by professionals’ stage of the candidacy journey (Figure 8) seems key and fits with our speculation about why infants, parents and parents-to-be from deprived areas were not offered more intensive assessments and interventions. This may have been related to professionals’ beliefs about, and understanding of, IMH.

The candidacy model supports the exploration of issues associated with inequality in the uptake of services (Dixon-Woods, 2006) and organises the contextual layers of systems into three categories: micro, meso and macro. Data from thematic analysis

were grouped accordingly and are shown in Figure 9, where themes also identified by focus groups are shown in bold. These are discussed in depth in **Publication 8**.

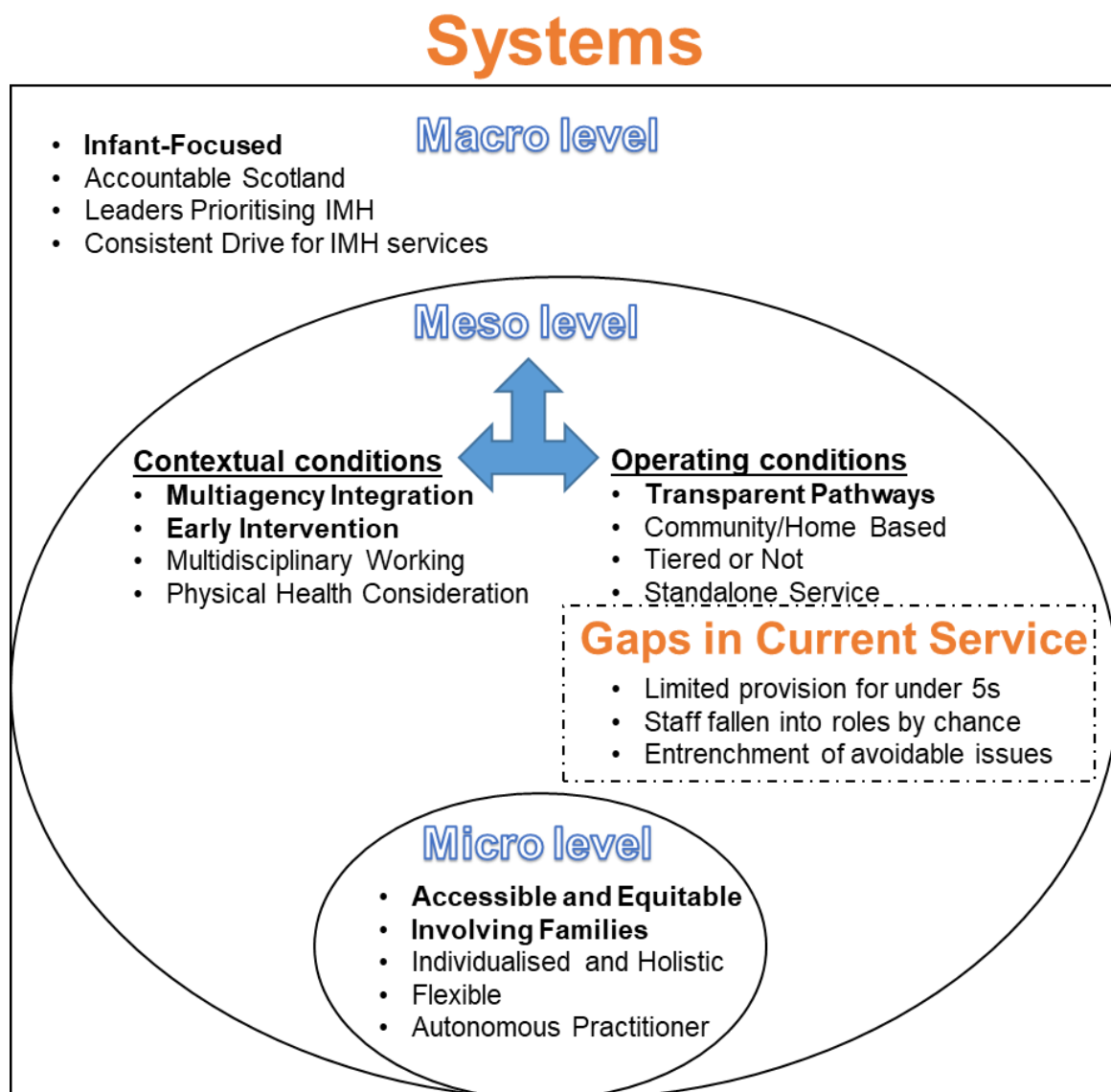


Figure 9: *Systems and Gaps in Current Service* represented according to the Candidacy model (Phang et al, 2023).

Respectful multidisciplinary and multiagency working was emphasised by all participants, for example, in the words of one psychiatrist:

*“Success of an infant mental health team will be in its relationships with those around about it, and in that collaborative working and that shared language of what we want to achieve and support in infants.”*

(Phang et al, 2023)

Challenges here were also acknowledged, but despite this “the focus groups exemplified the multidisciplinary, collaborative working that is required in order to achieve a successful IMH system” (Phang et, 2023).

## Deep End GPs’ Views

### Publication 9

In 2021, our research group was joined by a medical student, trainee psychiatrist and academic GP, who were interested in examining GPs’ perspectives on IMH. Linking this project to the issues raised in our other enquiries about the impact of socioeconomic adversity we designed a project exploring the views of Deep End GPs: “a network of GPs from the one hundred most deprived practices in Scotland; these practices have the highest proportion of patients living in the most deprived postcodes” (deNatale et al, 2023). The findings are reported in **Publication 9**. The methodology was similar to that employed in the study of IMH stakeholders, with participants being largely recruited from a different health board.

Given the concern expressed in **Publications 7** and **8** about professional lack of understanding of IMH, it was striking that one of the main findings here was that GPs believed that they had an inherent understanding of and commitment to this area of mental health, even though they were largely unfamiliar with the term *Infant Mental Health*. Like the participants in the stakeholder study, they identified stigma, and particularly parents’ fear of being blamed or judged, or having their children removed, as a major barrier to engagement with services. Important contributions to factors enabling IMH service development were their observations about accessibility of services and the relationships needed to ensure that appropriate pathways into specialist care were developed. They welcomed the development of a new service and encouraged communication with GPs and other primary care practitioners to ensure that services reached the families most in need.



## Commentary

The needs assessment informing **Publication 6** found correlations between socioeconomic circumstances and the referral of babies, parents-to-be and parent/carers to services which might mitigate risk for infants and their relationships. In addition to the risks of adversity which are higher for infants living in poor social circumstances, they were further disadvantaged by not being able to access services. We hypothesised that “awareness of the importance of infant mental health, the knowledge and skills within teams of practitioners, the capacity for outreach, and the quality and consistency of relationships locally” (Galloway et al, 2022) were important. Stakeholder participants (**Publications 7 and 8**), and Deep End GPs (**Publication 9**) also identified these factors, with all emphasising the importance of respectful relationships in multidisciplinary teams and across agencies.

Examining the patient journey through the lens of candidacy was helpful, and we focussed on the ‘Adjudications by professionals’ stage which appeared to fit with our speculation about why those from deprived areas were not offered more intensive assessments and interventions. The model makes little mention of relationships except at the final stage ‘Operating conditions and local production of candidacy’ where “the kinds of contingent relationships that develop between professionals and service-users over a number of encounters” are recognised as important (Mackenzie et al, 2012). Returning to an earlier theme, the trust between patient and professional will affect the actions of each, and further if they are not ‘in tune’ optimal care may not be offered or accepted. Equally important are the relationships between professionals which will also influence the patient’s journey into services, as well as the quality of service available.

## Conclusion

This essay has presented and discussed publications supporting the thesis that good relationships at all levels are fundamental to successful and sustainable service development and delivery. The studies informing these publications have explored service development in a variety of contexts and reflected on the importance of relationships within and between different parts of the system, including patients and their families.

The Coordinated Management of Meaning (Cronen et al, 1982) has been presented, and its use described in **Publication 4**. It is a helpful way to conceptualise all the findings reported here. At its simplest, the beliefs, values, past and current experiences of clinicians affect how they relate to patients and colleagues as they carry out their primary task, which is to assess and treat health problems. In a similar way, patients' and their families' individual and collective views and circumstances may affect how they engage with professionals and allow themselves to hear what they have to say. For both, these exist in a reflexive loop with, for example, beliefs and attitudes affecting experiences during clinical encounters, and actions in the present affecting beliefs and attitudes. This reflexivity is central to our understanding of attachment theory and its importance in relation to the continual re-shaping of "inner working models" (Sroufe, 1988).

CMM is limited in its focus on only one system, albeit it may include many subsystems. In **Publication 4**, I describe my development of the framework to embrace different levels of context in parallel, but interacting, systems. This allowed me to examine hypotheses about the impact of inter-system relationships on the developing infant-parent relationship, and vice versa. Links were observed, for example, between staff attitudes and beliefs about patients and their mothers and their actions as they provided direct care, and between mothers' feelings of being judged (perhaps resonating with their relationship with their own mother) and their actions with their baby. While it may be difficult to address mothers' firmly held beliefs, professionals' awareness of how their actions are informed by their own higher order beliefs and experience may allow them to adjust these to support better clinical relationships, leading in turn to improved outcomes.

Adopting a psychoanalytic lens, it is apparent that our interactions with others in both our professional and personal lives may be informed by patterns encountered in “previous experiences, each of which has left some residue” (Gosling, 1968). For this reason, some clinical trainings encourage personal analysis, and others recommend that trainees carry out psychoanalytic infant observation, as discussed in

### **Publication 5.**

I have introduced the concept of epistemic trust, which has its origins in early infant-carer relationships and epitomises the importance of respect and authenticity. Not only is it a helpful lens through which to reflect upon clinical engagement but also one which lends itself to the understanding of the functioning of the multidisciplinary team and the wider system. Every one of us, not just “hard-to-reach” patients, may have had “misleading information” imparted to us (Fonagy & Campbell, 2017), or received it as such, as the personal meaning we each ascribe to every communication is unique. Building trust within and between teams is itself a reflexive process, with more realistic expectations leading to more appropriate referrals and improved professional relationships. In **Publications 1-3**, this is described in relation to two psychiatric liaison services, where it was also observed that referrers’ understanding of the importance of psychological factors and their relationship to physical presentations improved, with effective and timely interventions supporting a more respectful relationship. From the patient’s perspective an improved service is experienced when teams work together as one system, the whole being greater than the sum of its parts.

The similarities between institutional processes which facilitate collaborative working with colleagues and engagement with patients, and the important components of early relationships must be understood and acted upon to ensure that services reach those most in need. The insights provided by Brazelton and Cramer (1990) in their description of the six dimensions by which parent and infant tune into each other can help us understand what is required to build successful relationships. Respecting the reciprocal nature of interactions supports the validity of each participant’s input and the importance of fit with their partner’s actions. Attunement between patients and clinicians and between colleagues working in different teams or agencies supports a reflective and compassionate approach to the delivery of care.

In Part 3, I presented key findings from papers on professional perceptions about IMH service development and access, and the wider context in which this takes place. The data was collected through semi-structured interviews with stakeholders, who were supportive of IMH. Six themes were reported in **Publication 7** where Barriers and Enablers were examined in more detail. Systems and Gaps were subjected to analysis using the lens of Candidacy in **Publication 8**. Like CMM, the candidacy model examines contextual levels of influence, in this case focussing on systemic issues raised and perceived gaps in service.

The patient journey, whether for adults or children, usually depends upon presentation at primary care or universal services and recognition that this patient would benefit from referral. A good understanding of what is on offer and potential benefits is essential for both referrer and patient. Most research participants believed that there was limited professional awareness of the point and purpose of IMH services, mirroring their belief that the public did not appreciate the importance of the early years both as they are experienced by the infant, and for later health. Participants were concerned that the service reach infants most in need. The stigma attached to mental health problems was also perceived as significant and often compounded by other prejudices.

The needs assessment (**Publication 6**) found “evidence of an inverse care law”. We found that mothers and babies living in areas of socioeconomic deprivation were less likely to be referred to specialist services, even though expectant mothers and their babies had risks related to their age and personal or family histories of mental illness and substance use. We speculated that “the presence of multiple difficulties” might influence clinicians’ decisions, and in retrospect saw this as linked to the “Adjudications by professionals” stage of the candidacy journey, though originally this step appeared to refer to adjudication by specialists rather than by those in universal services. Infants, who have a right to services to meet their needs but depend on others to access them, should be considered as candidates in their own right. A values-based approach to the development of services and clinical pathways (Fulford, 2011) would support the exploration of potentially prejudicial beliefs and genuine co-production with patients, including infants.

Our exploration of issues associated with inequality of access was supplemented by the study of Deep End GPs (**Publication 9**), who also emphasised stigma and parents' fears of being judged. Welcoming the development of IMH services, GPs stressed the importance of good relationships between professionals to ensure that appropriate pathways into specialist care were developed.

Dixon-Woods (2006) encourages the use of the candidacy model to explore issues associated with inequity in the uptake of services. Our research has shown that the quality and consistency of relationships locally, and knowledge and skills in relation to IMH are important.

Looking to the future, a number of findings are worthy of further action:

- A wealth of data is collected locally and nationally about infants, their circumstances, and their attendance at services. More use must be made of this to understand local need and inform the design of services to meet the needs of the most vulnerable infants.
- Our findings suggest that further work is needed to improve awareness of IMH, and to address both the stigma associated with referral to specialist services and the inequity of access.
- Considering infants' candidacy, it is important that professionals respect their rights and look beyond the adults to notice infants' communications about their needs.
- Attention needs to be paid to relationships at all levels, within each individual, between past experience and beliefs, and current behaviour, and between individuals, teams and wider systems. Thinking about the dance between baby and carer which supports early development can help us to understand the essential components which can lead to the building of trust and respect, between patients and clinicians, and between professionals.

## Postscript

### Hierarchy of Relationships – A Contextual Note and Personal Example

The model proposed and elaborated in Part 2 is relevant to the process of formulating my thoughts for this essay. I have been employed by the Scottish Government for the last 4 years to chair the Infant Mental Health Implementation and Advisory Group. In that capacity I asked Professor Helen Minnis to chair its Evaluation subcommittee. I write this essay as a PhD student with Professor Minnis as my adviser. We both have past experience of infant mental health research albeit informed by different schools of thought. Throughout her career, Professor Minnis has focussed on research while I have spent most of my working life as a clinician. Our relationship exists in different domains, including the University of Glasgow and the Scottish Government. We have differences of opinions and at times there may be tensions about the relative importance of different aspects of research. Our shift of positions within the hierarchy does not cause dissonance, as this ‘charmed loop’ is able to tolerate these challenges. In a third context we work as peers in a research group as co-researchers, conducting research and supervising medical students and trainee psychiatrists in projects about IMH service development (see Figure 10).

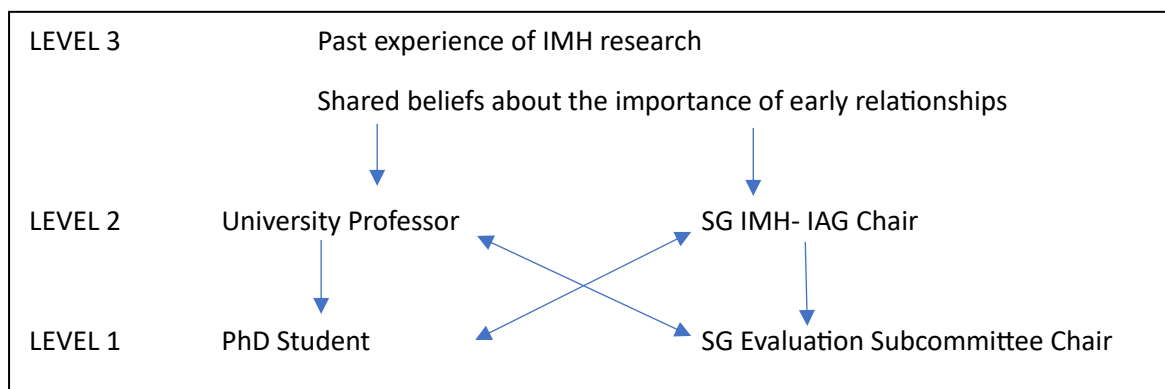


Figure 10: Relationships in context: Adviser and student.

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# Appendix 1

## Publications of Anne McFadyen

### Book

McFadyen, A (1994) *Special Care Babies and Their Developing Relationships*. London and New York: Routledge.

### Chapters

McFadyen, A (1997a) Making sense of the experience of neonatal intensive care. In R Papadopolous and J Byng-Hall (eds) *Multiple Voices: Narrative in Systemic Family Psychotherapy*. London: Duckworth.

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### Peer Reviewed Papers

Brown, A (now McFadyen) & Cooper, AF (1987) The impact of a liaison psychiatry service on patterns of referral in a general hospital. *British Journal of Psychiatry*, **150**, 83-87.

Black, D, McFadyen, A & Broster, G (1990) The development of a liaison service. *Archives of Disease in Childhood*, **65**, 1373-1375.

- McFadyen, A, Broster, G & Black, D (1991) The impact of a child psychiatry liaison service on patterns of referral. *British Journal of Psychiatry*, **158**, 93-96.
- McFadyen, A (1991) Mental illness in the family. *Psychiatric Bulletin*, **15**, 747-749.
- McFadyen, A & Altschuler, J (1992) Paediatric liaison research: problem at the clinical research interface. *Journal of Family Therapy*, **14**, 389-397.
- McFadyen, A & Roberts, J (1994) Teaching systems thinking to registrars in psychiatry. *Psychiatric Bulletin*, **18**, 683-686.
- McFadyen, A (1995) Reflections on the observation of special care babies. *Psychoanalytic Psychotherapy*, **9**, 157-174.
- McFadyen, A & Hughes, M (1996) Description and evaluation of a summer school for learning disabled children. *British Journal of Learning Disability*, **24**, 124-128.
- McFadyen, A (1997b) Rapprochement in sight? Postmodern family therapy and Psychoanalysis. *Journal of Family Therapy*, **19**, 241-262.
- McFadyen, A, Gledhill, J, Whitlow, B & Economides, D (1998) First trimester ultrasound screening, Carries ethical and psychological implications. *British Medical Journal*, **317**, 694-695. (non-commissioned editorial)
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- McFadyen, A (1999) New mothers and their babies: Attachment in the face of maternal life-threatening illness. *Journal of Family Therapy*, **21**, 321-336.
- McFadyen, A, Canham, H & Youell, B (1999) Rating infant observation. It is possible? *Infant Observation*, **2**, 66-80.
- Davies, V, Gledhill, J, McFadyen, A, Whitlow, B, Economides, D (2005) Psychological outcome in women undergoing termination of pregnancy for ultrasound detected foetal abnormality in the 1<sup>st</sup> and 2<sup>nd</sup> trimester: a pilot study. *Ultrasound in Obstetrics and Gynaecology*, **25**, 4, 389-92.

McFadyen, A (2021) Wellbeing for Scottish Wee Ones: developing infant mental health systems in Scotland. *Infant Observation*, **24**, 139-151.

McFadyen, A, Armstrong, VG, Masterson, K & Anderson, B (2022) The voice of the infant. *Infant Observation*, **25(2)**, 104-122.

Weaver, A, Dawson, A, Murphy, F, Phang, F, Turner, F, McFadyen, A, Minnis, H (2022) Prioritising Infant Mental Health: A Qualitative Study Examining Perceived Barriers and Enablers to Infant mental Health Service Development in Scotland. *Perspectives in Infant Mental Health*, **30(1)**, 37-42.

<https://perspectives.waimh.org/2022/07/01/prioritising-infant-mental-health-a-qualitative-study-examining-perceived-barriers-and-enablers-to-infant-mental-health-service-development-in-scotland/>

Galloway, S, Minnis, H & McFadyen, A (2022) Social Inequality and Infant Wellbeing in one area of Scotland. *Perspectives in Infant Mental Health*, **30(1)**, 21-28.

<https://perspectives.waimh.org/2022/07/15/social-inequality-and-infant-wellbeing-in-one-area-of-scotland/>

Phang, F, Weaver, A, Dawson, A, Murphy, F, Turner, F, McFadyen, A, Minnis, H (2023) Using the Candidacy Framework to Understand the Systems and Gaps in the Setup of Infant Mental Health Services (IMHS) in Scotland: A Qualitative Study. *Infant Mental Health Journal*. <http://doi.org/10.1002/imhj.22072>

De Natale, A, Hall, S, McFadyen, A, Minnis, H & Blane, D (2023) “Breaking the cycle”: A Qualitative Study Exploring General Practitioners’ Views of Infant Mental Health. *British Journal of General Practice*.

<https://bjgpopen.org/content/early/2023/06/01/BJGPO.2023.0009>

### **Others**

McFadyen, A (1991) Some thoughts on infant observation and its possible role in Child psychiatry training. *Newsletter of the Association of Child Psychology and Psychiatry*, **13**, 10-13.

McFadyen, A (1992) Treatment Approaches. *Current Opinion in Child and Adolescent Psychiatry*, **5(4)**, 535-540.



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Personal View. *British Medical Journal*, **316**, 1616-1617.

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Altschuler, J & McFadyen, A (1999) Editorial. *Journal of Family Therapy*, **21**, 239-241.

Kathuria, L, Fuller, J & McFadyen, A (2014) Child and adolescent mental health services. A brief overview of Scottish legislation. *The Bridge*, **2**, 4-5.

Galloway, S., Minnis, H., & McFadyen, A. (2021). *Assessing the Need for an Infant Mental Health Service in NHS Lanarkshire*.

<https://www.nhslanarkshire.scot.nhs.uk/download/infant-mental-health-report/>

McFadyen, A (in press) Commentary: 'Everyone needs to know that infant mental health is important' - a commentary/reflection on 'Improving access to mental health interventions for children from birth to five years: A Scoping Review' by Hickey et al, 2023. *Child and Adolescent Mental Health*.

## APPENDIX 2

### Additional referenced publications by Anne McFadyen

McFadyen, A (1991) Some thoughts on infant observation and its possible role in child psychiatry training. *Newsletter of the Association for Child Psychology and Psychiatry*, **13(1)**, 10-14.

McFadyen A (1994) *Special Care Babies and Their Developing Relationships*. London and New York: Routledge.

McFadyen, A (1997b) Rapprochement in sight? Postmodern family therapy and psychoanalysis, *Journal of Family Therapy*, **19**, 241-262.

McFadyen, A (2021) Wellbeing for Scottish Wee Ones: developing infant mental health systems in Scotland. *Infant Observation*, **24(2)**, 139-151.

McFadyen, A & Altschuler, J (1992) Paediatric liaison research: problems at the clinical-research interface. *Journal of Family Therapy*, **14(4)**, 389-397.

McFadyen A & Roberts J (1997) Professionals must offer a multifaceted approach (letter). *British Medical Journal*, **315**, 312.

McFadyen, A, Armstrong, VG, Masterson, K & Anderson, B (2022) The voice of the infant. *Infant Observation*, **25(2)**, 104-122.

Galloway, S., Minnis, H., & McFadyen, A. (2021). *Assessing the Need for an Infant Mental Health Service in NHS Lanarkshire*.

<https://www.nhslanarkshire.scot.nhs.uk/download/infant-mental-health-report/>

## **Author's declaration and co-authors' confirmations**

### **Author's declaration**

I, Anne McFadyen declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Signed:

Date: 11/07/2023

## Co-author confirmation statements

### Publication 1

Brown A (now **McFadyen**) & Cooper, AF (1987) The impact of a liaison psychiatry service on patterns of referral in a general hospital. *British Journal of Psychiatry*, **150**, 83-87. <https://doi.org/10.1192/bjp.150.1.83>

Co-author confirmation statement

Paper 1

Brown A (now **McFadyen**) & Cooper, AF (1987) The impact of a liaison psychiatry service on patterns of referral in a general hospital. *British Journal of Psychiatry*, **150**, 83-87.

<https://doi.org/10.1192/bjp.150.1.83>

I, Dr AF Cooper, confirm that Anne McFadyen collected all data and was the main author of this paper.

Signed

Date

1/7/23

### Publications 2 & 3

**McFadyen, A**, Broster, G & Black, D (1991) The impact of a child psychiatry liaison service on patterns of referral. *British Journal of Psychiatry*, **158**, 93-96.

<https://doi.org/10.1192/bjp.158.1.93>

Black, D, **McFadyen, A** & Broster, G (1990) The development of a liaison service. *Archives of Disease in Childhood*, **65**, 1373-1375.

<https://adc.bmj.com/content/65/12/1373>

I, Dr Gillian Broster, confirm that Anne McFadyen designed the study described, was involved in data collection and was the main author of Paper 2. She was a co-author of Paper 3.

Signed

Date 2/7/2023

### Publication 5

**McFadyen, A**, Canham, H & Youell, B (1999) Rating infant observation. It is possible? *International Journal of Infant Observation and its Applications*, 2, 66-80.  
<https://doi.org/10.1080/13698039908405031>

I, Bidy Youell, (Bridget) confirm that Anne McFadyen contributed to the design and implementation of the project described and was the main author of Paper 5.

Signed

Date 5th July 2023

### Publication 6

Galloway, S, Minnis, H & **McFadyen, A** (2022) Social Inequality and Infant Wellbeing in one area of Scotland. *Perspectives in Infant Mental Health*, **30(1)**, 21-28.  
<https://perspectives.waimh.org/2022/07/15/social-inequality-and-infant-wellbeing-in-one-area-of-scotland/>

I, Susan Galloway, confirm that Anne McFadyen was the senior author of Publication 6. It is an abridged report of a paper published by NHS Lanarkshire which reported on a needs assessment in relation to infant mental health. I was the lead researcher, we wrote the main report together and Anne McFadyen was the main writer of this paper, published in *Perspectives in Infant Mental Health*.

Signed

Date 30 June 2023

I, Professor Helen Minnis, confirm that Anne McFadyen was the senior author of Publication 6. It is an abridged report of a paper published by NHS Lanarkshire which reported on a needs assessment in relation to infant mental health. Susan Galloway was the lead researcher, we wrote the main report together and Anne McFadyen was the main writer of this paper, published in *Perspectives in Infant Mental Health*.

Signed

Date 30.6.23

## Publication 7

Weaver, A, Dawson, A, Murphy, F, Phang, F, Turner, F, **McFadyen, A\***, & Minnis. H\* (\*joint senior authors) (2022) Prioritising Infant Mental Health: A Qualitative Study Examining Perceived Barriers and Enablers to Infant Mental Health Service Development in Scotland. *Perspectives in Infant Mental Health*, **30(1)**, 37-42. <https://perspectives.waimh.org/2022/07/01/prioritising-infant-mental-health-a-qualitative-study-examining-perceived-barriers-and-enablers-to-infant-mental-health-service-development-in-scotland/>

I, Andrew Dawson, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as joint senior author.

Signed

Date 30/06/23

I, Fionnghuala Murphy, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper senior author.

Signed

Date: 1st July 2023

I, Alicia Weaver, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper- as joint senior author.

Signed

Date: 2.7.23

I, Helen Minnis, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as joint senior author.

Signed

Date 3/7/23

I, Fiona Turner, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as joint senior author.

Signed

Date 02/07/23

I, Phang, Tze Hui (Fifi), confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as joint senior author.

Signed

Date 03/07/2023

### **Publication 8**

Phang, F, Weaver, A, Blane, D, Murphy, F, Dawson, A, Hall, S, DeNatale, A, Minnis, H, **McFadyen, A**, (2023) Using the Candidacy Framework to Conceptualise Systems and Gaps when Developing Infant Mental Health (IMH) Services in Scotland: A Qualitative Study. *Infant Mental Health Journal*. <https://doi.org/10.1002/imhj.22072>

I, David Blane, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as senior author.

Signed:

Date: 30/06/23

I, Andrew Dawson, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as senior author.

Signed

Date 30/06/23

I, Sophie Hall, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as senior author.

Signed

Date 30/06/23

I, Fionnghuala Murphy, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as senior author.

Signed

Date: 1st July 2023

I, Alicia Weaver, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as senior author.

Signed

Date: 2.7.23

I, Phang, Tze Hui (Fifi), confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as senior author.

Signed

Date 03/07/2023



I, Helen Minnis, confirm that Anne McFadyen jointly supervised the research project described in this publication. She recruited participants, undertook the pilot thematic analysis and significantly contributed to the writing of this paper as senior author.

Signed

Date 3/7/23

### **Publication 9**

De Natale, A, Hall, S, **McFadyen, A**, Minnis, H & Blane, D “Breaking the cycle”: A Qualitative Study Exploring General Practitioners’ Views of Infant Mental Health. *British Journal of General Practice Open* <https://doi.org/10.3399/BJGPO.2023.0009>

I, David Blane, confirm that Anne McFadyen jointly supervised the research project described in this publication and contributed to the writing of this paper.

Signed:

Date: 30/06/23

I, Sophie Hall, confirm that Anne McFadyen jointly supervised the research project described in this publication and contributed to the writing of this paper.

Signed

Date 30/06/23

I, Helen Minnis, confirm that Anne McFadyen jointly supervised the research project described in this publication and contributed to the writing of this paper.

Signed

Date 2/7/23

I, Anna De Natale, confirm that Anne McFadyen jointly supervised the research project described in this publication and contributed to the writing of this paper.

Signed

Date 05/07/2023