Children's Credibility as Witnesses

~ an analysis of fact-finder and child factors

and Research Portfolio

Christopher J Wiles

Thesis submitted in partial fulfilment of the degree of Doctor of Clinical Psychology, in the Faculty of Medicine, University of Glasgow.

July, 1997.

Contents

Acknowledgements

I would like to thank the staff at the Department of Psychological Medicine for all their help and advice throughout my time on the course, and my classmates for their humour and support.

I am also grateful to all those who took part in my project and those who helped me get my subjects.

I am especially grateful to my wife, Karen, without your support and inspiration I would not have got this far - Cheers!

Major Project Literature Review.

Children's Credibility As Witnesses: an analysis of fact-finder and child factors.

Prepared in accordance with the notes for contributors to: Legal and Criminological Psychology.

Christopher J Wiles

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 OXH

Abstract.

The review examines the research on children's credibility as witnesses. Children's credibility depends upon how they present their testimony and how this is perceived by the fact-finder or person making a decision about the testimony.

Studies into children's eyewitness skills and moderating factors is reviewed in relation to the effect of reliability on credibility. How children's reliability is perceived by individuals and the effects of this on judgements about credibility are also reviewed.

Studies into factors relating to the fact-finders are also reviewed including discussion about personality and attitudinal variables.

The consequences of the perceptions about credibility are discussed in relation to the legal decision making process and future research directions are identified.

Children as witnesses.

Children see and hear many things during everyday life and on occasion children are asked to describe or report what they have seen or heard. The type of information being sought (the report) and the person seeking that information (the fact-finder) vary greatly in their importance and consequence. Possibly the most important scenario is when a child witnesses, or is a victim, of a crime. Whether a child is believed or not plays a crucial role in the entire legal decision making process.

In 1911, *Varendonck* asked "When are we going to give up listening to children in courts of law?". This question reflects the dominant belief throughout this century, that children make unreliable witnesses *(Whipple 1912 - as cited by Goodman et al 1984, Wigmore 1935, Chance & Goldstein 1984).* Further evidence comes from historically widespread legal practices such as competency examinations, usually by the judge, the requirement for corroboration and the instructions given to juries by judges *(Goodman et al 1984 and Murray 1995).*

Researchers have suggested that children's ability to process information and their capacity to store and recall memories about an event are poor *(Goodman 1980, Chi 1976).* It has also been commonly cited that children are more open to suggestion than adults *(Brown. M, 1926, Brown. A, 1979).*

These opinions perhaps reflect the wider views of society about children's witnessing ability and they must have an impact when a child presents his report to a fact-finder. Clearly, the judgements made by fact-finders about the child's believability *{*as well as the anticipated reaction of jurors to the child's testimony, *Penrod & Borgida (I983)},* will determine how, and indeed if, a

case proceeds. The judgements made by fact-finders (such as, parents, police officers, social workers, psychologists, psychiatrists and lawyers) about a child's reliability and credibility are therefore very important.

The issue is becoming even more relevant considering the increase in the reporting of crimes which children are commonly considered to be victims of, or witnesses to, such as domestic violence and abuse. As these cases increasingly come to trial the evidence of children and the decisions made about, and on the basis of, that evidence becomes an issue demanding investigation.

Reliability of children's witnessing abilities.

Memory.

Early research suggesting that children's memory was poor and unreliable *(Whipple 1912),* suffered from both methodological flaws and from the prevailing negative attitudes generally held about children at the time. More recent research has suggested that children's memory skills improve with age *(Kail 1979),* and that even young children are capable of accurate performance, if the materials and procedures make sense to them *(Flavell 1985).* There is also improved recall if the event is personally meaningful to them *(Fivush & Hammonnd 1990)*, or if they are participants in the event *(Rudy & Goodman 1991).*

Crowder (1976) suggested that when remembering an event an individual must perceive the event initially and the perceived information is encoded in the acquisition stage. The memory is then stored and finally, retrieved when it is required to be recalled. *Chase & Simon (1973)* in their experiments with

adult chess experts, concluded that experts encode different features of their environment than non-experts. Using this framework it could be said that children, generally, have less "expertise" and their initial perception of the information that they acquire may be more fragmented. This may be due to their lower levels of cognitive and linguistic skills *(Loftus & Davies 1984).* Their memory representations, therefore may be less rich and contain fewer details *(Siegler 1983).* Children may also have a faster rate of forgetting than adults *(Loftus & Davies 1984),* and there may be developmental differences in the ability to retrieve information from long-term memory *(Brown. A, 1979).*

Suggestibility.

A related area of concern about the reliability of children's witness skills is that children are more likely to be open to suggestion, in part because of their poor memory. Suggestibility can be defined as the extent to which individuals incorporate post-event information into their memory recollections *(Gudjonsson 1986).* This is either consciously, through the influence of subtle suggestions or leading questions or more explicitly through the effect of threats or other forms of inducement *(Ceci & Bruck 1993).*

The belief in children's suggestibility has been pervasive for some time *(Whipple 1912, Brown 1926)* and in particular that children were more suggestible than adults *(Burt 1948). Whipple (1912),* suggested that this was because children needed to fill gaps in their memory, and to do this used material provided by their imagination and by other people. Other early researchers such as *Stern* and *Varendonck (cited in Ceci & Bruck 1993)* suggested that cognitive factors, in relation to the memory process, as well as

social factors, such as children's compliance with authority figures, made children more suggestible.

More recent research has suggested that the relationship between age and suggestibility is not as simple as first thought. Some studies have found younger children to be more susceptible to misleading information than older children *(Ceci, Ross & Toglia 1987, King & Yuille 1987).* Others have emphasised children's resistance to suggestion *(Brigham et al 1986, Rudy & Goodman 1991).* Studies have also suggested that adults, at times, are likely to change their reports as a result of misleading questioning *(Gudjonsson & Clark 1986, Loftus & Davis 1984).* Adults appear more suggestible when an authoritative person is asking leading questions *(Eagly 1983). Warren, Hulse-Trotter and Tubbs (1991),* found that the initial strength of the memory trace was related more strongly than age to suggestibility. It may also be the case that children can be more resistant to suggestibility if we consider that children are less efficient at integrating information and less likely to generate inferences spontaneously. Both these processes are involved in incorporating post-event information, of any source, into existing memories *(Paris & Lindauer 1976).*

It seems, therefore, that suggestibility is a function of a dynamic relationship between a person, their environment and the significant individuals within that environment, as opposed to a stable age-related or personality trait. Thus a witness of any age will be more suggestible if they are uncertain of the facts due to poor memory for details, if there is a long delay between the event and the questioning and if they are faced with ambiguous questioning *(Gudjonsson & Clark 1986).* Several researchers have attained significant,

though not complete, success in reducing children's suggestibility by changing the questioning style *(Warren et al 1991, Goodman, Bottoms et al 1991).*

It appears that early investigations of children's memory skill and suggestibility have led to an oversimplified and misleading view about children's witness skills. Current and future research must seek to determine the conditions under which children's memory and resistance to suggestibility are maximised.

From the research outlined above, it appears that, under certain conditions, children can provide reasonably accurate and reliable testimony about an event they have witnessed.

Credibility.

A crucial component in the legal process is the credibility of the witness. This affects the decisions juries make about a witness' testimony, but may also play a part in deciding whether the case should proceed to court at all. When a child testifies in a court of law, juror's must evaluate the honesty and accuracy of their report, compare the child's statements to the testimony of others, weigh the testimony within the light of the judges instructions and eventually rely on or disregard their testimony in reaching a verdict *(Goodman 1984).* In most trials the evidence is weighted towards one side and it is the strength of the evidence, rather than the attitudes of the jurors, that is the most important factor in determining the outcome of the trial *(Saks, Werner & Ostrom 1975).* However, if the evidence is ambiguous, the jurors' attitudes and biases are more likely to influence their decisions. However,

research into juror's perceptions of child witnesses, has been relatively sparse until quite recently and the findings from the current studies are not entirely consistent.

Several researchers claim to have demonstrated that child witnesses are viewed as less credible than adult witnesses. *Goodman et al (1987),* conducted experiments where mock jurors made judgements about the credibility of testimony attributed to either a six-, ten- or thirty-year old witness. The six-year olds were rated as the least credible and the thirty year old as the most credible. However, they also found that the witness's age made no difference to the juror's decisions about the guilt or otherwise of the defendant. A similar study by *Leippe and Romanczyk (1987),* replicated these results. However, both these studies only used college students as subjects, perhaps questioning their representativeness. *Yarmey and Jones (1983),* tested the credibility ratings assigned to an 8-year old's testimony by several groups of people including law students, legal professionals, psychologists researching eyewitness skills and college students. They found that the majority in each group rated the child as inaccurate and not credible.

In contrast to these findings, several other researchers report that children are seen as no less credible and may be seen as more credible than adults. *Ross, Miller and Moran (1987),* asked subjects to rate the credibility of either eight-, twenty-one- or seventy-four year old witnesses in a case involving drugs. They found no significant age effect for witness credibility as the eight year old was rated as being just as credible as the adults. The twenty-one year old was rated as least accurate, intelligent, competent and consistent.

This possibly reflects the nature of the case, in that the jurors may have believed that the twenty-one year old was likely to be involved in drugs. This supports the idea that the specific details of the case influence the effect of the juror's attitudes and beliefs. *Nigro et al (1987),* also tried to replicate *Goodman's (1984)* study, he also varied the powerfulness of the witness's speech. He found that the child who used a powerful speech style was rated as the most credible witness.

In attempting to explain these inconsistent findings, *Goodman (1984)* and her colleagues suggest that jurors, or indeed any fact-finders, hold at least two kinds of theories that would influence their perception of child witnesses. The first is that children are generally as honest, if not more honest, than adults and are therefore credible. The second theory is that children's cognitive abilities are less developed than adults and as such are less credible than adults. However, the child's perceived cognitive abilities may make their report more believable, for example, if a young child gives details of a sexual act that they would not normally have knowledge of. A problem with the literature is that children are viewed as a homogenous group in terms of their cognitive and witness skills and likewise their credibility and this is clearly not the case. *Ross et al (1987),* refer to the role of the stereotype in the juror's ratings of credibility. They suggest that the child's testimony will be more positively evaluated if it violates, in a positive manner the juror's expectations about the child's witness skills or if honesty is a more important factor in the testimony than cognitive ability. They also suggest that children's testimony will be viewed more negatively if neither of these conditions are present and the child either acts like his stereotype, or if the

credibility of the testimony rests mainly with the child's ability to remember events.

What is evident is that the relationship between the juror's attitudes and beliefs and their decisions about the credibility of the child's testimony , is not a simple one. It is also clear that several factors are involved.

Child Factors.

In the same way as adult witnesses, children will differ in their presentational styles, their physical characteristics and their cognitive and memory abilities. There has been little research focusing on the specific credibility enhancing characteristics of children, but it is reasonable for us to examine similar issues studied with adult witnesses. Studies by *Deffenbacher (1980),* and *Wells, Ferguson and Lindsay (1981),* suggest that trustworthiness, consistency, certainty, confidence and objectivity are witness factors that positively affect juror's impressions. Children may be more vulnerable to projecting confidence and consistency less well. It may be that inconsistency plays a significant part in reducing credibility, especially as jurors are often instructed against heeding inconsistent statements. Children may be more likely not to guard against being inconsistent, because they have more difficulty following the logical flow of an argument and their perception of inconsistency will be different from an adult *(Markman 1981).* For example a child may answer questions too literally or may not realise that two separate answers contradict themselves. The child is also likely to be quite nervous and perhaps intimidated by the courtroom setting and the process of a trial and as such may not present confidently. Related to this is the presentation

style of the child in terms of the language used, and the tone, strength and volume of their voice. *Lind and Barr (1978),* differentiate between a powerful style characterised by direct, unqualified answers, delivered in a clear, audible voice, and a powerless style characterised by quiet voice, hesitations, intensifiers (such as "definitely" etc) and hedges (such as "I think so") and a questioning intonation in normally declarative contexts. *Nigro et al (1987)* demonstrated that a child presenting in a powerful style was rated as significantly more credible than a child presenting in a powerless style, and they also point out that witnesses are more likely to use a powerless style when their testimony is being threatened and especially if this is being done by an authoritative figure. For children in a courtroom this is likely to be the predominant experience.

Other studies with adult witnesses suggest that the personal attractiveness of the witness may affect perceived credibility *(Stephan & Tully 1977, Chaiken 1979).* Truthfulness and accuracy are thought to be key issues in establishing credibility *(Miller & Burgoon 1982),* and perhaps children's projection of accuracy will be affected by confidence, consistency, and forcefulness of presentational style, as discussed above. Also good memory for even irrelevant details may impress the jury *(Wells & Leippe 1981). Keeton (1973),* suggests that a narrative presentation is more convincing than short answers to questions, perhaps because jurors are less suspicious of lawyers' leading questions. Children however may be less able to carry a narrative account on their own *(Johnson and Foley 1984).* Children may be disadvantaged in all of these characteristics.

Fact-finder factors.

The fact-finder's beliefs about child witnesses may have a powerful impact on their evaluation of a child's credibility. The study by *Yarmey and Jones (1983),* is one of few looking at jurors' views and it indicates generally negative attitudes and beliefs. *Goodman (1984),* suggests that if the trial evidence is ambiguous, then pre-trial biases are more likely to influence the verdict than if the evidence is strong. Often children may be testifying in cases where the evidence is ambiguous as they are the only witness, for example in cases of sexual abuse. Juror's beliefs and attitudes may also vary with the type and severity of the charge, the kind of testimony presented (description vs identification), the characteristics of the specific child witness, the conditions of the witnessing, the length of time since the event and the trial and the amount of stress involved.

The effect of taking part in a jury deliberation may be another factor that moderates the effects of individual juror's attitudes. *Kalven and Zeisel (1966)* suggest that jury deliberations do not produce large changes in juror's pre-deliberation opinion. However, they also suggest that if a certain view is held by only a single individual in a jury, that individual is likely over the course of the deliberations to accede to the majority view.

In sum, jurors are likely to enter the court with biases against children's credibility, but these biases are affected by the amount of other evidence, factors relating to the event being testified about, factors about the child's presentation and the views of the other jurors during deliberations.

The research discussed above suggests that children are capable of giving accurate testimony. However, if jurors, or indeed any fact-finder, cannot

distinguish accurate from inaccurate testimony, then the child's accuracy is of little consequence. *Wigmore (1909),* argued at the turn of the century that research on the fact-finders ability to reach the truth, in any trial, was more important than research on witness accuracy. There have been a limited number of investigations into jurors' ability to distinguish accurate from inaccurate reports, and most have looked at adult eyewitnesses. *Wells (1985),* concluded from his review that there was little evidence that people were good at evaluating the accuracy of testimony. *Leippe and Romanczyk (1987),* gave subjects written testimony of various age groups and found that people significantly under-estimated the accuracy of the witnesses. *Brigham and Bothwell (1983),* in a similar study reported mock jurors consistently over-estimating the witness's accuracy. The subjects in *Wells, Lyndsay and Ferguson's (1979)* study, saw the witnesses as opposed to reading their written testimony, a procedure with greater ecological validity. They concluded that the mock jurors were unable to distinguish accurate from inaccurate witnesses. *Wells and Leippe (1981),* found that regardless of accuracy, mock jurors were much more likely to believe confident rather than non-confident witnesses.

In summary , the limited research on jurors' ability to distinguish the accuracy of a witness' testimony indicates that people may often under or over-estimate accuracy, placing too much emphasis on other factors such as confidence. It should be noted that most of this research concerns adult witnesses and this is clearly another area requiring examination regarding child witnesses.

There may be other characteristics of the jurors that affect the child's credibility. *Sealy (1981),* suggested that there are broad categories of juror characteristics that may predict courtroom biases, for example, general social background, special life experiences, education and personality. There is some limited research evidence to support some of these factors. For example, *McGllicuddy-DeLisi (1982),* found that the educational level and age of mothers related to their beliefs about their children's cognitive abilities. Research into people with authoritarian attitudes indicates that they tend to think in rigid, simplistic categories and show a conspicuous intolerance of ambiguity in their environment *(Siminton 1990).* It may be that jurors with authoritarian attitudes may be less likely to find witnesses credible if their evidence is not completely clear and consistent. Again there has been little research examining the effect of authoritarian attitudes on jurors' judgements about children's credibility. Another related characteristic of the juror may be his belief or otherwise in a just world. *Rubin and Peplau (1973),* suggest that people who believe strongly that good people are rewarded and bad people punished, are likely to derogate victims and indeed find them blameworthy, in order to maintain their perception that people get what they deserve. *Lerner and Simmons (1966),* found that people with a high belief in a just world, attributed more blame to the victim of a rape than did those subjects with a low belief in a just world. This has implications for how victims, and indeed supporting witnesses of victims, are perceived. Belief in a just world has been found to relate to authoritarian attitudes, strong religious beliefs and high levels of trust. Clearly, more investigation on the potential impact of

jurors' belief in a just world on their judgements of children's credibility is needed.

Factors within the legal process and the courtroom.

Many factors external to the child in the courtroom may also affect their credibility, such as the tactics of the lawyers, in particular the use of cross examination to highlight inconsistencies, browbeating and the use of subtle methods of speech and questioning to confuse or discredit the child. Also because the child probably has to repeat their story to several different people their story may appear stilted and scripted and lawyers try to use this to discredit the child *(Goodman 1984).* Another factor is the explicit instructions given to the jury by the judge in terms of how he warns them about the potential strengths and weaknesses of a child's testimony, more often than not this is oversimplistic and negative and must affect the jurors' perceptions of the child witness. The courtroom, and indeed the entire legal process, must be extremely confusing, stressful and traumatic for children, and at times affect their performance and hence their believability. This is being addressed more by legal systems, through increasing training for professionals involved in questioning children, improving the child's understanding of the court process and by making the experience of giving testimony a less frightening experience, for example through the use of video cameras etc *(Murray 1995).*

Conclusion.

Recent research into children's abilities to provide accurate and reliable testimony about an event they have witnessed, indicates that children have significant memory skills and can be resistance to suggestibility, under certain conditions and circumstances. Despite this their credibility as witnesses still rests mainly with the attitudes of jurors and the perception of these attitudes by other fact-finders involved in the legal decision making process. Their credibility is affected by factors within themselves and their presentation, by the fact-finders' attitudes, beliefs and abilities to determine accurate from inaccurate testimony, and by the legal process as a whole.

There is a great need to develop further the investigation into the factors that influence a child's believability in terms of both research and legal practice. Successful research into the areas of children's abilities as witnesses, techniques for obtaining accurate testimony and the factors involved in perceptions about children's credibility, is important to maximise the potential of children participating in the legal process in a constructive and appropriate way.

Brigham, J. C., & Bothwell, R. K. (1983). The ability of prospective jurors to estimate the accuracy of eyewitness identifications. *Law and Human Behaviour*, 7, 19-29.

Brigham, J. C., Van Verst, M., Bothwell, R. K. (1986). Accuracy of children's eyewitness identifications in a field setting. *Basic and Applied Psychology*, 7, 295-306.

Brown, A. L. (1979). Theories of memory and the problem of development: Activity, growth and knowledge. In L.Cermak & F.I.M.Craik (Eds), *Levels of processing in memory* (pp. 225-258). Hillsdale, NJ: Erlbaum.

Brown, M. R. (1926). *Legal Psychology.* Indianapolis: Bobbs-Merrill.

Burtt, H. E. (1948). *Applied Psychology.* Englewood Cliffs, NJ: Prentice Hall.

Ceci,S.J. & Bruck,M. (1993). *Suggestibility of the child witness.* Psychological Bulletin, 1993, Vol. 113, No. 3, 403-439.

Ceci, S. J., Ross, D., & Toglia, M. (1987). Age differences in suggestibility: psycholegal implications. *Journal of Experimental Psychology: General*, 117, 38-49.

Chaiken, S. (1979). Communicator physical attractiveness and persuasion. *Journal of Personality and Social Psychology.* 1979, Vol. 37, No. 8, 1387-1397.

Chance, J. & Goldstein, A. (1984). Face recognition memory - implications for children's eyewitness testimony. *Journal of social Issues*, 1984, 40, 139-153.

Chase, W. G. & Simon, H. A. (1973). The mind's eye in chess. In W.G.Chase (Ed), *Visual information processing* (pp. 215-281). New York: Academic Press.

Chi, M. T. H. (1976). Short-term memory limitations in children: capacity or processing deficits? *Memory and Cognition*, 4, 559-572.

Crowder, R. F. (1976). *Principles of learning and memory*. Hillsdale, NJ: Erlbaum.

Deffenbacher, K. A. (1980). Eyewitness accuracy and confidence: can we infer anything about their relationship? *Law and Human Behaviour*, 4, 243-260.

Eagly, A. H. (1983). Gender and social influence: a social and psychological analysis. *American Psychologist*, 38, 971-981.

Fivush, R. & Hammond, N. (1990). Autobiographical memory across the pre-school years. In R.Fivush & J.Hammond (Eds.), *Knowing and remembering in young children* (pp. 223-248). New York: Cambridge University Press.

Flavel, J. H. (1985). *Cognitive Development* (2nd ed). Englewood Cliffs, NJ: Prentice-Hall.

Goodman, G. (1980). Picture memory. *Cognitive Psychology*, 12, 77-94.

Goodman, G., Golding, J. M., Haith, M. M. (1984). Juror's reactions to child witnesses. *Journal of social Issues*, Vol. 40, No.2, 1984, pp. 139-156.

Goodman, G., Golding, J. M., Hegleson, V. S., Haith, M. M., & Micheli, J. (1987). When a child takes the stand: jurors perceptions of children's eyewitness testimony. *Law and Human Behaviour*, 11, 27-40.

Goodman, G., Bottoms, B. L., Herscovici, B. B, & Shaver, P. (1991). Determinants of a child victim's perceived credibility. In S.J. Ceci.M., P.Toglia & D.F.Ross (Eds) *Perspectives on children's testimony.* pp. 1-22. New York: Springer-Verlag.

Gudjonsson, G. (1986). The relationship between interrogative suggestibility and acquiescence. *Personality and Individual Differences*, 7, 195-199.

Gudjonsson, G. & Clark, N. K. (1986). Suggestibility in police interrogation. *Social Behaviour*, 1, 83-104.

Johnson, M. K. & Foley, M. A. (1984), Differentiating fact from reality: the reliability of children's memory, *Journal of Social Issues*, 40(2), 33-50.

Kail, R. V. (1989). *The development of memory in children.* (2nd ed). New York: Freeman.

Kalven, H.Jr., & Zeisel, H. (1966). *The American Jury.* Boston: Little Brown.

Keeton, R. F. (1973). *Trials, tactics and methods.* Boston: Little, Brown.

King, M., & Yuille, J. (1987). Suggestibility and the child witness. In S.Ceci, M.Toglia & D.Ross (Eds), *Children's eyewitness memory.* (pp. 24-35). New York: Springer-Verlag.

Leippe, M. & Romancyzk, A. (1987). Children on the witness stand. In S.Ceci, M.Toglia & D.Ross (Eds), *Children's eyewitness memory.* (pp. 24-35). New York: Springer-Verlag.

Lerner, M. J. & Simmons, C. H. (1966). Observer's reactions to the innocent victim. *Journal of Personality and Social Psychology*, 1966, 4, 203-210.

Lind, E. A. & O'Barr, W. M. (1978). The social significance of speech in the courtroom. In H.Giles & R St.Clair (Eds), *Language and social psychology* (pp. 66-87). Oxford, England: Blackwell.

Loftus, E. F. & Davies, G. M. (1984). Distortions in children's memory. *Journal of Social Issues*, 42(2), 51-67.

Markman, E. M. (1981). Comprehension monitoring. In W.P.Dickson (Ed), *Children's oral communication skills* (pp. 61-84). New York: Academic Press.

McGullicuddy-DeLisi, A. V. (1982). Parental beliefs about developmental processes. *Human Development*, 25, 192-200.

Miller, G. R. & Burgoon, J. K. (1982). Factors affecting assessments of witness credibility. In N.L.Kerr & R.M.Bray (Eds), *The psychology of the courtroom* (pp. 169-196). New York: Academic Press.

Murray, K. (1995) *Live television link: an evaluation of it's use by child witnesses in Scottish Criminal Trials.* The Scottish Office, Central Research Unit.

Nigro, G. N., Buckley, M. A., Hill, D. E., & Nelson, J. (1987). When juries "hear" children testify. In S.J. Ceci.M.P.Toglia & D.F.Ross (Eds) *Perspectives on children's testimony*. pp.1-22. New York: Springer-Verlag.

Paris, S. G. & Lindauer, B. K. (1976). The role of inference in children's comprehension and memory for sentences. *Cognitive Psychology*, 8, 217-227.

Penrod, S. & Borgida, E. (1983). Legal rules and lay inference. In L.Wheeler & P. Shaver (Eds), *Review of personality and social psychology* (Vol.4. pp.151-180). Beverly Hills, CA: Sage Publications.

Rubin, Z. & Peplau, A. (1973). Belief in a just world and reactions to another's lot. *Journal of social issues*, 1973, 29(4), 73-93.

Ross, D. F., Miller, B. S., & Moran, P. B. (1987). The child in the eyes of the jury. In S.Ceci, M.Toglia & D.Ross (Eds), *Children's eyewitness memory.* (pp. 24-35). New York: Springer-Verlag.

Rudy, L. & Goodman, G. (1991). Effects of participation on children's reports. *Developmental Psychology*, 27, 527-538.

Saks, M. J., Werner, C. M, & Ostrom, T. M. (1975). The presumption of innocence and the American juror. *Journal of Contemporary Law*, 2, 46-54.

Sealy, A. P. (1981). Another look at social psychological aspects of juror bias. *Law and Human Behaviour*, 5, 187-200.

Sieger, R. S. (1983). Five generalisations about cognitive development. *American Psychologist*, 38, 263-277.

Simonton, D. K. (1990). Personality and politics. In L.A.Pervin (Ed), *Handbook of personality - theory and research.* Guilford Press NY.

Stephan, C. & Tully, J. C. (1977). The influence of physical attractiveness of a plaintiff on the decisions of simulated jurors. *Journal of Social Psychology*, 101, 149-150.

Varendonck, J. (1911). The testimony of children in a famous trial. In Goodman,G. Children's testimony in historical perspective. *Journal of Social Issues*, Vol. 40, No. 2, 1984, pp. 9-31.

Warren, A. R., Hulse-Trotter, K., & Tubbs, E. (1991). Inducing resistance to suggestibility in children. *Law and Human Behaviour*, 15, 273-285.

Wells, G. L. (1985). The eyewitness. In S.M.Kassin & L.S.Wrightsman (Eds), *The psychology of evidence and trial procedure.* (pp.43-66). Beverly-Hills, C.A: Sage.

Wells, G. L., Ferguson, T. J., & Lindsay, R. C. L. (1981). The tractibility of eyewitness , confidence and it's implications for triers of fact. *Journal of Applied Psychology*, 66, 688-696.

Wells, G. L., & Leippe, M. R. (1981). How do triers of fact infer the accuracy of eyewitness identifications? *Journal of Applied Psychology*, 66, 682-687.

Wells, G. L., Lindsay, R. C. L. & Ferguson, T. J. (1979). Accuracy, confidence and juror perceptions in eyewitness identification. *Journal of Applied Psychology*, 64, 440-448.

Whipple, G. M. (1912) Psychology of testimony and report. Psychological Bulletin, 10, 264 -268. Cited in Goodman,G., Golding,J.M., Haith,M.M. (1984). Juror's reactions to child witnesses. *Journal of social Issues*, Vol. 40, No.2, 1984, pp. 139-156.

Wigmore, J. (1909). Professor Munsterberg and the psychology of testimony. *Illinois Law Review*, 3, 399-445.

Wigmore, J. (1935/1976). *Evidence in trials at common law* (revised by J. Chadborn) (Vol. 6). Boston,MA: Little, Brown & Co.

Yarmey, A. & Jones, H. (1983). Is the psychology of eyewitness identification a matter of common sense? In S.Llyod-Bostock, & B.Clifford (Eds). *Evaluating witness evidence - recent research and new perspectives.* (pp. 13-40). New York: Wiley.

Major Project Proposal.

Children's Credibility As Witnesses: an analysis of fact-finder and child factors.

Prepared in accordance with the notes for contributors to: Legal and Criminological Psychology.

Christopher J Wiles

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 OXH

Abstract.

The proposed study plans to investigate the way in which a child's testimony about witnessing a video of an assault is perceived on an individual basis by a set of subjects.

In the first phase of the experiment, a child will view a video of a reconstruction of an assault and the following day, he will be interviewed about what he can recall (by an independent interviewer, who will be unaware of the child's truthfulness). The researcher will then instruct the child to answer several key points differently when he is re-interviewed (ie the child would be asked to lie).

In the second phase of the experiment, subjects will view video-recordings of both interviews with the child (the order being randomised to avoid any order effects). After each condition the subjects will complete a questionnaire examining their perceptions of the presentation they have just seen, focusing on assessments of credibility, confidence, intelligence and attractiveness. After the subjects have seen both conditions they will then be asked to compare them and decide in which version the child is lying. The subjects will also complete questionnaires on their background, demographic details and personality factors such as 'authoritarianism', 'belief in a just world' and their attitudes towards children as witnesses, to investigate links between these factors and the subjects' assignation of credibility ratings.

Introduction.

Children see and hear many things in the course of everyday life and on occasion children may be asked to describe or report what they have seen or heard. The type of information being sought (the report) and the person seeking that information (the fact-finder) vary greatly in their importance and consequence, and range, for example, from a parent asking a child about his/her day at school to a lawyer asking a child in court about an alleged abuse. In all of these situations, however, whether the child is believable to the fact-finder or not may determine, to a large extent, what happens thereafter.

Whether a child's testimony or report of what he/she has witnessed is believed by a fact-finder may be partly determined by both the reliability and credibility of the child and his/her report.

Research focusing on the reliability of the child as a witness, has looked at issues such as the age and cognitive abilities of the child (specifically memory and language functioning) and how these may influence the child's capabilities to observe and recall an event. Contemporary experimental studies *(Goodman et al, 1984, 1987; Ross et al, 1987)* have suggested that children may be more able to give reliable evidence than earlier research (*Chance & Goldstein, 1984)* had implied.

The credibility of the child as a witness has not been researched extensively, but the existing literature shows considerable disagreement. Some studies suggest that fact-finders consider children not to be as credible as adult witnesses *(Yarmey & Jones, 1983; Leippe & Romanzyk, 1987)* whilst other

studies suggest that children can be perceived as being equally (or even more) credible than adults (*Ross et al, 1987).* The child's credibility is determined by factors such as; how they present their report in terms of verbal and visual confidence, consistency and detail of report, whether or not they present as being intelligent and attractive and also whether the child has the ability or the motivation to lie or to be prone to suggestion.

There are also important factors within the fact-finder (ie the person who is making a judgement of the child's credibility) which may influence that decision. Previous research has suggested that various personality variables, such as authoritarianism (*Mitchell & Byrne, 1973; Boehm, 1968)* and belief in a "just world" *(Rubin & Peplau, 1975)* may affect how fact-finders judge the credibility of adult witnesses. Several studies have indicated that witnesses who are perceived as more attractive and/or intelligent are considered to be more credible *(Wells & Lieppe, 1981).* It may also be that the fact-finders' background in terms of age, sex, parental status and professional experience may affect their motivation or reason for making a judgement, and the processes they use to make a judgement.

Other factors may also have an impact on the decision as to whether a child is believed. For example, the conditions when the event was witnessed, such as light, distance away from the scene and the relationship to the people involved; emotional state of the child; the length of time between the event and the questioning about it; who is asking the questions and how the questioning is structured.

The aim of this study is to investigate the factors which may affect the decision by mock fact-finders (referred to henceforth as "subjects") that the child is credible, focussing on elements of the child's presentation, how these are perceived by the subjects, and what factors in the subjects may influence their decisions.

Hypotheses to be tested.

1. Will the subjects correctly identify which version of the child's testimony is the truthful one?

2. Will factors such as the age, sex, parental status of the subjects affect their judgements about the truthful condition?

3. Will the subjects who have experience of children, in a professional, legal, health or social care setting, be better at judging the truthful from the lying condition?

4. Will subjects who scored highly on an authoritarian attitude scale, "belief in a just world" scale or attitudes towards children as witnesses be better at judging the truthful from the lying condition?

5. Will the subjects rate factors within the child's presentation, such as perceived attractiveness, intelligence, confidence, consistency and believability, more positively in the truthful condition?

Plan of investigation.

~ design and procedures

A 13 year old male will be shown an extract from a video depicting a portrayal of a man and a woman arguing in the street, resulting in the man grabbing the woman and pushing her over. The man in the video will then shake the woman as if to try and wake her, fail and then run away. The video will be made using actors, and will attempt to be as realistic as possible, in terms of setting, style and the speed of the assault.

A 13 year old child has been chosen because the literature suggests that by this age his cognitive abilities make him more reliable, as he is better able to remember and describe what he has seen, but he may also be perceived as less credible, as he may be considered to be more prone to lie, either at their own or someone else's bequest. Before watching the video, the child will discuss what is involved to allow him to become more comfortable with the task and build up a rapport with the researcher. Twenty-four hours after the child has watched the video he will be asked a series of questions by an independent adult interviewer, who will be blind to the experimental condition. The questions will be structured to examine several key elements of the assault shown in the video, and the interview will be video-recorded. The researcher will then talk to the child, and will instruct him to respond to the same set of questions, differently from his original responses, with some key elements of his testimony changed, ie the child will be asked to lie about several pertinent details. The child will then be interviewed again by the same

independant adult, asking the same questions, in the same style and order. This interview will also be video-recorded.

The subjects will view both versions of the child's testimony and will complete the measures described below. To try and avoid any order effects, subjects will be randomly assigned to two groups, with one group watching the truthful version first and the second group watching this version second. The results of these two groups will be compared to establish if there have been any order effects allowing this to be accommodated for in the data analysis

~ subjects

An attempt will be made to find subjects who will represent the general population in terms of age and sex distribution. Particular effort, however will be made to recruit members of professions who are involved with working closely with children, in particular groups involved in the legal process. For example solicitors, social workers, police, health care professionals, teachers and psychologists. This is because these professional groups are often involved in the process of making judgements about the credibility of a child's reporting of an event they have witnessed.

The researcher would aim to obtain approximately fifty to one hundred subjects, through a mixture of professional and personal contacts.

~ measures

Before viewing the video of the child's interviews the subjects will complete questionnaires to determine demographic details and also an authoritarian

attitude scale - the revised Legal Attitudes Questionnaire *(Kravitz et al 1993)*, the 'Belief in a Just World' scale *(Rubin & Peplau, 1973)* and an questionnaire examining attitudes towards children as witnesses *(Kovera et al, 1993)*. After viewing one version of the interview, the subjects will be asked to complete a series of questions regarding the child's presentation, in terms of credibility, reliability, believability, perceived attractiveness and intelligence, nervousness, visual and verbal confidence, voice tone and strength. The questions will require the subjects to rate the various factors by placing a mark on a ten centimetre line, which represents their assessment of the factor. One endpoint indicating extreme positive rating and the other end indicating extreme negative rating. The subjects will then watch the second version of the child's testimony and will subsequently rate the presentation as before. They will then be told that in one of the versions the child is lying, and they will be asked to decide which version that is and then answer a series of questions about which factors influenced their judgement.

~ settings and equipment

The video-recorded interviews will last approximately 10 minutes and the subjects will watch the video in a setting which is suitable for them. In order to maximise the number of subjects, more than one subject will view the video at one time, but they will not be allowed to confer before completing the questionnaires.

~ data analysis

The subjects' judgements of which version of the child's evidence was true will be analysed using two-by-two contingency tables and a chi-squared measurement. The ratings of the various factors within the child's presentation and their influence on the subjects' credibility ratings will be analysed by looking at the mean scores for each rating and using a repeated measure T-test. The various demograpic, personality and experiential factors of the subject fact-finders will be compared by contingency tables and Chi-squared analysis, for their judgements about the truthful version of testimony.

Practical applications.

The study will add to the body of research investigating which factors influence judgements that people make about whether a child (who is reporting on an event they have witnessed), is telling the truth. Clearly, knowledge of such factors might have implications for various arenas, such as the way in which children are viewed as potential witnesses of various criminal activity. Particularly, in terms of prosecuting authorities making decisions about whether a case with a key witness who is a child should go to trial and also how lawyers may treat children as they are giving their evidence. The study may also give some indication as to how jury members make judgements about the believability of a child's testimony. In a wider sense, the study willl probably raise many questions both at a theoretical and practical level for future research.

Timescales.

It is envisaged that the first part of the experiment, where the child is interviewed will be completed by May 1996, allowing 9 months for the collection of data from subjects. It is therefore anticipated that the data will be analysed by May 1997, allowing a further 3 months to complete the discussion and conclusions of the experiment.

Ethical approval.

Although it is not anticipated that ethical committee consent will be required for the participation of the 13 year old boy, written approval will be sought from his parents before the experiment {for videotaping his interviews as well as his participation}, and the child himself will be fully debriefed afterwards to explain the nature of the study and the reasons for the methodological design. To facilitate in this process the child and his parents will be invited to watch the videos and discuss the applications of the study. Permission will also be sought to allow the videoed interviews to be used in future research.

Chance, J. & Goldstein, A. (1984). Face recognition memory - implications for children's eyewitness testimony. *Journal of social Issues*, 1984, 40, 139-153.

Goodman, G., Golding, J. M., Haith, M .M. (1984). Juror's reactions to child witnesses. *Journal of social Issues*, Vol. 40, No.2, 1984, pp. 139-156.

Goodman, G., Golding, J. M., Hegleson, V. S., Haith, M. M., & Micheli, J. (1987). When a child takes the stand: jurors perceptions of children's eyewitness testimony. *Law and Human Behaviour*, 11, 27-40.

Kovera, M. B., Borgida, E., Gresham, A. W., Swim, J. & Gray, E. (1993). Do child sexual abuse experts hold pro-child beliefs?: A survey of the International Society for Traumatic Stress Studies. *Journal of Traumatic Stress*, 6, 3, 383-404.

Kravitz, D. A., Cutler, B. L. & Brock. P. (1993). Reliability and validity of the original and revised Legal Attitudes Questionnaire. *Law and Human Behaviour*, 17, 6, 661-677.

Leippe, M & Romancyzk, A. (1987). Children on the witness stand. In S.Ceci, M.Toglia & D.Ross (Eds), *Children's eyewitness memory.* (pp. 24-35). New York: Springer-Verlag.

Mithchell, H. E. & Byrne, D. (1973). Effects of jurors' attitudes and authoritarianism on judicial decisions. *Journal of Personality and Social Psychology*, 25 (1), 123-129.

Ross, D. F., Miller, B. S., & Moran, P. B. (1987). The child in the eyes of the jury. In S.Ceci, M.Toglia & D.Ross (Eds), *Children's eyewitness memory.* (pp. 24-35). New York: Springer-Verlag.

Rubin, Z. & Peplau, A. (1973). Belief in a just world and reactions to another's lot. *Journal of social issues*, 1973, 29(4), 73-93.

Wells, G. L., & Leippe, M. R. (1981). How do triers of fact infer the accuracy of eyewitness identifications? *Journal of Applied Psychology*, 66, 682-687.

Yarmey, A. & Jones, H. (1983). Is the psychology of eyewitness identification a matter of common sense? In S.Llyod-Bostock, & B.Clifford (Eds). *Evaluating witness evidence - recent research and new perspectives.* (pp. 13-40). New York: Wiley.

Major Project Paper.

Children's Credibility As Witnesses: an analysis of fact-finder and child factors.

Prepared in accordance with the notes for contributors to: Legal and Criminological Psychology.

Christopher J Wiles

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 OXH

Abstract.

The study investigates the way in which a child's testimony about witnessing a video of an assault is perceived by subjects of different professional groups.

The subjects viewed video-recordings of two alternative versions of the child's testimony, and rated his presentation in each version. After the subjects had seen both conditions they were asked to compare them and decide if the child was being truthful in either of the two versions or not. Questionnaires were completed for subjects' demographic details and personality factors such as 'authoritarianism', 'belief in a just world' and their attitudes towards children as witnesses.

The results indicated that the subjects were poor at identifying the truthful version. Age, sex, parental status, Belief in a Just World, Authoritarian attitudes and pro-child beliefs were not significantly related to improved performance. However, mental health professionals correctly identified the truthful version more often than the other groups.

The results are reviewed in relation to the involvement of mental health professionals' in the legal decision making process and future research directions are identified.

Introduction.

Contemporary experimental studies have examined the abilities of children to provide accurate and reliable testimony about an event they have witnessed *(Goodman et al, (1984, 1987); Ross et al, 1987).* These studies suggest that children may be able to give more reliable testimony than earlier research had inferred *(Chance & Goldstein, 1984).* However, the attitudes of those making decisions about children's evidence throughout the legal process (that is the police, solicitors, judges and juries) significantly affect children's credibility as witnesses. The perception of the child's credibility may influence an individual's ability to determine accurate from inaccurate testimony *(see Literature Review, in this portfolio).* Decisions made about the accuracy or otherwise of a child's testimony may determine the procedure and outcome of any case to which a child appears as a witness.

There is a great need to develop further the investigation into the factors that influence a child's credibility for both research and legal practice. This study attempts to examine whether the beliefs, attitudes and experience of fact-finders, and the way in which a child presents testimony, influences the determination of truthful from false testimony.

Method.

The study examined how two alternative versions of a child's testimony about witnessing an assault were rated by a group of subjects. The subjects were also asked to identify which version contained truthful testimony.

Subjects

Three main groups of subjects were targeted, namely, Child Mental Health Professionals, Legal Professionals and a group of subjects with no professional experience of children. All subjects were asked to volunteer to take part in a study about attitudes towards children as witnesses.

1. Child Mental Health Professionals group: The heads of service for various child and family mental health services were contacted and agreed to seek volunteers from their employees. A variety of child mental health professionals volunteered to take part (see Appendix 2 for details), giving a total number of sixty-one subjects.

2. Legal Professionals group: Contact was established with the administrators of various organisations such as the Reporter to the Children's Panel service, the Police training college and the Family Law Association. A total of fifty-six volunteers agreed to take part from these agencies (see Appendix 2 for details).

3. A Lay group: These subjects had no professional experience of working with children. They were obtained by seeking volunteers from various charitable (such as The Rotary Club) and social organisations (such as a local country dancing club). Attempts were made by doing this to target subjects with similar professional and educational status to the other two groups. Three subjects from within this group had described themselves as having professional experience of children and were excluded from analysis leaving a total number of ninety-four subjects.

Measures

1. Child Presentation Ratings Questionnaire. To allow the subjects to rate the child's presentation a series of twelve questions were devised by the author for the purposes of the study. These questions focused on various aspects of the child's presentation (see Appendix 2).

2. The Revised Legal Attitudes Questionnaire (RLAQ), *(Kravitz et al 1993)*. This questionnaire consists of a series of questions investigating the degree to which the respondent applies authoritarian attitudes to their thinking about aspects of the legal process. The terminology of this questionnaire relates to the American Legal System which meant that the questions had to be adapted for the British context (see Appendix 2). This makes direct comparison with the American studies difficult. However, *Kravitz et al (1993)*, reviewed a series of studies, concluding that the RLAQ had good internal reliability and good construct validity in comparison with other measures of authoritarianism.

3. The Belief in a Just World Scale *(Rubin & Peplau, 1973)*. This questionnaire was developed to investigate the degree to which respondents were sympathetic to the idea that the world is a just place where good people are rewarded and bad people punished. They suggested that a belief in a just world was a perceptual bias which helped perpetuate social injustice. Studies have reported the measure to have good internal reliability (for example, *Ahmed & Stewart (1985)*), however, there are no normative data reported in the literature.

4. The Child Witness Attitude Scale *(Kovera, 1993)*. This scale was developed as part of a study into the attitudes of child sex abuse experts towards children. The questions focus on the respondents' beliefs about the memory and witness skills of children and their susceptibility to suggestion and unreliability. *Kovera* concluded that subjects scoring highly on this scale held pro-child beliefs with favourable implications for child witnesses. There is no detailed analysis of this questionnaire in *Kovera's* study but has been used in the current study as no more robust measures were identified.

For all of the measures the subjects were asked to place a mark at the point on a 100 millimetre line which best reflected their opinion about the question. One endpoint of the line indicated an extremely positive rating and the other an extremely negative rating. For the all of the questionnaires, except the child presentation ratings, the scores per question were totalled. High scores therefore indicated strong Belief in a Just World, highly authoritarian attitudes or pro-child beliefs (see Appendix 2 for examples of the questionnaires).

Design

In the first phase of the experiment, a 13 year old child viewed a video of a reconstruction of an assault. The next day, he was interviewed about what he could recall. Following the first interview, the child was re-interviewed, after the researcher had instructed the child to answer several key points differently (that is the child was asked to lie).

The interviewer was a solicitor with experience of interviewing children. She was invited to take part in a study about children as witnesses. She was instructed to ask the child a given set of twelve questions highlighting important aspects about the incident the child had watched. The interviewer was asked to repeat the interview with the child using the same words, style and tone and was told that the child's responses may differ from the first interview but was given no explanation at this stage as to why this was. The interviewer had not seen the incident until after completion of both interviews when the design and purpose of the study were explained and discussed.

In the second phase of the experiment, the subjects were instructed that they would see two alternative versions of a child's videotaped testimony and that it was possible that either may be more truthful than the other or that neither versions were truthful. The order of the presentation of the two videos was randomised to identify any order effects. The subjects watched the videos in convenient groups and were instructed not to confer during the experiment. Prior to watching the videos, the subjects completed questionnaires on their background, demographic details and the Revised Legal Attitudes questionnaire, Belief in a Just World Scale and the Children Witness Attitude Scale, as detailed above. After each condition the subjects completed the Child Presentation Ratings questionnaire, as detailed above. After the subjects had seen both conditions they were asked to compare them and decide which version of the child's testimony appeared most truthful. After completion of all the questionnaires the subjects were fully debriefed as to

the purpose, and methodology of the study and free discussion about the possible outcome was encouraged

Research Questions

The study aimed to address the following questions.

1. Will the subjects correctly identify which version of the child's testimony was the truthful one?

2. Will factors such as the age, sex and parental status of the subjects affect their judgement about which version was truthful?

3. Will the subjects who have experience of children, in a professional, legal, health or social care setting, be better at judging the truthful from the lying condition?

4. Will subjects who scored highly on an authoritarian attitude scale or a "belief in a just world" scale, be better at estimating the truthful version than those subjects with low scores?

5. Will the subjects rate factors within the child's presentation, such as perceived attractiveness, intelligence, confidence, consistency, reliability and believability, more positively in the truthful condition?

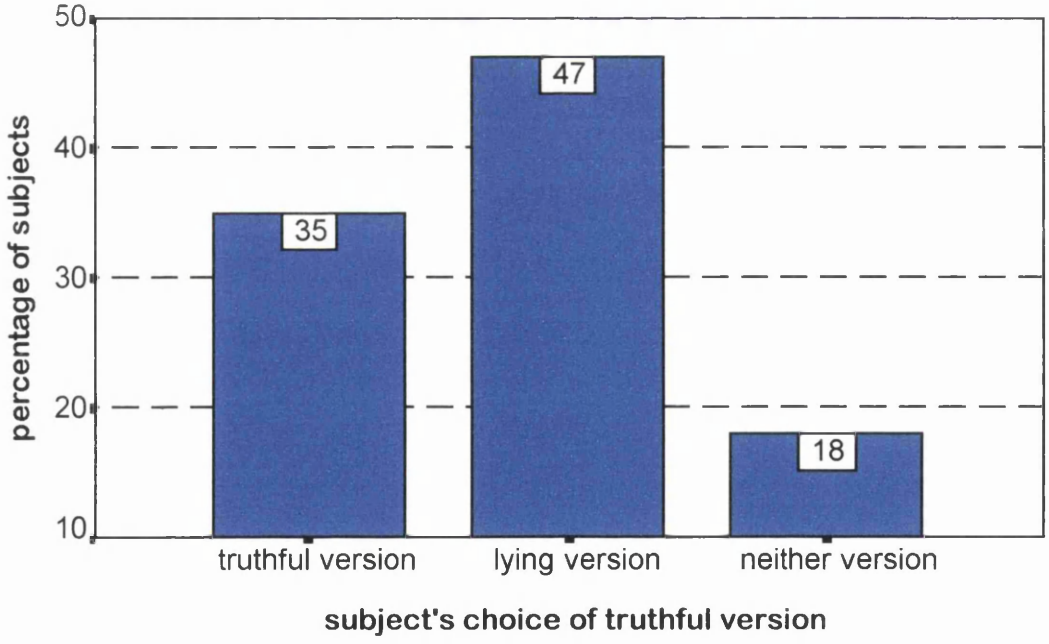
Results.

There was no significant effect of the order of presentation on the percentages of the subjects choosing each version of testimony.

1. Will the subjects be able to identify the truthful from the lying version?

The percentages of all the subjects (n=211) are shown in Graph 1 for those who identified the correct version (35%), the incorrect version (47%) and those who decided neither version was more truthful (18%). This result differs significantly from chance (x_2 = 26.74, df = 2, p<0.001). The subjects who failed to identify the truthful version (that is those who identified the lying version or decided that neither version had been truthful), were compared to those choosing the correct version. This was done to help analyse the factors involved in identifying accurate or truthful testimony. This result was also highly significant (x_2 = 18.81, df = 1, p<0.001).

Graph 1. Percentages of subjects per version of testimony.



2. Will the demographic factors of the subjects effect their choice of truthful version?

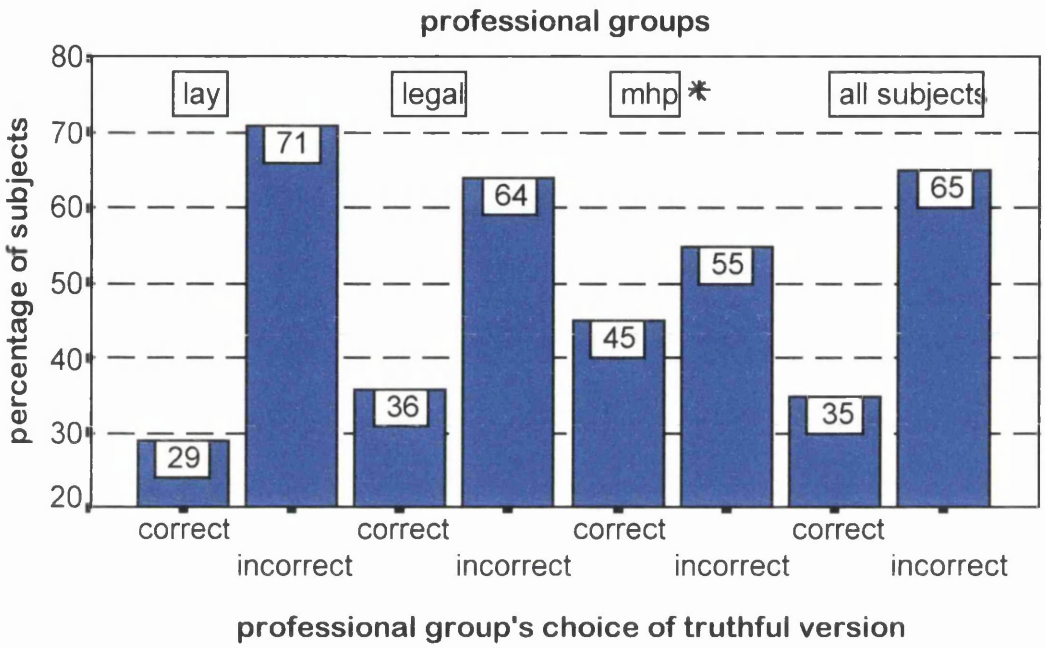
Analysis showed that there was no relationship between the subject's sex ($x2$ = 0.03, df = 1, ns), parental status ($x2$ = 0.31, df = 1, ns) and age group ($x2$ = 2.97, df = 5, ns), and choice of truthful version. Further analysis of the combinations and inter-relatedness of these and other subject factors was not possible because of insufficient numbers of subjects per group.

3. Will professional experience with children effect choice of truthful version?

The subjects were divided into three groups; those working with children in mental health settings (Clinical Psychologists, Psychiatrists, Social Workers and Nurse Therapists) and legal settings (Policemen and women, Family Law Solicitors, Procurator Fiscals and Reporters to the Children's Panel) and those who had no professional contact with children. The percentages of subjects in each group identifying the correct version of testimony are shown on Graph 2. Analysis with Chi-squared, showed that there was no significant relationship between profession and choosing correct version of testimony ($x2$ = 3.94, df = 2, ns). Each group was then compared individually with the percentages of subjects expected to identify the correct version by chance. This analysis revealed that although the group of mental health professionals did not identify the truthful version significantly more or less than chance (n=61, $x2$ = 0.80, df = 1, ns), both the lay and legal professional groups did significantly worse than chance for identifying the truthful version {lay group

(n=94): $x2$ =17.02, df = 1, p< 0.001; legal group (n=56): $x2$ =4.58, df = 1, p< 0.05}

Graph 2. Percentage of Professional Groups per Truthful Version Choice.



(*mhp = child mental health professionals)

4. Will the personality or attitudinal factors of the subjects affect their choice of truthful version?

The subjects' scores on all of the personality and attitude questionnaires were normally distributed. The subjects were therefore grouped into low scorers (more than one standard deviation below the mean), medium scorers (within one standard deviation above or below the mean) and high scorers (more than one standard deviation above the mean). These groups were compared for their choice of truthful version by contingency tables and $x2$ analysis. There was no significant relationship between the subjects' score

on the Belief in a Just World Scale ($x2$ = 0.54, df=2, ns), the Authoritarianism scale of the Revised Legal Attitudes Questionnaire ($x2$ =4.38, df=2, ns), and the Child Witness Attitude Scale ($x2$ =0.24, df=2, ns) and their choice of truthful version.

5. Will the subjects rate factors within the child's presentation more positively in the truthful condition?

The child's presentation in the two versions of testimony the subjects had seen was different. The child's presentation of the lying testimony contained fewer hesitations, and was presented more confidently. However, the content of this version was considerably more inconsistent.

The mean rating scores (on a 100 point scale) for the subjects' ratings of the features of the child's presentations, were compared with each other. The differences between the ratings in the two versions are shown in Table 1 for the twelve questions the subjects rated the child's presentation on. The table shows small but significant differences using repeated measure T-tests. The child was rated as taking the interview more seriously and with more interest in the false testimony version. He was also rated as more certain of his answers, with a stronger, clearer voice, giving more consistent testimony and appeared more intelligent in the false testimony. The child's presentation of truthful testimony was rated as having more filler or distracter words than the false testimony version.

Table 1. Differences between the means of the ratings for the features of the child's presentation.

Rating	Version	Mean	Std Dev	T-value	df	P-value
How seriously the child took the interview	Truthful: Lying:	58.35 71.15	24.22 20.60	-6.59	210	p < .001
How interested the child was in the interview	Truthful: Lying:	60.75 66.39	20.89 22.51	-3.03	210	p < .01
Degree of uncertainty in child's answers	Truthful: Lying:	50.89 57.91	23.00 23.02	-3.36	210	p < .001
Strength and clarity of the child's voice	Truthful: Lying:	65.61 70.35	18.33 17.14	-3.37	210	p < .001
Extent of the child's use of filler and distracting words	Truthful: Lying:	41.97 35.54	23.38 24.90	2.74	210	p < .01
Consistency of child's testimony	Truthful: Lying:	65.33 70.04	21.45 21.25	-2.21	208	p < .05
How intelligent the child appeared	Truthful: Lying:	67.61 72.40	16.12 14.58	-4.92	210	p < .001
How attractive the child was	Truthful: Lying:	65.87 67.63	16.95 17.44	-2.64	210	p < .05
How willingly the child answered	Truthful: Lying:	75.18 78.04	16.95 15.39	-2.20	210	p < .05
How believable the child was	Truthful: Lying:	67.33 70.44	20.02 19.26	-2.00	210	p < .05
How relaxed the child appeared	Truthful: Lying:	51.39 48.47	24.98 25.08	1.50	210	ns
Degree of eye contact	Truthful: Lying:	43.55 43.73	23.04 26.11	-0.18	209	ns

Summary of Results.

The results indicate that the subjects were more likely to identify the false version of testimony as being accurate and true, than the truthful version of testimony. The subjects' sex, parental status and age-group were not significantly related to choice of truthful testimony. Although professional status was not significantly related to choice of testimony, the mental health professionals did no better than chance but both the legal professionals and

the lay group did significantly worse than chance. There were no significant relationships for those scoring highly on the belief in a just world scale, the Authoritarianism scale or the attitudes towards child witnesses questionnaire. The subjects rated the child's presentation of false testimony as more confident in voice and presentation and as being more engaged with the interviewer.

Discussion.

The results of the study suggest that identifying true from false testimony is not an easy task, with most subjects failing to identify the condition where the child told the truth. This finding is consistent with earlier research which concluded that most subjects were unable to distinguish accurate from inaccurate witnesses *(Wells et al, 1981).* Indeed *Wells, (1985)* concluded that there was little evidence that people were good at evaluating the accuracy of testimony. Clearly, detecting false or inaccurate testimony is a complex process affected by factors both in the child's presentation and the individuals making judgements about the testimony. In this particular experiment the subjects are forced to make a choice between two alternative versions of testimony. It could be argued that this is not necessarily representative of the task facing many fact-finders. The task of identifying the differences between the two alternative versions, however, allows us to consider the processes involved in making a decision about the truthfulness of the child's testimony. Both factors within the subjects and the child's presentation should be addressed.

Subject factors.

The finding that the sex, age-group and parental status of the subject's did not significantly influence their performance in terms of correctly identifying the truthful testimony requires further consideration. Future studies should be designed to address the impact of these and other subject factors more specifically.

The subjects' scores on the Belief in a Just World, Authoritarianism scale of the Revised Legal Attitudes Questionnaire and the Child Witness Attitudes Scale were not significantly related to correctly identifying the truthful version of testimony. The complex interaction between beliefs and action is demonstrated by the finding that having positive attitudes about the abilities of children as witnesses was not significantly related to improved performance for identifying the truthful condition. This suggests that subjects reporting to have positive attitudes were just as likely as those with negative attitudes to choose the false testimony. However, the interaction between these and other types of personality variables and attitudes should be the focus of future research. The measures used in this study require further repetition to confirm their sensitivity and validity for similar research designs. Future studies should address the manipulation of different measures of personality variables and attitudes to examine more specifically their relationship to the ability to detect truthful testimony.

The results also suggest that the mental health professionals were most successful at identifying the truthful version. It is important to note, however, that they did no better than chance with both legal professionals and those

with no professional experience with children, correctly identifying the truthful testimony significantly less than chance. This is an important and interesting finding, in that it raises questions about the abilities of all those involved in the legal-decision making process, to determine the quality of the evidence of children. Therefore it is important that future research aims to identify if the different professional groups use different processes and approaches for determining the truthfulness of testimony. If the mental health professionals are using a more successful approach for determining the truthfulness of testimony, then clearly there is an argument for developing these approaches within the various stages of legal investigation. The role of the mental health professional within this process may initially be in the disclosure of involvement, as witness or victim, by children in traumatic or criminal events. Further involvement in such cases, means balancing the requirement to provide support, care and treatment with an investigative role, and clearly performing one may affect the other. Clearly, researchers have a role to play in identifying and educating about the indicators of deception and their application to decisions about the quality of testimony. This knowledge may help to understand the strength of the child as a witness and influence the likelihood of a case proceeding.

Therefore, greater understanding of how the truthfulness or accuracy of testimony is determined, is crucial to the legal process, as the appropriate application of such knowledge will improve the use and impact of children's testimony.

Child factors.

In his original interview, the child told the truth and was, in fact, extremely accurate in his descriptions and details of the event he had witnessed. His presentation of the false testimony differed; as his answers were prepared for him, he appeared more confident and precise in delivery, despite being (by design) inconsistent, with elements of his testimony clearly contradicting others. Despite the differences in the two presentations, the subjects were more likely to identify the false version as the truthful testimony. Examination of their ratings of the two versions shows that their perception of the child's attitude and confidence may be important factors in making their decision. This finding is consistent with other research suggesting that witnesses who are confident in presentation and voice style are more likely to convince people of their truthfulness *(Wells & Leippe, 1979; Nigro et al, 1987).* However, it is unclear how much these individual factors effected subject's choice of truthful version. Future studies should focus on this with experiments designed to specifically test and measure subject's perceptions of the child's presentation, allowing for more sophisticated analysis.

It is likely then, that fact-finders perceive witnesses who present their testimony with powerful voice style and confident manner to be more believable. This has implications for the way in which children's evidence is gathered and presented in court. *Goodman et al (1991)*, suggested that by repeated questioning and over-preparation, children may appear stilted, scripted and less believable. However, in this study the child's scripted and prepared report was presented more confidently and was subsequently rated

more believable. The effects of repeated questioning may lead to increased rehearsal of the testimony (truthful or not). This in turn, may lead to increased simplification and clarity, allowing the child to be more confident and his presentation appear more truthful. The child's experience of presenting evidence in court, however, is likely to be stressful and frightening, and hardly likely to allow the child to appear confident and sure of themselves. This is especially so when we consider the nature of the adversarial system within the court with children being more vulnerable to hostile cross-examination. Efforts should be made to improve the child witness's understanding of the legal process and the place their evidence plays in it. This may allow children to present their evidence confidently and may improve the chances of their testimony being believed. The reverse scenario is just as important in terms of improving the detection of witnesses who appear confident but are in fact, presenting false testimony, for what ever reason.

It is important to note that the child in the experiment gave testimony of a staged event that he was an eye-witness to and not an event where he was a victim. Children who appear in court as victims of such crimes as domestic violence and sexual abuse, are often the only witnesses. Commonly there may be little other evidence and this makes them an extremely important group of child witnesses. Research is required to examine if child victims are perceived differently from children who have witnessed crime. The assault which the child viewed in the study was reconstructed, and was representative of the type of incident children often witness. The child also

took his role in the experiment seriously and responded to the task with considerable effort. However, the child had no emotional connection with the participants of the assault and his presentation was not necessarily affected by any distress or disturbance caused by witnessing such an event for real. The potentially traumatic nature of such experiences is another area for future research. It is important to examine the impact of emotional disturbance on the future presentation of testimony. This also raises the issue of the mental health professional's role in supporting such children without significantly contaminating or affecting their evidence, as discussed above. It is also important to note that children are not homogeneous and the child in this study is not meant to represent all children. Future study should be directed towards varying the child's age, sex, cognitive abilities and presentational style to examine the relationship between children's testimony and how it is perceived.

A potential criticism of this study is that by presenting subjects with two versions of testimony and asking them to decide which is more truthful an expectation is created that one of the versions must be truthful, which is unlike the situation facing a juror in a courtroom. However, attempts were made in the instructions to the subjects to highlight the possibility of neither being truthful. It could be argued that a juror in the courtroom may be likely to take part with an expectation about the testimony of children and it's bearing on the case as a whole, and this in a sense is similar to the position of the subjects in the study. However, although, the task facing the subjects was not directly comparable to the courtroom situation it was designed in

such a way as to expose the elements of the process of making a decision about the truthfulness of testimony in a controlled manner. The impact of these elements, as discussed above, should also be considered in light of the other aspects of the legal process, for example the evidence of other witnesses and any physical evidence. Despite the limitations of the study's design it does provide clear starting points for future research directions which should take into account more closely the position of this research with regard to the courtroom situation.

The role of the child as a witness, will continue to be a difficult area for research. However, more research is required to examine further the relationships between the child presenting evidence and the person making a judgement about that evidence. This relationship is important for the legal decision making process from initial disclosure of testimony, through interviewing, court appearance and judgement (within the context of the other evidence). Successful examination of this issue should develop practices to maximise the potential of children participating in the legal process in a constructive and appropriate way.

Ahmed, S. M. & Stewart, R. A. (1985). Factor analytical and correlational study of the just world scale. *Perceptual and Motor Skills*, 60, 135-140.

Bray, R. M. & Noble, A. M. (1978). Authoritarianism and decisions of mock juries: evidence of jury bias and group polarisation. *Journal of Personality and Social Psychology*, 36 (12), 1424-1430.

Chance, J. & Goldstein, A. (1984). Face recognition memory - implications for children's eyewitness testimony. *Journal of social Issues*, 1984, 40, 139-153.

Goodman, G., Golding, J. M., Haith, M. M. (1984). Juror's reactions to child witnesses. *Journal of social Issues*, Vol. 40, No.2, 1984, pp. 139-156.

Goodman, G., Golding, J. M., Hegleson, V. S., Haith, M. M., & Micheli, J. (1987). When a child takes the stand: jurors perceptions of children's eyewitness testimony. *Law and Human Behaviour*, 11, 27-40.

Goodman, G., Bottoms, B. L., Herscovici, B. B, & Shaver, P. (1991). Determinants of a child victim's perceived credibility. In S.J. Ceci.M., P.Toglia & D.F.Ross (Eds) *Perspectives on children's testimony.* pp. 1-22. New York: Springer-Verlag.

Kovera, M. B., Borgida, E., Gresham, A. W., Swim, J. & Gray, E. (1993). Do child sexual abuse experts hold pro-child beliefs?: A survey of the International Society for Traumatic Stress Studies. *Journal of Traumatic Stress*, 6, 3, 383-404.

Kravitz, D. A., Cutler, B. L. & Brock. P. (1993). Reliability and validity of the original and revised Legal Attitudes Questionnaire. *Law and Human Behaviour*, 17, 6, 661-677.

Mithchell, H. E. & Byrne, D. (1973). Effects of jurors' attitudes and authoritarianism on judicial decisions. *Journal of Personality and Social Psychology*, 25 (1), 123-129.

Nigro, G. N., Buckley, M. A., Hill, D. E., & Nelson, J. (1987). When juries "hear" children testify. In S.J. Ceci.M.P.Toglia & D.F.Ross (Eds) *Perspectives on children's testimony*. pp.1-22. New York: Springer-Verlag.

Ross, D. F., Miller, B. S., & Moran, P. B. (1987). The child in the eyes of the jury. In S.Ceci, M.Toglia & D.Ross (Eds), *Children's eyewitness memory*. (pp. 24-35). New York: Springer-Verlag.

Rubin, Z. & Peplau, A. (1973). Belief in a just world and reactions to another's lot. *Journal of social issues*, 1973, 29(4), 73-93.

Wells, G. L., Lindsay, R. C. L. & Ferguson, T. J. (1979). Accuracy, confidence and juror perceptions in eyewitness identification. *Journal of Applied Psychology*, 64, 440-448.

Wells, G. L. (1985). The eyewitness. In S.M.Kassin & L.S.Wrightsman (Eds), *The psychology of evidence and trial procedure.* (pp.43-66). Beverly-Hills, C.A: Sage.

Wells, G. L., Ferguson, T. J., & Lindsay, R. C. L. (1981). The tractibility of eyewitness , confidence and it's implications for triers of fact. *Journal of Applied Psychology*, 66, 688-696.

Small Scale Service Evaluation Project.

GP Referral To And Perception Of Clinical Psychology Services.

Prepared in accordance with the notes for contributors to: Clinical Psychology Forum.

Christopher J Wiles

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 OXH

Abstract.

The database for referrals to a Clinical Psychology Service from a large inner-city GP practice was examined to establish patterns in waiting time, reason for referral and patient characteristics. The GPs completed a questionnaire about their understanding about the current Clinical Psychology Service. The questionnaire also asked about their perceptions about the degree of psychological difficulties experienced by their patients and the most appropriate method of diagnosing and treating such problems. The results of the database analysis and the GP questionnaire are discussed in relation to the provision of Clinical Psychology services at the Primary care level and areas of future development.

Introduction.

The practice of Adult Clinical Psychology in Primary Care settings has changed considerably in recent years. At the centre of the change is the restructuring of the National Health Service as a whole and in particular the development of the purchaser-provider split. This has meant significant changes in the way that Clinical Psychology departments operate and also the placing of a greater emphasis on the GP to make decisions about the management of their patients' cases. This 'gatekeeper' role has meant that the GP now has more power in deciding which services should be involved in a patient's case and also that the providers have a greater responsibility in ensuring that services are clinically and cost-effective and are targeted at the appropriate groups of patients. In this context, it is crucial that Clinical Psychology departments are aware of what their referrers require of them, in term of quantity and types of referrals. This knowledge can then be used to ensure that these demands can be met from the existing resources, and if not, for services to evolve and adapt to ensure that the needs of the referrers and patients are being met. This is important because following the move from the hospitals in the last two decades, psychologists have often simply transferred work practices into the Primary Care field and, generally, failed to adequately consult GPs and other members of the Primary Care teams on how best the psychologist can be utilised in these settings.

A major implication of this is whether services continue to exist purely in terms of a specialist referral or whether, {considering the shortage of Clinical Psychologists}, psychologists should try and concentrate on consultancy

rather than individual work. Elements of this already exist, in that several studies have indicated that GPs estimate the proportion of their patients who are presenting with psychological problems to be quite high and that the proportion referred on to specialist services, like Psychology and Psychiatry, is quite low. *Mayou (1980)*,concluded that GPs in his study preferred to treat psychological problems themselves despite having a "manifest lack of knowledge of psychological techniques", and the reasons why they referred some patients to the specialist services were unclear. *Eastman & McPherson (1982)*, described how the majority of GPs in their study treated patients with psychological problems themselves although only one in twelve employed formal psychological treatment methods. In their study, *Espie & White (1986)*, found that 90% of the patients that GPs considered to have psychological problems were not referred on at all. Clearly it is important to establish exactly how GPs are using the Clinical Psychology Services, whether patients are seen by GPs and appropriately treated, or whether the services should be developed to better meet the needs of both the GPs and their patients.

This study attempts to clarify what demands are currently being made on the Clinical Psychology Department at the Lansdowne Clinic from a section of it's referrers from the Clydebank Health Centre. This information can then be used to optimise service delivery in terms of the number of sessions provided by Clinical Psychologists to referrals from Clydebank and also improve the referral system itself, ensuring that GPs and Clinical Psychologists are

agreed on the type and severity of problems which a psychologist can provide services for.

The Clydebank area is one of five geographical areas covered by staff based at the Lansdowne Clinic and currently there is one psychologist providing clinics at the Health Centre two days a week.

Methods.

1. Database Review.

To assess how many referrals were made to the Lansdowne Clinic by the GP's based at the Clydebank Health Centre, information was gathered using the referral database in the Department and patient case notes. This database search highlighted the following points of information:

a. Referral rates per GP and per practice, taking into account the number of referrals made for the period January to December 1994 and the size of each practice's list of patients.

b. The number of referrals per month for the period January to December 1994.

c. The length of time between the referral letter and the first appointment, ie waiting time.

d. The characteristics of the patients referred in terms of their age and sex and also the reason for their referral. To establish why the patients were being referred, the referral letter in the case notes was coded in terms of the

main problem which constituted the reason for referral from the point of view of the GP.

2. GP Questionnaire.

To examine the GP's use and satisfaction with the Services and also to establish what the GP's considered to be appropriate referrals to the Clinical Psychology Services, a questionnaire was devised to identify the following information:

a. The characteristics of the GPs in terms of their age, sex, number of years experience practising as a GP and an indication of any special interests they have, such as Psychiatry etc.

b. A rating from the GPs of their satisfaction with the current Clinical Psychology Service, in terms of the quality of the service, the extent to which the service meets their patients' needs, whether or not input from the Clinical Psychology Services reduces the number of GP consultations with the patients and also their opinion on the waiting time for an appointment and the quality of the communication from the Psychologist.

c. An estimate from the GPs of how many of their patients were presenting primarily with psychological problems and to which other services they refer these patients to, also which factors determined where a referral was made to.

d. An estimate from the GPs as to what type of problem constituted an appropriate reason for referral, using the same coding system from the database search as a check-list.

e. The GP's willingness to learn more about Psychological techniques and treatments was established and also if they would consider attending local workshops.

Results.

1. Database Review.

The database search yielded the following results:

a. The total number of referrals from the Clydebank Health Centre GPs direct to the Lansdowne Clinic, for the period January to December 1994 was *126.* These referrals were made by *23* GPs from a total number of *8* practises. There were *8* GPs who did not refer at all, and from this total, *2* practises did not refer at all. The majority of the GPs *(19)* made *1-6* referrals and only *3* GPs made more than *10* referrals throughout the year. Calculating the number of referrals as a percentage of their practise lists, indicated that the 8 practises referred from *0.08% - 0.53%* of their practise lists, with the average being *0.27%.* The total percentage of all of the GP's patients who were referred to the Lansdowne Clinic was *0.26%.*

b. The number of referrals made in each month of 1994, ranged from *5 - 14* referrals, with the average being *10.5* referrals. The spread of referrals throughout the year indicates that generally speaking fewer referrals were made during the winter months.

c. Once referred , patients waited on average *17 weeks* before being offered a first appointment. The shortest waiting time was *3 weeks* and the longest was *34 weeks.*

d. The sex of the 126 patients referred in the year 1994 were : *Male - 41, Female - 85.*

The ages of the patients ranged from *16 - 81 years old* with the average being *35 years old.*

The following table shows the patients categorised in terms of the types of problems the GPs were referring the patients for.

Table 1:

The Number of Referrals per Type of Problem (or Reason For Referral):

CODE:	*TYPE OF PROBLEM:*	*NUMBER OF REFS:*
01:	Generalised Anxiety (or Anxiety Management).	27
02:	Phobic Anxiety (or Simple Phobia).	0
03:	Social Anxiety or Phobia.	2
04:	Agoraphobia.	10
05:	Panic Attacks.	30
06:	Post-Traumatic Stress Disorder.	0
07:	Depression.	12
08:	Anxiety/Depression Mixture.	10
09:	Bereavement Problems.	5
10:	Relationship Difficulties and/or Marital Problems.	8
11:	Problems with Anger or Aggression.	3
12:	Unrealistic Jealousy.	0
13:	Eating Disorder.	1
14:	Obsessional and/or Compulsive Behaviour.	2
15:	Alcohol Abuse.	2
16:	Drug Abuse.	1
17:	Sleep Problems.	3
18:	Sexual Dsyfunction.	4
19:	Sexual Deviation.	0
20:	Chidhood Sexual and/or Physical Abuse.	2
21:	Personality Disorder.	1
22:	Psychotic Symptoms.	0
23:	Memory or Neuropsychological Problems.	2
24:	Adjustment Problems.	0
25:	Hypochondriacal Problems.	1

2. GP Questionnaire.

The GP Questionnaire was given to all of the GPs at the Clydebank Health Centre. To try and ensure as good a return as possible, before the questionnaires were given out, the Vice-Chairman of The GP's Management Group was consulted (in person), in order to raise the profile of the questionnaire with the GPs as a whole. The Vice-Chairman was positive about the exercise and the questionnaire was distributed to the GPs and collected a week later in the internal mail system. Out of a total of 33 GPs, 11 questionnaires were returned. One of the questionnaires was completed inappropriately and was thus omitted from the analysis. This relatively poor response rate is possibly typical of such exercises given the dramatic increase in administrative and paperwork now being demanded of GPs, and compares with response rates in similar studies, eg *Espie & White (1986).* The information however can still be useful as a pilot study for future work on the GP's perception and satisfaction with the Clinical Psychology Services.

a. The GP's who did respond to the questionnaire came from both ends of the range of the number of referrals made, 4 of the respondents had not referred anyone in 1994, but were currently referring. The other 6 respondents had referred from 1 -17 patients in 1994 and were all currently referring. ie The GP's who answered the questionnaire were a mixture of regular and infrequent referrers.

GP Characteristics.

Age: The respondents ranged in age from *29-49 years old*, with the average age being *35 years old.*

Sex: Male: *7*

Female: *3*

Number of Years Practising as a GP: The range of years experience was from *2 - 16 years*, with the average being *8 years.*

Special Interests: Out of the 10 GPs surveyed, only *4* reported having any special interests, these included diabetes, asthma, women's health, chest medicine, care of the elderly and care of terminally ill patients.

b. All of the GPs reported currently making referrals to the Clinical Psychology Services. One GP felt unable to comment on the current quality of the Services as he hadn't made a referral for some time. The remaining 9 GPs rated the quality of the Services as 'Good' (8 GPs) or 'Excellent' (1 GP). The extent to which the service met the patient's needs were rated similarly highly; 'Very Well' (1 GP), 'Well' (7 GPs) and 'Fair' (1 GP). All of the GPs , bar one, felt that the referral to the Clinical Psychology Services had reduced the number of GP consultations in relation to the referred problem; 'Significant Reduction' (1 GP), 'Slight Reduction' (7 GPs) and 'No Change' (1 GP). Only 2 of the GPs felt that the time delay between the referral letter and the first appointment was 'Reasonable', and only 1 GP felt that the Psychologists did not keep the GPs adequately informed about their patient's progress.

c. The GPs identified the following range of estimates of the percentages of their patients who are presenting primarily with psychological problems;

Table 2: GP's Estimates of the Percentage of Patients with Psychological Problems.

Percentage of Estimate	Number of GPs
10-19%	2
20-29%	5
30-39%	3

All of the GPs said that they referred patients with psychological problems to other services as well as Clinical Psychology Services and the following list details the other services referred to:

Psychiatry outpatients (5 GPs), Community Psychiatric Nursing Services (7 GPs), Social Work Department (2 GPs), Health Visiting Team (2 GPs), Psychotherapy Service (2 GPs), various Voluntary Counselling Services, such as Relate, Cruise Bereavement, McMillan Nurses for the Terminally Ill, Women's Counselling Services (4 GPs), the Tom Allen Centre for sexual offenders (1 GP), the Family Planning Services for sexual dysfunction work (1 GP), Child and Family Psychology Services (2 GPs), Educational Psychologist (2 GPs), Alternative Medicine (1 GP) and Private Sector Services (1 GP).

The GPs listed various factors which play a part in determining if a referral is made to 'Specialist' services and to which services the referral is made. eg the type, severity and chronicity of the problem (4 GPs), patients requests or wishes (4 GPs), patient characteristics which increase the chances of psychological therapy being effective (5 GPs), failure to respond to GP's

interventions (2 GPs), degree of social support (1 GP) and the availability of Specialist Services/Waiting Times (1 GP).

d. The following table summarises the number of GPs who regarded each type of problem as an appropriate reason for referral to the Clinical Psychology Services.

Table 3. GP's Opinions of Which Types of Problems Were Appropriate Referrals:

CODE:	*TYPE OF PROBLEM:*	*Appropriate Referral:*
01:	Generalised Anxiety (or Anxiety Management).	9
02:	Phobic Anxiety (or Simple Phobia).	10
03:	Social Anxiety or Phobia.	10
04:	Agoraphobia.	9
05:	Panic Attacks.	10
06:	Post-Traumatic Stress Disorder.	10
07:	Depression.	3
08:	Anxiety/Depression Mixture.	6
09:	Bereavement Problems.	3
10:	Relationship Difficulties and/or Marital Problems.	4
11:	Problems with Anger or Aggression.	8
12:	Unrealistic Jealousy.	6
13:	Eating Disorder.	8
14:	Obsessional and/or Compulsive Behaviour.	8
15:	Alcohol Abuse.	2
16:	Drug Abuse.	2
17:	Sleep Problems.	2
18:	Sexual Dsyfunction.	3
19:	Sexual Deviation.	1
20:	Chidhood Sexual and/or Physical Abuse.	2
21:	Personality Disorder.	0
22:	Psychotic Symptoms.	0
23:	Memory or Neuropsychological Problems.	3
24:	Adjustment Problems.	4
25:	Hypochondriacal Problems.	8

e. Out of the 10 GPs surveyed, *8* GPs said that they would wish to find out more about psychological techniques and treatments, and *7* GPs said that they would be prepared to attend a local seminar or workshop.

Discussion.

The pattern that emerges from the database review is that there is considerable variation in the referral rates of the GPs and the practices at the Clydebank Health Centre. This variation cannot be accounted for exclusively in terms of the size of the practices, as the variation in the percentage of practice size being referred on is also considerable *(0.08% - 0.53%).* These figures clearly indicate that other factors are influencing the GP's referral rates.

One such factor may be the differences in the GPs awareness and knowledge of psychological treatments in general, and the treatment offered by the Clinical Psychology Department in particular. Perhaps GPs who are more 'psychologically minded' diagnose more psychological problems in their patients and are more willing to refer on. Alternatively, they may be more interested in trying to deal with the problems themselves. Following on from this, perhaps GPs whose knowledge of diagnoses, classification and treatment of psychological problems, is poorer may be less well equipped to deal with the problems themselves and thus refer on, or alternatively do not refer on as they are unaware of the potential benefit of a referral to Clinical Psychology.

This analysis is supported by *Creed et al (1990)* who concluded from their study that a high or low referral rate was maintained across diagnostic categories and was not related to practice size. This suggests that the GP's knowledge of the diagnostic categories of psychological problems is an important factor in deciding whether a referral is made or not. This is

supported to an extent in the present study with almost half of the GPs surveyed citing the type, severity and chronicity of the problem as an important factor in deciding if a specialist referral was needed and to whom the referral was made.

Other important factors which may influence a GP's referral to Clinical Psychology include past experiences with the services, perceived length of the waiting list and the availability of other services.

The age and sex of the referrals was as expected, with more females than male (the ratio being almost *2:1*), and with the highest age group being aged between *21 - 30* years old. This distribution is similar to distributions found in previous studies (eg *Brown et al (1988))*. The data on the reason for referral indicates that most patients are being referred for either *General Anxiety, Panic Attacks, Depression* or a *mixture of Anxiety and Depression.*

The rating of the quality of the Clinical Psychology Service, and the GP's satisfaction with the Service, indicate that generally speaking the current level of service provision is being well received by the GPs who responded to the questionnaire, although there may clearly be a response bias operating here. Many of the GPs who are not referring patients to the Clinical Psychology Service did not complete the questionnaire and as such their views on service provision are unknown. The problem of the waiting list remains however, although since December 1994 the waiting time before the first appointment has been considerably reduced due to various recent developments, such as evening clinics, a Stress Management evening class and the introduction of an opt-in system whereby patients are given detailed

information about the service, allowing them to make informed decisions as to attending. This improvement was noted by several of the GPs in their comments on the questionnaire.

The GPs estimated the percentage of their patients presenting primarily with psychological problems to be *10% - 39%* . This range is consistent to findings from other studies eg *Espie & White (1986)*. These results suggest that many of the patients the GPs see are presenting with psychological problems and that GPs are dealing with the majority of these patients without referring them. *Goldberg & Huxley (1992)*, in a review of studies examining the distribution of emotional and psychological problems in British populations, suggest that the annual number of new cases of significant psychological problems is approximately *315* per *1,000* population (ie *31%* of the population). Of this group, *101* (ie *32%* of all new cases) were recognised to have significant problems on presentation to their GP. Of the group presented to and diagnosed by GPs, only *23* (ie *7%* of all new cases), were referred on to specialist Mental Health Services. This has clear implications for the consultancy role of the psychologist in Primary Care as clearly the current services are not equipped to deal with all of the patients recognised by GPs to have psychological problems, even if the GPs were prepared to refer them all. Thus, perhaps there is a case for passing on some of the Clinical skills and treatments available to Psychologists to improve the way that the GPs deal with the psychological problems of the patients who they do not refer on, or at the very least improve their diagnosis and classification of their patient's psychological problems and possibly aid appropriate referrals

to services such as Clinical Psychology and Psychiatry. To this end it was encouraging that nearly all of the GPs responding to the survey were willing to learn more about psychological treatments and attend local workshops or seminars, although clearly the problems that resulted in the response rate would need to be addressed in relation to actually performing this training.

Another interesting topic from the questionnaire was the variation in the GP's opinions on what constituted an appropriate referral to Clinical Psychology. Although there was agreement amongst most of the GPs with regard to the more common psychological problems {see Table 2}, there was not full agreement with regard to *Relationship Difficulties* and *Depression*. The former tending to be referred to Voluntary Agencies and the latter to Psychiatry Services. This is interesting in that both relationship problems and depression are being referred currently, and are both problems which are generally considered by Clinical Psychologists to fall within their domain. This may suggest that there are differences in the understanding of psychological problems, their diagnosis and their treatment.

This is clearly an important issue, as it is crucial that both sets of clinicians are speaking the same language with regard to diagnosis and treatment in order ensure clinical and cost-effectiveness. The questionnaire responses suggest that there is some confusion, especially with regard to relationship difficulties and depression, and this has obvious implications for directing the services in the future as it is clear that a dialogue is needed to clarify the appropriateness of these referrals. Some GP practices have introduced the use of Diagnostic Manuals, such as DSMIV or ICD10, to try and ensure that

GPs and Psychologists are agreed on what is being referred. Some researchers, however have suggested that the use of such rigid and strict criteria for referral is of limited value. Indeed, *Beaumont (1988)* questions whether GPs would find the use of such manuals as relevant or applicable to everyday use in the Surgery, considering the issues of time and the complex nature of using the manuals.

Implications.

The database review gives a picture of the number and type of referrals currently coming from the Clydebank Health Centre. The review also highlights some of the patterns of the referrals in terms of patient characteristics (ie age and sex) and waiting times. This information can be used as a baseline to develop the Clinical Psychology services to meet these demands.

The GP questionnaire highlights several issues for the development of the Service. Firstly it is clear that the although the service is considered reasonably favourably by the GPs who completed the questionnaire, the majority of the GPs did not take part and perhaps this in itself is an area for future research. It may be that some of the GPs who did not respond were unaware of the Clinical Psychology Service and the important role a psychologist may play in the assessment and treatment of psychological problems and therefore did not refer on. Alternatively, they may be aware of the Service but do not use it because they are confident in the diagnosis and treatment of psychological problems, and are therefore more willing to treat

the patients themselves and not refer on. Perhaps, however, some GPs were aware of the Service but were deterred from making referrals for a variety of reasons, such as problems with access to the Service, beliefs about the effectiveness of the psychologist's input and the availability of other services. In any case , it would be beneficial for both GPs and the Clinical Psychology Service to examine these areas further in the hope of finding ways to improve the awareness of the Service, it's accessibility and effectiveness. This is particularly important when consideration is given to the increasing options which GPs have for referrals to other services, such as CPNs, counsellors and Voluntary Agencies.

The questionnaire also highlighted a degree of variation amongst the GP population as to which problems are appropriate to refer on to Clinical Psychology. This is another important area for future research work as improving the definition of diagnoses and also what constitutes an appropriate referral is beneficial to all parties. Related to this is the need to test out how accurate the GPs were in their evaluations of what the patient's problems were and the level of agreement between the GP's assessment and that of the Clinical Psychologists. It would also be useful to examine the amount and effectiveness of the psychological treatment carried out by the GPs and to establish whether there is scope for Clinical Psychology Services to be involved in facilitating and improving the GP's skills in this area, in a consultancy role rather than exclusively working individually with patients.

Beaumont, G. (1988). The management of anxiety disorders in the community - a GP's viewpoint. *Postgraduate Medical Journal*, 64. (suppl 2), 32 - 35.

Brown, R., Strathdee, G, Christie-Brown, J, & Robinson, P. (1988). A comparison of referrals to primary care and hospital out-patient clinics. *British Journal of Psychiatry*, 153. 168 - 173.

Creed, F., Gowrisunkur, J, Russell, E, & Kincey, J. (1990). GP referral rates to district psychiatry and psychology services. *British Journal of General Practice*, 40. 450 -454.

Eastman, C. & McPherson, I. (1982). As others see us : GP's perceptions of psychological problems and the relevance of Clinical Psychology. *British Journal of Clinical Psychology*, 21. 85 - 92.

Espie, C. A. & White, J. (1986). Clinical Psychology in General Practice : a four year review. *Health Bulletin*, 4415. 267 - 273.

Goldberg, D. & Huxley, P. (1992). *Common Mental Disorders: a Bio-Social Model.* Routledge Press.

Mayou, R. (1980). Management of neurotic problems in General Practice. *Journal of the Royal College of General Practitioners*, 30. (220), 678 - 681.

Single Case Research Study.

Impact of Alcohol Problems on Treatment of Anxiety - a single case study.

Prepared in accordance with the notes for contributors to: Behaviour Therapy.

Christopher J Wiles

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 OXH

Abstract.

The difficulties of treating patients presenting with alcohol problems and anxiety are discussed in relation to the current research into both conditions. The tension-reduction model of alcohol use is considered and models for effective treatment are evaluated.

The case of a 36 year old man with alcohol abuse, anxiety and inter-personal difficulties is described as an illustration of the difficulties of treatment and the need to treat the alcohol abuse before addressing any residual anxiety.

The successful cognitive-behavioural treatment of alcohol and caffeine reduction is discussed in relation to the tension-reduction model and implications for future research are identified.

Introduction.

Many people who present to primary care services with anxiety or mood related difficulties are also drinking large amounts of alcohol. Some researchers have suggested that anxiety and alcohol abuse occur together at a rate well above chance *(Mulder, 1991; Ross et al, 1988).* However, it is unclear whether there may be a common underlying cause or if having one increases your chances of developing the other *(Robins, 1991).* The assumption that anxious people self-medicate in a simple tension-reduction model has been challenged more recently by numerous researchers and clinicians *(Young et al, 1990).* Principally, the notion that drinking increasing amounts of alcohol leads to increasingly reduced anxiety or elevated mood has little scientific basis. *Stockwell et al (1987),* concluded that prolonged drinking can increase psychological distress and this is clearly the case in those patients who are strongly physically addicted. Pharmacological, situational, expectancy and gender-related factors also modify the simple tension reduction model *(Wilson, 1988).* Longitudinal studies, such as *Vallient (1983),* suggest that psychopathology is often the consequence of pathological drinking. *Kusher et al (1990),* suggested that some patients with phobic anxiety were more likely to try and self-medicate, whereas panic disorder and generalised anxiety disorder were more likely to follow pathological alcohol consumption.

Treatment for a patient presenting with symptoms of anxiety and co-morbid alcohol abuse, is unlikely to be successful without reducing the intake of alcohol or other drugs (even if anxiety is the primary diagnosis). *Anthenelli &*

Schuckit (1993), suggest that patients with co-morbid anxiety and substance abuse are likely to have a different course and prognosis than independent anxiety and depression. Consequently they urge consideration of reducing substance abuse as the primary focus of management.

There is now significant research showing that reduced drinking results in a dramatic reduction in the anxiety symptoms of most dual-diagnosis patients. Some have suggested that only 10% are left with persistent anxiety symptoms which appear to be a distinct clinical disorder *(Brown et al, 1991).* It is important to establish clearly whether or not the anxiety persists after a considerable period of reduced drinking or even abstinence. Continuing anxiety may mean that there is a separate or a co-existing disorder and would require a different treatment approach. It is therefore crucial that the patient reduces or stops drinking as the alcohol will be affecting their ability to learn more effective behavioural and cognitive methods of coping with their anxiety or mood disturbance.

When considering dual diagnosis patients of this type, the role of other drugs is also important. One very common psychostimulant that may be overlooked in such an analysis is caffeine. Caffeine is widely available in various products and several researchers have cited the relationship between high caffeine intake and anxiety, notably panic attacks *(Uhde et al, 1984). Greden (1974),* suggested that caffeine toxicity was indistinguishable clinically from anxiety states. *Bruce & Lader (1989),* demonstrated how the reduction of daily caffeine intake was an effective element of their treatment programme.

The following illustrates the case of a man presenting with considerable anxiety and mood disturbance, poor interpersonal relationships with high alcohol and caffeine intake.

Presentation and History.

D. was a 36 year old man, who sought referral following his concerns about the difficult nature of his current relationship. He described being unable to communicate with or even trust his current partner; their sexual relationship was very poor and he generally felt insecure and was pessimistic of the relationship surviving. He described himself as being extremely tense, irritable, anxious and unsettled, as if he had "ants in his pants", and being unable to relax or unwind. He often suffered from pains in his neck, back and shoulders and frequently found it difficult to concentrate for very long.

He reported often feeling "morose" and of feeling very low. These periods of depression would build up over a few days and happened at least once a week. At worst they culminated in suicidal thoughts, although he made it clear that he would not follow through on these thoughts as it would be unfair to his children.

D. described having resorted to alcohol to "hide" from his problems at various times in his life and currently drank more than 80 units of alcohol per week. He reported going to a bar almost every night of the week, mainly to avoid having to communicate with his partner. He also reported a high daily intake of caffeine of approx. 1100mg per day.

He reported significant sleep disturbance, occasionally finding it difficult to get to sleep and waking up during the night at least once and often as many as three or four times. Once awake he found it difficult to return to sleep, sometimes being awake for an hour before falling to sleep again. He said that he usually got up between 5am and 6am if he could not get back to sleep and reported feeling tired and lethargic most days.

D. had few hobbies and found it difficult to concentrate on activities, such as reading, for any length of time. His only social outlet was drinking with his work colleagues and friends he had made at the various bars he visited. He rarely went anywhere with his partner and was aware that he did very little exercise.

D. had been married twice before his current relationship and on both occasions the relationships had broken down following his use of alcohol and consequent communication problems. He described his relationship with his second wife and their two children as 'strained' with continuing fights about money and contact with the children. His mother was described as being close to his second wife and their relationship had deteriorated significantly when that relationship broke down. D.'s father died at about the same time and he found it hard to deal with this loss and help his mother come to terms with the bereavement. Consequently his contact with his mother, a previous source of support, was severely reduced and this was a great concern to him.

Assessment Measures

1. The Severity of Alcohol Dependence Questionnaire - SADQ *(Stockwell et al 1983),* was administered to establish the degree of physical and psychological dependency on alcohol. D. also started recording his daily intake of alcohol and caffeine in a diary.

2. The Self-Rating Anxiety Scale - SAS, *(Zung 1965),* was administered to assess the degree of anxiety D. was experiencing.

3. The General Health Questionnaire - 28 question version - GHQ-28 *(Goldberg & Hillier, 1979),* was administered to establish the degree of mood disturbance.

4. The Automatic Thought Questionnaire - ATQ *(Hollon & Kendall, 1980),* This is a self-rating questionnaire devised to measure the frequency of occurances of automatic negative thoughts or negative self statements. His subsequent behaviours in response to these automatic thoughts were recorded in a diary aimed particularly at periods of high anxiety.

Baseline Measures.

1. D.'s score on the SADQ indicated a moderate degree of physical dependency. His diaries confirmed that alcohol, and in particular going to the 'pub', had become a form of psychological dependency, allowing him to avoid difficult contact with his partner and family and escape from his problems. D.'s diaries showed harmful levels of both alcohol and caffeine intake, see Graphs 1 & 2.

2. His scores on the SAS indicated high degree of anxiety especially with regard to physical, muscular pain and sleep difficulties.

3. D.'s GHQ-28 score indicated moderate mood disturbance with significant anxiety.

4. His responses on the ATQ indicated considerably negative cognitive processing, for 18 of the 30 items he scored moderately often or more frequently. This pattern was confirmed by his thought diary.

The main groups of negative thoughts were:

1. Dissatisfaction with current situation, e.g. "My life is a mess".

2. Disappointed with himself and a feeling that others are disappointed with him as well, e.g. "I've let people down".

3. A sense of helplessness and hopelessness, e.g. "The future is bleak" and "It's just not worth it".

4. A desire to run away and escape, e.g. "I wish I could just disappear".

Treatment.

Treatment started with education about the 'three systems' model where the physiological, cognitive/affective and behavioural systems interact and contribute to psychological difficulties *(Hawton et al, 1984)*. The rationale for treatment was explained in terms of working with each individual system to elicit change in the others. The initial stages of treatment also included information about the recommended daily maximum levels of alcohol and caffeine and the consequences of pathological intake. D.'s reduction and maintenance of less harmful amounts of caffeine (see Graph 2) resulted from increased understanding about the potential harmful effects of high caffeine intake. The diaries were used as a basis for discussion, establishing the underlying dysfunctional thoughts and core beliefs and their relationship with

the addictive behaviours *(Beck, 1993).* In other words, D.'s interpretations of his inability to deal with his difficult relationships combined with the expected benefits of his use of alcohol resulted in his avoidance of facing up to his interpersonal problems. A functional analysis of drinking behaviour confirmed that relationship difficulties were an important trigger for drinking. Treatment attempted to reconstruct these cognitions and change the associated feelings and behaviour and reduce the alcohol intake, by improving interpersonal skills and develop alternative strategies for coping with these problems. Cognitively, he used thought stopping and diversion techniques to allow himself time to consider the alternative strategies. He practised reciting to himself statements about his preferred coping styles to help deal with the situations eliciting drinking behaviour and his thoughts about avoiding his problems. D. was also encouraged to reduce his expectations about the efficacy of the alcohol to reduce tension and lift mood *(Marlatt & Rosenhow, 1986).* This helped to reduce his craving for alcohol at times of tension or low mood. Behaviourally, he tried to reduce his time in drinking situations by spending less time with his regular drinking friends and developing other interests and activities, such as exercise and driving in the country-side. He practised strategies for coping with being in drinking situations by drinking more slowly, and alternating alcoholic with soft drinks. This eventually led to increased control of his rate of drinking and reduction through continued self-monitoring and self-reinforcement. To help with the anxiety provoked by attempting these changes, D. learned Brief Progressive Muscular Relaxation and breathing control exercises *(Ost, 1987).* His use of

rapid relaxation to help cope with identified stressful trigger situations was particularly important. Considerable time throughout the sessions was spent focusing on D.'s interpersonal difficulties and developing ways of improving his communication skills. A problem-solving approach was used to determine what he wanted from his relationships by identifying the goals he was seeking and prioritising strategies to achieve these goals. The sessions were used to develop these techniques through the use of imagery and role play and D. was set a series of tasks between sessions which served as the focus for the following session. As treatment progressed it became clear that although his anxiety, alcohol and caffeine intake were reducing, there were still some underlying difficulties with sleep. This was addressed through education about good sleep hygiene and stimulus control, reducing unrealistic sleep expectations and misconceptions. Cognitive and behavioural strategies, including the application of acquired relaxation skills, were encouraged to reduce the amount of time he lay awake in bed unable to sleep *(Espie, 1993).* Treatment concluded by addressing relapse prevention issues, preparing D. for continued self-monitoring and identifying strategies for dealing with slips and enhancing self-efficacy.

Follow-up Measures.

Six weeks after the final appointment D. continued to report reduced symptoms of anxiety and low mood, as evidenced by the following measures, summarised in Table 1.

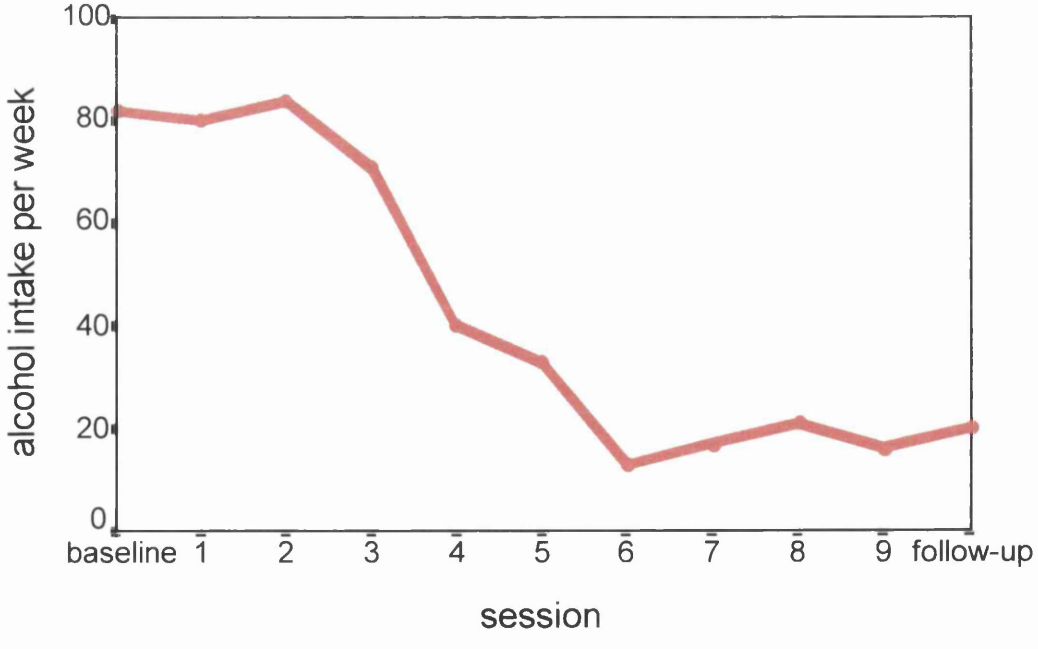
As can be seen from Table 1, there had been significant reduction in the measures used at initial assessment.

Table 1: Baseline and Follow-up Measures

Measures	Baseline	Follow-up
SADQ	14	2
SAS	25	10
GHQ	17	0

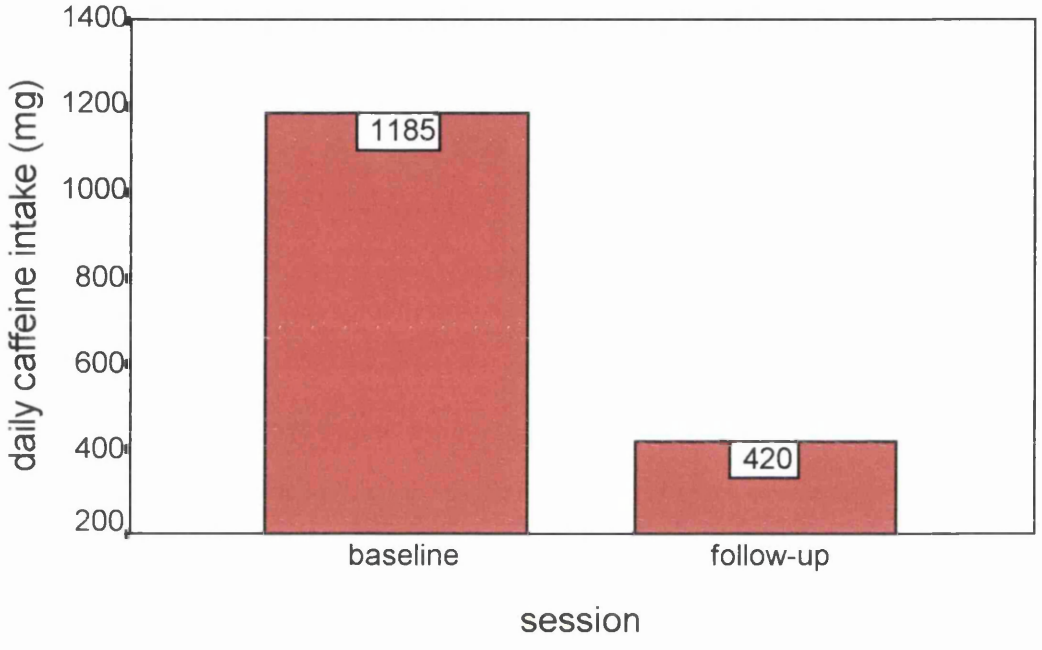
1. D.'s score on the SADQ indicated no physical or psychological dependency on alcohol. This was further evidenced by his reported weekly alcohol intake, as can be seen in Graph 1, showing his alcohol intake reducing steadily during treatment and this was sustained at follow-up.

Graph 1: Reported Weekly Alcohol Intake



Self report of his average daily caffeine intake also indicated reduction from harmful levels at baseline to low-moderate levels at follow-up *(James & Stirling, 1983)*, as can be seen from Graph 2.

Graph 2. Reported Daily Caffeine Intake



2. D.'s SAS score had reduced significantly indicating mild anxiety.

3. His GHQ-28 score indicated the complete absence of any mood disturbance.

4. On the ATQ all of the previous thoughts occuring moderately often or more frequently were reported as occuring at below moderately often levels, again thisd was supported by his diaries.

Since the final session D. had been made redundant from his job, but had made plans to start his own business. He reported improved relations with his mother, his ex-wife and his children. He had also made progress with his partner and he felt they were beginning to resolve some of their problems. Their communication difficulties had improved and although he felt they still

had a lot to sort out he was confident that they would be reconciled. His sleep had continued to improve with less disturbance during the night, less early waking and reduced feelings of tiredness during the day.

Discussion.

D. had presented originally with significant levels of anxiety and low mood and was avoiding coming to terms with problems in his various relationships. He was using alcohol as a psychological and social "crutch"; a course of action that was exacerbating his symptoms.

Treatment focused on reducing his alcohol intake, improving his coping skills, as well as allowing him to work through and cognitively restructure several issues relating to his many relationship difficulties. Both self-report and questionnaire results at one month follow-up suggest significant improvement in all areas.

Clearly in this case reducing alcohol and caffeine intake was a significant factor in reducing anxiety maintained at follow-up. There may have been an overlap of the techniques used and skills acquired, to reduce intake that may also have been helpful in terms of reducing anxiety in itself. For example, the greatest reduction in weekly alcohol intake followed acquisition of relaxation skills and the development of cognitive strategies to cope with reducing his alcohol. However, the anxiety management was directed and focused on coping with situations leading to drinking (relationship difficulties), and the anxiety provoked by controlling and reducing alcohol intake.

The patient also reported increased feelings of self-control and efficacy, as his alcohol intake reduced and he was more able to address his relationship difficulties. It may be that this increased sense of control was the most effective agent of change as evidenced by the absence of any negative automatic thoughts and the elimination of significant mood problems at follow-up.

Another important part of the treatment was the education about the effects of pathological alcohol and caffeine intake. The use of this knowledge was crucial in reducing the expected efficacy of using these drugs to cope with his difficulties. Considering the tension-reduction model, the reduction in the expectancy that alcohol would help, was crucial in restructuring the cognitive processing and was a critical factor in the success of the intake-reduction work. The situational factors of the habitual drinking behaviour also related to the tension-reduction model in this case. The cognitive and behavioural strategies for reducing the impact of situational factors such as drinking style and behaviour, effectively reduced the impact of these factors on the control of alcohol intake.

The generalisability of the problem solving approach was also important as he continued to improve his relationship problems and coped well with the loss of his job.

Future studies should address the impact of the individual components of the treatment package. This would allow for the development of more defined and targeted treatment within alcohol and anxiety management.

In conclusion, despite the importance of the acquired anxiety management skills and problem-solving techniques, it seems unlikely that such a positive outcome would have been achieved without the use of cognitive and behavioural strategies to reduce alcohol and caffeine intake.

Anthenelli, R. M. & Schuckit, M. A. (1993). Affective and anxiety disorders and alcohol and drug dependency: diagnosis and treatment. *Journal of Addictive Diseases*, Vol 12(3), 73-87.

Beck, A. T., Wright, F. D., Newman, C. F. & Liese, B. S. (1993). *Cognitive Therapy of Substance Abuse.* Guildford Press.

Brown, S., Irwin, M. & Schuckit, M. (1991). Changes in anxiety among abstinent male alcoholics. *Journal of Studies on Alcohol*, 52, 55-61.

Bruce, M. S. & Lader, M. (1989). Caffeine abstention in the management of anxiety disorders. *Psychological Medicine*, 19, 211-214.

Espie, C. (1993). The Practical Management of Insomnia; Behavioural and Cognitive Techniques. *The British Medical Journal*, 20, Feb 1993 Vol 306, 509-511.

Greden, J. F. (1974). Anxiety or Caffeinism: a diagnostic dilemma. *American Journal of Psychiatry*, 131, 1089-1092.

Hawton, K., Salkovskis, P. M., Kirk, J. & Clark, D. M. (1994). *Cognitive behaviour therapy for psychiatric problems.* Oxford University Press.

Hollon, S. D. and Kendall, P. C. (1980) 'Cognitive self-statements in depression: development of an Automatics Thought Questionnaire'. *Cognitive Therapy and Research*, 4, 383-95.

James, J. E. & Stirling, P. K. (1983). Caffeine: a survey of some of the known and suspected deleterious effects of habitual use. *British Journal of Addiction,* 78, 251-258.

Kusher, M. G., Sher, K. J. & Beitman, B. D. (1990). The relation between alcohol problems and the anxiety disorders. *American Journal of Psychiatry,* 147, 685-695.

Marlatt, G. A. & Rosenhow, D. J. (1980). Cognitive processesin alcohol use: expectancy and the balanced placebo design. in N. K. Mello (Ed) *Advances in substance abuse.* Greenwich, Conn: JAI Press.

Mulder, R. T., Sellman, J. D. & Joyce, P. R. (1991). The co-morbidity of anxiety disorders with personality, depressive, alcohol and drug disorders. *International Review of Psychiatry*, 1991, Vol 3(2), 253-263.

Nelson, H. & Windsor, B. (1978). *The General Health Questionnaire.* NFER - Nelson, Windsor.

Ost, L. G. (1987). Applied relaxation: description of a coping technique and a review of controlled studies. *Behaviour Research and Therapy*, 25, 397-410.

Stockwell, T., Murphy, D. & Hodgson, R. (1983). The Severity of Alcohol Dependence Questionnaire: it's use, reliability and validity. *British Journal of Addiction,* 78, 145-155.

Stockwell, T. & Bolderston, H. (1987). Alcohol and Phobias. *British Journal of Addiction*, 82, 971-979.

Vallient, G. E. (1983). *The natural history of alcoholism.* Cambridge, Harvard University Press.

Wilson, G. T. (1988). Alcohol and anxiety. *Behaviour, Research and Therapy*, 26, 369-381.

Young, R., Oei, T. P. & Knight, R. (1990). The tension-reduction hypothesis revisited: an alcohol expectancy perspective. *British Journal of Addiction*, 85, 31-40.

Zung, W. K. (1965). Self-Rating Anxiety Scale. *The Archives of General Psychiatry*, 12, 63-70

Parent Training Programmes for the Treatment of Children with Attention Deficit Hyperactivity Disorder - a single case illustration.

Prepared in accordance with the notes for contributors to: Clinical Child Psychology and Psychiatry.

Christopher J Wiles

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 OXH

Abstract.

The current research on the diagnosis and treatment for Attention Deficit Hyperactivity Disorder is evaluated and discussed. One treatment approach is the use of Parent Training Programmes particularly in helping educate parents about the condition. The programmes have also been shown to improve the relationship between parents and child, which may have a preventative effect in reducing the development of secondary problems.

The case of a pre-school child with Attention Deficit Hyperactivity Disorder and associated conduct disorder, is described to illustrate the effectiveness of parent training programmes for improving parental behaviour management and self-efficacy. The treament approach is reviewed and future research and clinical directions are identified.

Introduction.

Attention Deficit-Hyperactivity Disorder (ADHD) has attracted increasing amounts of both clinical and research interest in recent years. In the UK the condition has tended to be described as hyperactivity disorder and stricter diagnostic criteria have been applied resulting in fewer cases than in the USA. However, the changes in diagnostic criteria in both *DSMIV* and *ICD10* have led to greater alignment and consequently there has been an increase in the number of identified cases being treated in the UK. There are 3 main components required for diagnosis with onset in early childhood required:

1. Physical overactivity, i.e. physically very active, with lots of energy, lots of fidgeting and restlessness, requiring little sleep, never feeling tired and described as always on the go or talking incessantly
2. Inattention, i.e. difficulty in giving or sustaining close attention to tasks, having difficulties following instructions, organising tasks, and is easily distractible.
3. Impulsiveness, i.e. difficulty in waiting, turn-taking and sharing, interrupting others and often seem unaware of, or unable to understand, the consequences of their actions.

Many children diagnosed with the condition also have symptoms of, or meet diagnostic criteria for, oppositional-defiant or conduct disorders, and most tend to suffer from their reputation and the consequences of their behaviour.

Treatment for ADHD has been extensively studied and remains contentious. The most common treatment, especially in the USA, is the prescription of stimulant medication, such as Ritalin (Methlyphenidate). Medication of this

type has been shown to have significant, if short-lived positive effects on the attention, compliance and organisational difficulties experienced by children with ADHD *(Gadow, 1992; Greenhill & Osman, 1991).* However, the benefits are short term and there has also been some concern about potential side-effects. These include the suppression of appetite, sleep disturbance and if the dosage is too high, tics can occur *(Barkley et al, 1990).* For these reasons the drug tends not to be prescribed to pre-school children.

There is also research suggesting the benefits of behaviour modification strategies. These have included the implementation of clear and powerful reinforcement systems, including the use of problem-solving training for the child to effect changes in their self-monitoring and consequent behaviour *(Hinshaw, 1989, 1994).* Other strategies include the use of time-out and other response cost strategies by parents *(O'Dell et al, 1980; Pelham et al 1980).* Cognitive-behavioural strategies have included *Meichenbaum's (1977)* Self-Instructional Training (SIT), although *Abikoff & Gleitman (1985)* found little efficacy for SIT for improving compliance and overactivity in ADHD children. *Kendall & Bramwell (1993)* report successful intervention using SIT, role play and behavioural contingencies to improve the impulsive behaviours. However, there are problems with the generalisation and long-term follow-up results with behaviour modification strategies alone, *(Kendall, 1993).*

Many researchers conclude that a combination of behaviour modification and drug treatment is most efficacious *(Pelham & Hinshaw, 1992).* Parent training has also been cited as an effective way of combining such treatments. *Henry (1987)* concluded that there is evidence to support the

efficacy of parent training programmes for parents of ADHD children who have been stabilised on psychostimulant medication. A study by *Horn et al (1987)*, showed improved behavioural management with a parent training programme, most effective when in conjunction with improved self-control for the child and good social support for the mother. *Forehand et al (1984)*, highlighted the need for parent training to reduce the mother's distress to allow more control of their child's non-compliance. Significant improvements, both of children's behaviour and parent's management, were demonstrated by *Stayhorn & Weidman (1991)*, even after one year follow-up. Programmes for pre-school children, where medication is not used, have also shown to be successful. For example, *Anastopoulos & Barkley (1989),* developed a parent training programme for pre-school children. The programme contained education about the condition, methods to improve parent-child interactions and increase the attending skills of parental and their behaviour management including the use of time-out. It can be concluded, that there is research support for parent training improving the interactions between mother and child, with increases in behavioural management. This effect is most significant when combined with training the child to increase their self-control.

The following case describes the treatment of a child with ADHD and oppositional and conduct disorder, using a parent training programme.

Presentation and History.

S was a 4 year old boy who was referred after his mother sought help, following a period of significant disturbance. S was described as only being able to concentrate for 15-20 minutes, being quite fidgety and distractible. He had no sense of fear and would often run away, climbing on the kitchen units, putting things in the oven and playing with the electrical sockets despite warnings about the danger. He had a poor sleep routine and often refused to go to bed, getting up early and rarely seemed to be tired out. His mother felt that he was 'the boss' and she was controlled by him. He often would not do what he was told, and could be extremely demanding of her time and attention, breaking his toys and having tantrums.

Baseline measures.

Child.

1. Parent's Account of Children's Symptoms (PACS), *(Taylor et al, 1986.)* This semi-structured interview (with S's mother) identified that S scored highly for ADHD, with particularly high scores for physical overactivity. The interview also indicated that S had significant symptomatology for conduct disorder, with sleep being a serious problem with S refusing to settle and severely challenging his mother's limited control of his behaviour.

2. The 'Draw a line slowly' test and the 'Walk Slowly' test *(Maccoby et al, 1965).* These tests assess how overactive the child is by demonstrating walking or drawing slowly and observing if the child is able to control their

overactivity and copy the tester. S was unable to do either slowly confirming his high rate of overactivity.

3. Delayed Gratification Test *(Arend et al, 1979)*. In this test the child is shown a reward such a sweet and told he will receive it after completion of a task, such as completing a jigsaw. The number of attempts the child makes to grab the reward or finish the task quickly indicates difficulty with self control and impulsiveness. S made three attempts to grab the sweets and completed the task quickly and without due attention.

Mother and Child Interaction.

Throughout the interview, S's mother gave him little eye contact, and there was virtually no physical contact. At times she seemed very switched off and detached from him, generally looking uncomfortable and seemingly quite afraid of him. S and his mother completed two videotaped 10 minute sessions of unstructured and structured play, and their interaction was rated. The rating procedure used was developed by *Nash & Johnson (1982),* and involves making a rating every 15 seconds about the interaction between child and mother. The interactions being categorised into a series of behaviours for mother and child initiations and responses. The development of this assessment followed a series of studies which indicated that interactions between mothers and hyperactive children (especially young children), were more likely to be characterised by highly directive and negative communications from mother. These initiations tended to ellicit mainly negative responses from their child *(Barkley & Cunnigham 1979)*. The lunchtime interactions were also rated using this technique. As these

sessions were a mixture of both unstructured and structured tasks, the average of both measures at baseline and follow-up is presented on Graph 1, for comparison. The result of the analysis of the interaction between S and his mother did indeed show that S's mother was extremely non-responsive to S with most initiations being directive. She tended not to respond to his initiations, but when she did it was generally negative or directive.

Treatment.

It was apparent from the measures and the background history that S fulfilled the diagnostic criteria for ADHD. Given his age, pre-school status and the degree of oppositional and conduct difficulties, S was offered a place in the Pre-school Overactivity Programme.

The Pre-school Overactivity Programme (POP), comprises of ten weekly sessions. The programme is devised for children aged approx. 3½ to 5 years old and their mothers. The day is divided into a two hour session in the morning, followed by a half hour lunch, which is screened by the therapist using a two-way mirrored screen. The day concludes with a final hour session in the afternoon. The mothers leave their children with a group of therapists and take part in a psycho-educational group with a therapist. There are equal numbers of therapists and children, and their sessions are divided into two main parts. Firstly, the children are encouraged to develop their own play skills through free play. The therapists also work individually with the children to help them develop sustained concentration through structured play. The children also take part in group activities such as ball

games and are encouraged to take turns and share. The mothers have a handbook that they read through each week and the sessions are composed of discussions about the relevant sections of the handbook and the establishment of homework for the following sessions. The handbook contains information about the core features of the condition, possible causes, treatment options and likely future prognosis. The treatment sections contain advice on understanding their children's behaviour, communication, play, the use of praise and rewards. There is also advice about behavioural management techniques such as time-out, effective limit setting, commands, consistency and managing tantrums. The handbook also deals with the likely gains and losses in their attempts to manage their children's behaviour more effectively. The mother's groups are divided into didactic components and more free sessions where the mothers are encouraged to share their experiences and get support from their progression through the programme. The work the therapists do with the children is all video-taped and these tapes form part of the mother's sessions using real examples to evidence problems and therapeutic gains. The lunches the mother's share with the children are also taped and the therapists, communicate to the mother's with ear pieces to give direct advice on the management of their children's difficult behaviour. The other therapists were all volunteers from a variety of local services. They spent an hour at the start of each session being trained by the core staff on the management techniques employed by the parents. At the end of each session the therapists and the core staff spent an hour

talking about each session allowing the therapists to share their impressions of the development of the children and their mother's.

Description of Progress Throughout Treatment.

Child.

S was quite quiet in the early sessions taking a while to initiate communication with the other therapists as well as the other children. However, as the sessions continued he responded well to the structured environment and clear, consistent handling. He was rated as the most overactive child of the group by the therapists, and this required careful management, as he was quick to respond to others' difficult behaviour such as swearing and running around. He calmed quickly with the therapist's use of time-out and environmental control. Towards the end of the group he was reported as greatly enjoying the individual therapist's play sessions and was interacting well with the other children.

Mother.

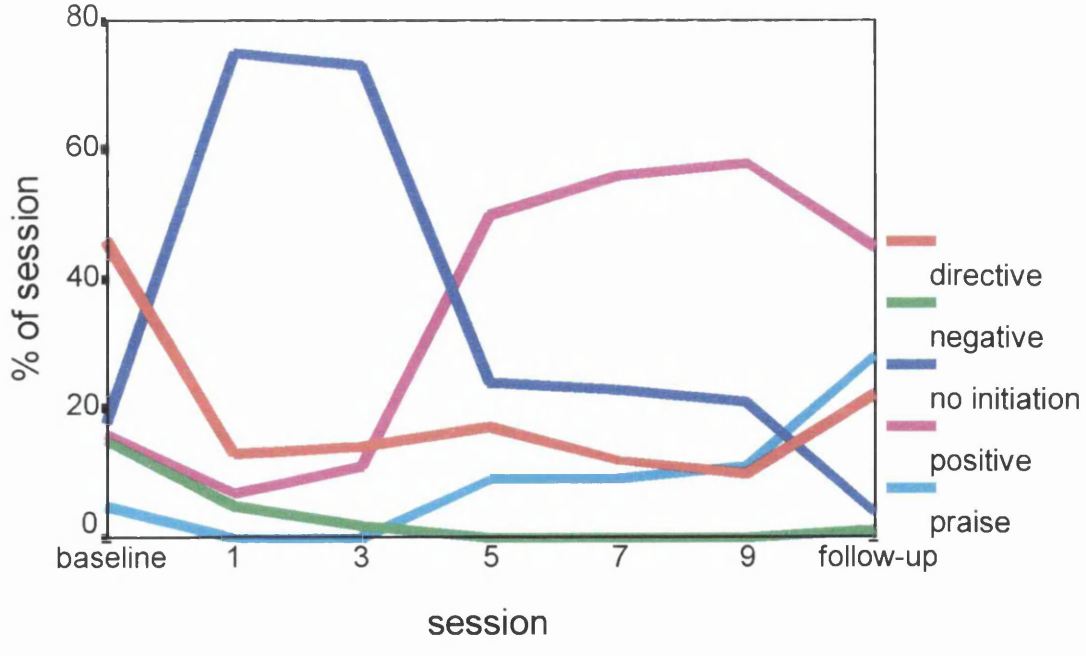
In the early sessions MrsM was very quiet and allowed the other mothers to do most of the talking. She seemed anxious, embarrassed and appeared to be uninterested in the discussions. However, as the sessions wore on it became apparent that she had indeed been listening and had been making substantial efforts to try out the methods and techniques from the handbook. She also became more vociferous in the group relating her experiences more freely and encouraging the other mothers with her success in getting S to go to bed. By the final session she reported feeling less depressed than at the

start of the programme. She also felt she could control his behaviour more effectively and she had stopped giving in to him. She also described herself as being more determined to stay in control than ever before. She still felt unsure about the future, however, saying that she planned to take one day at a time.

Mother and Child Interactions.

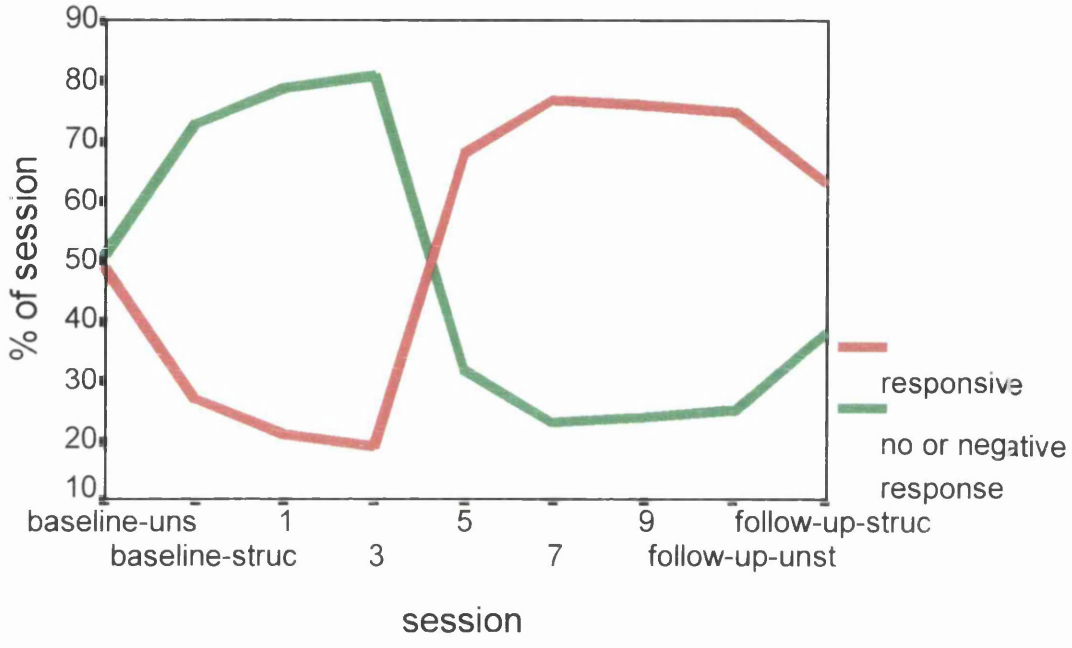
The video tapes of the lunchtime sessions were rated using the same procedure as the play sessions in the assessment and follow-up interviews. As can be seen from Graph 1, there was considerable improvement over the course of the sessions. S.'s mother had significantly increased the amount of her positive initiations and drastically reduced the amount of non-responsive time per session.

Graph 1. Mother's Initiation in interactions.



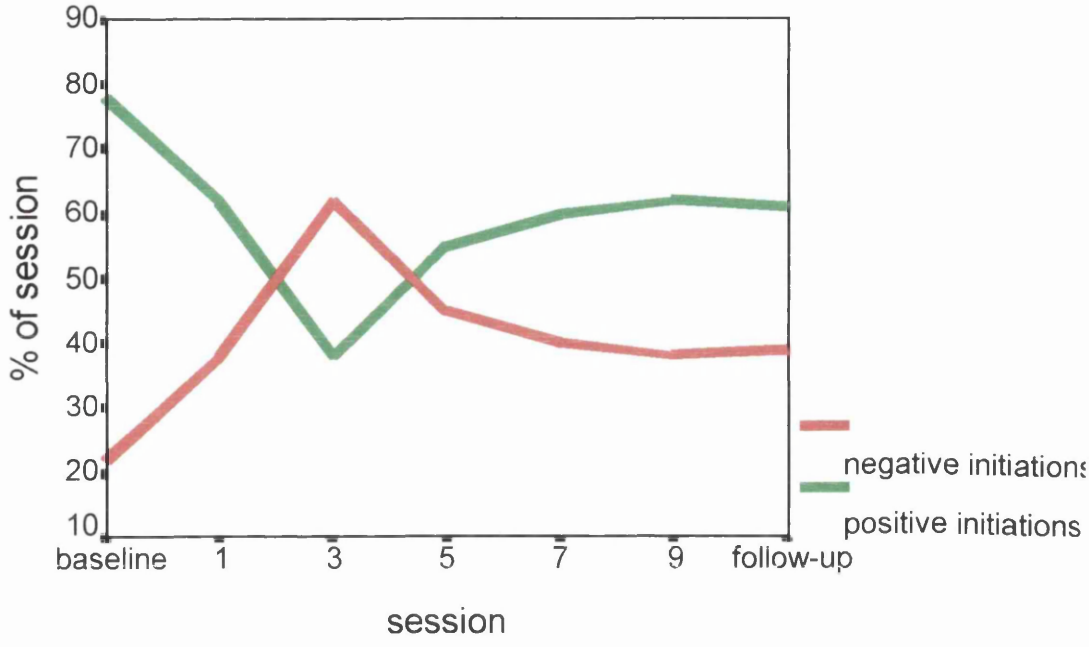
Graph 2. shows the increases in the positive responses to his mother's initiated interactions by S. over the course of the programme. The graph also highlights the reduction in the child's negative responses.

Graph 2: Child's responses to his mother's initiated interactions.



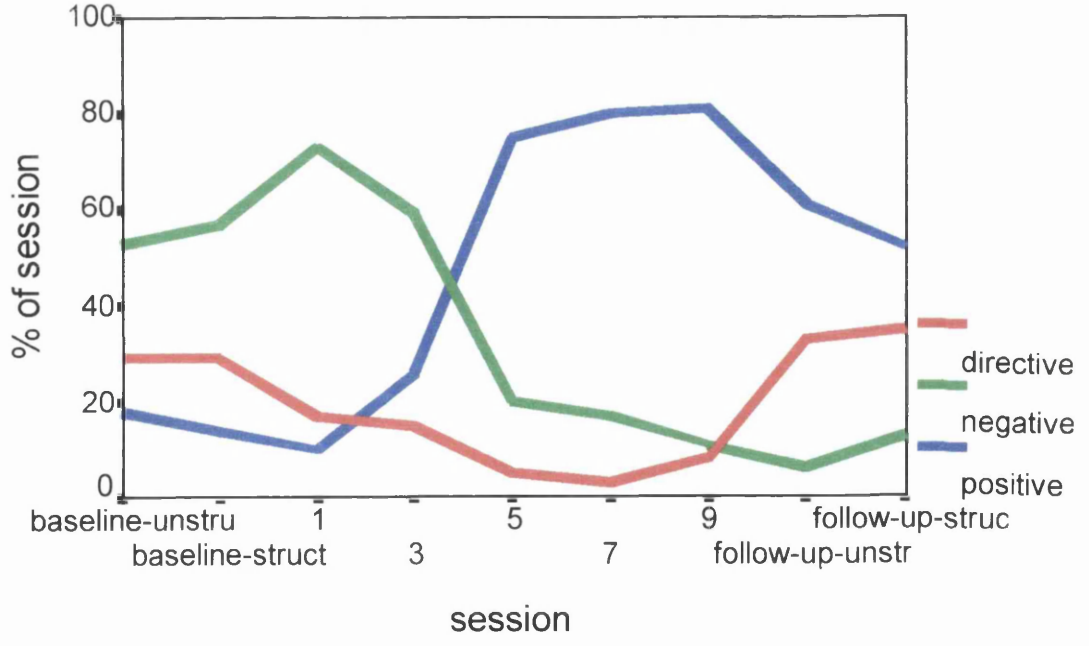
Graph 3. illustrates the pattern of the child's initiations towards his interactions with his mother. Despite the improvements in their interactions it can be seen that S. did not significantly change the amount of negative initiations throughout the follow-up sessions. This highlights that the improvements were made despite S. continuing to present his mother with a similar level of negative initiations.

Graph 3: Child's Initiations In interactions.



Although S's negative initiations did not change significantly, his mother's responses to his initiations did change considerably, as shown in Graph 4.

Graph 4: Mother's Responses to child's initiated interactions.



The graph highlights a large increase in her positive responses and corresponding decreases in her negative responses. This shows she was responding more positively and more often to S's positive initiations, and it is likely that this was important in improving their interactions.

Measures at follow-up.

One month after completion of the course, the baseline measures were repeated.

Child.

1. Parent's Assessment of Children's Symptoms: S's score on the PACS was not significantly different than at baseline indicating high physical overactivity and a slight increase in conduct disorder features. S.'s mother indicated an increased sense of control reflected in reduced difficult behaviour from S. He was listening to his mother more but was not always doing what he was told. There had been improved communication between S and his mother, for example he had been expressing more emotions to his mother. However, at least 2 or 3 times a week he would flare up into a tantrum which would start quickly. His mother felt that she was handling these better than before, and that she could calm him down quickly. S's behaviour had continued to be defiant at times especially when he refused to comply with an instruction or request from his mother. This defiance happened most days, although it only resulted in tantrums a couple of times a week. The difficult behaviour was particularly hard for mum to deal with when they were outside or in shops or when other people were around. She said

this was because she found it harder to perform her new skills in front of others, feeling self-conscious about S's behaviour. She also felt that the increase in S's challenging behaviour was perhaps in response to her increased control. S had continued to be quite destructive and aggressive with his toys and his friends and his sister. S's attention had improved a little but he continued to be extremely restless and fidgety. S's sleep pattern had improved dramatically, and mum now rated it as not a problem at all from previously being a serious problem. Mum felt that she had been more consistent with setting limits for S.'s behaviour and the consequences of the behaviour, using time-out. Although S. had initially resisted her control, he had eventually responded well to her new management and this success had helped her become more positive about other aspects of his behaviour.

2. The "Draw a line slowly test" and the "Walk Slowly test", indicated no real difference from baseline measure confirming continued difficulty with overactivity.

3. The Delayed Gratification Test also showed little improvement since the baseline, confirming continuing difficulty with attention and impulsivity.

Mother and Child Interaction.

During the interview there was considerably more eye contact than in the initial session. Physical contact had also increased with several cuddles and smiles. She was less detached from him and seemed less afraid of him, with increased reaction to his behaviour. She reported that there had been more enjoyable interactive play between S and his parerts. She also felt he was talking to her more often and there seemed to be more warmth in their

relationship. As can be seen from Graphs 1-4, measurement at follow-up indicated significant improvement form the baseline measures. There were increased positive initiations from S.'s mother and increased responsiveness from him. There were also increased responses to S's initiated interactions by his mother.

Discussion.

It appears that the programme was relatively effective in terms of increasing S.'s mother's feelings of control and efficacy. The relationship between S and his mother improved dramatically over the course of the programme and this was maintained at one month follow-up. S's behaviour did not improve significantly and certain aspects of his defiant and oppositional behaviour grew worse. This may have been in part a response to his mother's increased determination and responsiveness. The support S.'s mother had received from the other members of the group was extremely important to her. The group of parents were in a similar position, initially being confused about their child's condition and isolated from other parents because of it. The programme had allowed them to gain considerable confidence in sharing their experiences. The behavioural management techniques learned had also been important for building up S's mother's self-esteem and feelings of efficacy. Another important aspect of the programme was the educational element, which allowed the mothers to make informed and appropriate responses to their children's challenging behaviour as they continued to grow and develop.

The studies of parent training programmes indicate that improving parental management skills may improve the relationships between the child and their parents and increase the amount of control and feelings of efficacy the parents have. Although this may mean little change in the child's symptommatology, it may prevent other problems resulting from the consequences of the child's condition developing *(Wright et al 1993)*. These difficulties could potentially effect the relationship between the parents and the child and the management of the condition.

The case illustrates the potential for improvement in the parent's management and their relationship with their child. However, it was also apparent that the child's ADHD itself did not significantly improve. Perhaps an important addition to this type of programme would be an increase in the individual work with the children's ability to control their behaviour and improve their levels of compliance. This in turn may lead to reducing their impulsivity and overactivity. Such work has been shown to be relatively successful with older ADHD children but developmental considerations would have to be taken into account for aplication to younger children. Clearly combining this type of intervention with the parent training may improve the child's behaviour as well as their parent's sense of control and improved relationships.

Abikoff, H. & Gittelman, R. (1985). Hyperactive children treated with stimulants: Is cognitive therapy a useful adjunct? *Archives of General Psychiatry*, 42, 953-961.

American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition (DSM IV).* American Psychiatric Association, Washington, DC.

Anastopoulos, A. D. & Barkley, R. A. (1989). A training programme for parents of children with Attention Deficit Hyperactivity Disorder. In C. E. Schaffer & J. M. Briesmeister (Eds), *Handbook of Parent Training - Parents as co-therapists for children's behaviour problems.* John Wiley, New York.

Arend, R., Gove, F. L. & Sroufe, L. A. (1979). Continuity of individual adaptation from infancy to Kindergarten: a predictive study of ego-resiliency and curiosity in pre-schoolers. *Child Development*, 50, 950-959.

Barkley, R. A., McMurray, M. B., Edelbrock, C. S. & Robbins, K. (1990). Side-effects of Methylphenidate in children with Attention Deficit Hyperactivity Disorder: a systematic, placebo-controlled evaluation. *Paediatrics,* 86, 184-192.

Barkley, R. A. & Cunningham, C. (1979). The effects of Methylphenidate on the mother-child interactions of hyperactive children. *Archives of General Psychiatry*, 36, 201-208.

Forehand, R., Furey, W. M., & McMahon, R. J. (1984). The role of maternal distress in a parent training programme to modify child non-compliance. *Behavioural Psychotherapy*, 12, 93-108.

Gadow, K. D. (1992). Paediatric Psychopharmacotherapy: A review of recent research. *Journal of Child Psychology and Psychiatry*, 33, 153-195.

Greenhill, L. L. & Osman, B. P. (1991). *Ritalin: Theory and patient management.* Liebert, New York.

Henry, G. K. (1987). Symbolic modelling and parent behavioural training: Effects on non-compliance of hyperactive children. *Journal of Behaviour Therapy and Experimental Psychiatry.* 18, 105-113.

Horn, W. F., Lalongo, N., Popovich, S. & Peradotto, D. (1987). Behavioural Parent Training and Cognitive-Behavioural Self-control therapy with ADHD children: comparative and combined effects. *Journal of Clinical Child Psychology*, 76, 1, 57-68.

Hinshaw, S. P. (1994). *Attention Deficits and Hyperactivity in children.* Sage, London.

Hinshaw, S. P. & Erhardt, D. (1993). Behaviour Treatment. In V. B. Van Hasslet & M. Hessen (Eds), *Handbook of behaviour Therapy and pharmacotherapy for children: a comparative analysis*, 233-250. Allyn & Bacon, Needham Heights.

Kendall, P. C. & Bramswell, L. (1993). *Cognitive-behavioural Therapy for Impulsive children (Second Edition).* The Guliford Press, New York.

Maccoby, E. E., Dowley, E. M., Hagen, J. W. & Degerman, R. (1965). Activity level and intellectual functioning in normal pre-school children. *Child Development*, 36, 761-770.

Mash, E. J. & Johnston, C. (1982). A comparison of the mother-child interactions of younger and older hyperactive and normal children. *Child Development*, 53, 1371-1381.

Meichenbaum, D. H. (1977). *Cognitive-behaviour modification: an integrative approach.* Plenum, New York.

O'Dell, S. L., Krug, W. W., Patterson, J. N. & Faustman, W. O. (1980). An assessment of methods of training parents in the use of time out. *Journal of Behaviour Therapy and Experimental Psychiatry*, 11, 21-25.

Pelham, W. E. & Hinshaw, S. P. (1992). Behavioural intervention for with Attention Deficit Hyperactivity Disorder. In S. M. Turner, K. S. Calhoun & H. E. Adams (Eds), *Handbook of Clinical Behaviour Therapy (Second Edition).* John Wiley, New York.

Pelham, W. E., Carlson, C., Sama, S. E., Vallano, G., Dixon, M. J. & Hoza, B. (1993). Separate and combined effects of Methylphenidate and behaviour modification on the classroom behaviour and academic performance of ADHD boys: Group effects and individual differences. *Journal of Consulting and Clinical Psychology*, 61, 506-515.

Strayhorn, J. M., & Weidman, C. S. (1991). Follow-up one year after parent-child interaction training: Effects on behaviour of pre-school children. *Journal of American Academy of Child and Adolescent Psychiatry.* 30, 1, 138-143.

Taylor, E. A., Schacher, R., Thorley, G. & Wieselberg, M. (1986). Conduct disorder and hyperactivity: I. Separation of hyperactivity and anti-social

conduct in British child psychiatric patients. *British Journal of Psychiatry*, 149, 760-767.

World Health Organisation. (1988). *International Classification of Diseases (Tenth Edition).* W.H.O. Geneva.

Wright, L., Stroud, R. & Keenan, M. (1993). Indirect treatment of children via parent training: a burgeoning form of secondary prevention. *Applied and Preventative Psychology*, 2, 191-200.

Single Case Research Study.

Systemic Assessment and Intervention for Separation Anxiety Disorder in Childhood - a single case study.

Prepared in accordance with the notes for contributors to: The Journal of Child Psychology and Psychiatry.

Christopher J Wiles

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 OXH

Abstract.

Research into the treatment of Separation-Anxiety Disorder is reviewed and the systemic approach is considered as a suitable treatment approach. This approach considers the family as the unit of treatment as well as other influential systems outwith the family such as school.

The case illustrates the effectiveness of such an approach with a child with Separation-Anxiety Disorder and a complex family history and interactional pattern. Treatment included improving these patterns and working individually with different components of the family and their interaction with the school. The treatment is discussed and analysed in relation to the crucial stages of change in behaviour and increasing control over the separation anxiety. Future research and clinical considerations are identified and discussed.

Introduction.

Since the creation of sub-categories of anxiety disorders in childhood in *DSMIII*, there has been increased interest in the subject leading to further refinements in *DSMIV*. Within this classification possibly most research and clinical interest has been with Separation Anxiety Disorder (SAD). The hallmark of SAD is excessive anxiety concerning separation from major attachment figures such as parents and home surroundings. This is likely to result in worry about harm coming to these figures, persistent avoidance of being alone or separated from parents, including reluctance or refusal to attend school. The child exhibits extreme distress by such separations (or the anticipation of them) and this is often accompanied by complaints of physical symptoms such as nausea and headache *(DSMIV)*.

Many researchers cite factors such as low socio-economic factors *(Last et al, 1987)* and high numbers of stressful life events *(Gleitman-Klein & Klein, 1980)*, as influencing the onset of SAD. Other influential factors include the psychiatric history of parents. For example, *Weissman et al (1984)* concluded that children of mothers with depression and panic disorder have a greater risk for anxiety disorders, principally SAD. Temperament and personality factors are also important. For example, *Kagan et al (1988)*, demonstrated the persistence of social inhibition from early to mid-childhood. They suggested that this was an example of an interactional feature which may affect later function.

A common thread for all of these possible etiological influences is that the family as a whole, particularly the systemic process of interaction within the

family, is affected. It may be that family patterns of behaviour, cognition and affect, are important in terms of the behaviour acquired in childhood. These patterns of interaction may also become internalised within the child leading to continued influence, even if the family patterns change. *Bolton (1994)*, suggests that given such assumptions, the distinction between family and individual factors in the etiology of anxiety is blurred. It follows that it is sensible to consider the family as the unit of treatment, and this is established as a common approach for many childhood difficulties *(Herbert, 1988)*, and especially for anxiety *(Crombrick-Graham, 1986)*. However, it is crucial to consider how the basic principles of systems theory apply to the family to understand the full consequences of the interactional process. The family can be seen as a complex, integrated whole with organised, circular patterns of behaviour. The family members are consequently interdependent and demonstrate homeostatic features which maintain the stability of these patterns *(Minuchin, 1988)*. The family as a system, and it's internal sub-systems, are continually adapting to internal and external influences to maintain stability. Therefore, it is crucial that the families' interactions with members of the wider family and other influential systems such as school are considered *(Stratton, 1988)*.

For SAD, therefore, it is essential to consider the family as a system and review their internal and external interactions. The implications are that treatment should incorporate family and individual work as well as liaison with other systems such as school *(Tongue, 1994; Hamilton, 1994)*.

The following illustrates the case of a boy with SAD, and a complex family system and history, and demonstrates the importance of family and systemic considerations for treatment.

Presentation and History.

S. was 9 year old boy, referred by his GP following concern from his mother about his outbursts and peer relationships.

S's mother married when she was young and her husband was possessive, controlling and ultimately physically and mentally abusive. This abuse continued for several years and she finally left him six weeks after S was born, fearing for his safety. S's early childhood was spent with his mother and her adoptive parents. She described herself at this time as being depressed, anxious with panic attacks, rarely leaving the house and having very low self-esteem. Consequently, S spent very little time with other children and his mother was extremely lenient with his behaviour as were his grandparents. From an early age S is described as being unhappy to be apart from his mother or his grandparents. His mother describes herself as being clingy to him as well, gaining great support from their relationship and his happiness.

S's early childhood experiences are punctuated by a series of important life events and family disruptions, including frequent moves, poor living conditions, social isolation and problems in the neighbourhood. His mother continued to experience severe anxiety and she cared for her parents through various spells of ill health. When S was approximately five years old

she met and married her current husband, S's step-father, and her anxiety decreased as her self- esteem and confidence grew. This transition occurred just as S started school and the combination of both factors led to increased separation , which resulted in periods of great distress.

As he grew older these outbursts at times of separation deteriorated and at presentation S would be verbally abusive to both parents, shout, thump the wall and occasionally hit himself. At its most severe S would not be able to sleep because of constant crying and would complain of headaches and nausea the following day resulting in his absence from school. These outbursts led to severe anxiety from parents, with his mother distressed by his upset and his step-father worried that he was failing as a father.

This interaction was complicated by the fact that S's mother had never told him anything about his real father and they were unable to confront this issue. Their anxieties about the distress it may cause him and the possible effect it may have on his relationship with his step-father, resulted in avoidance. However, other members of the family were exerting pressure on his mother to tell him the truth and S continued to ask questions about why his step-father had only lived with them for a while. This uncertainty on both sides led to an increased difficulty with separating. It also resulted in inconsistent parental approaches to the management of S's difficult behaviour. S attempted to gain control by successfully playing one parent against the other. This led to S getting his own way and his parents avoiding confrontation and separation as much as possible. This avoidance was

clearly re-inforcing the child' behaviour and his parents felt unable to change their management because of their anxieties about their relationships with S.

Initial Measures.

1. Measurement of outbursts.

The parents were asked to record details of the number of outbursts per day with brief descriptions of their content and a rating of their severity using a ten-point scale. A score of ten suggested that the outburst resulted in the most severe distress or difficult behaviour. These diaries and ratings were used as a basis for discussion and continuing input per session. The scores for the first week of recording indicated that the total number of outbursts was 17 with an average rating of 6.1. The content indicated that the outbursts were mainly in response to separation from his mother, or if his father was at work and he had had no contact with his grandmother. There was considerable inconsistency between the parents as to the management of these outbursts.

2. Family interactional patterns.

The initial two family interviews were screened by the clinic's Consultant Psychiatrist as part of the policy of the team, providing multi-disciplinary team-working approach to the assessment of families' difficulties. Both therapists considered the family at the initial stages to be highly emeshed, characterised by few periods of separation between S and his mother, although S spent little time on his own with his step-father. It was apparent that S's mother found it difficult to cope with his distress, believing that it

reflected on her ability to provide safety and security for her son. S's step-father was less involved in the management of his problematic behaviour, finding it difficult to reprimand him. He was also sensitive to criticism from S., for example, becoming anxious if S. shouted 'I hate you, you don't love me' at him during an outburst. He was concerned about his role and the consequences of S. discovering that he was not his real father. There was considerable confusion, worry and anxiety about how and when to discuss this issue with S. Consequently both parents lacked confidence in dealing with his behaviour, resulting in overconcern about his safety and distress. For example, his mother would watch over him in the playground, take him home for his lunch and collect him from school at the end of the day. He had few social contacts with other children, apart from school and attended no clubs; his mother withdrawing him from the Cub Scouts after periods of weepy, distressed behaviour. In the interview room S would sit close to his mother and refused to play with the toys in the room. He also became weepy when asked to wait outside to allow his parents to discuss 'adult' business. The co-therapist also screened the final session to provide continuity for re-assessment.

3. Individual sessions with S.

In the initial individual sessions S was clearly unhappy to be apart from his mother, sobbing at various points in the session and constantly asking for his mother. He gave little eye contact and was difficult to engage in any discussion by refusing to answer questions about school or home. He also refused to draw any pictures or play with any of the toys in the room.

4. School report.

Communication with the school confirmed that S was absent at least twice a week and his behaviour in class was characterised by weeping most days, especially following absences from school. His academic work was being affected by his distress and poor concentration. He had few friends and was unable to work in groups because of his immature behaviour and poor social skills. These difficulties with his peers continued in the playground with several outbursts and incidents of fighting. The school had asked S's mother to try and reduce the amount of time she spent at the school and their relationship with the school was described as difficult.

Treatment.

Treatment focused on working with S's mother and step-father to improve their management of his distressed behaviour. They were encouraged to improve their communication regarding emotional expression, and develop their ability to help S cope with his distress.

An important part of this process was to emphasise the need to deal with their avoidance of addressing the issue of telling S about his biological father. This was necessary because of the need for S to have knowledge of his real father to understand his current family system. His parents also needed to feel more confident about dealing with his difficult behaviour whilst continuing to support his development. Strategies for dealing with what to tell him and how to cope with any resultant distress or anxiety were developed. However, they were unable to confront this issue completely until some way through the

treatment. This was a consequence of another family member giving S. gifts from his natural father's family, and telling him to ask his mother about his real father.

Using a problem solving approach and setting tasks and behavioural experiments for the parents to try between sessions, the parents were gradually able to increase the amount of separation from S. They built up their confidence to allow him to experience pain and fear to learn appropriate coping skills, by controlling their anxieties.

A series of 3 individual sessions for S were used to develop time away from his parents with the therapist. These focussed on helping S to label his emotions and encouraging him to express these emotions appropriately.

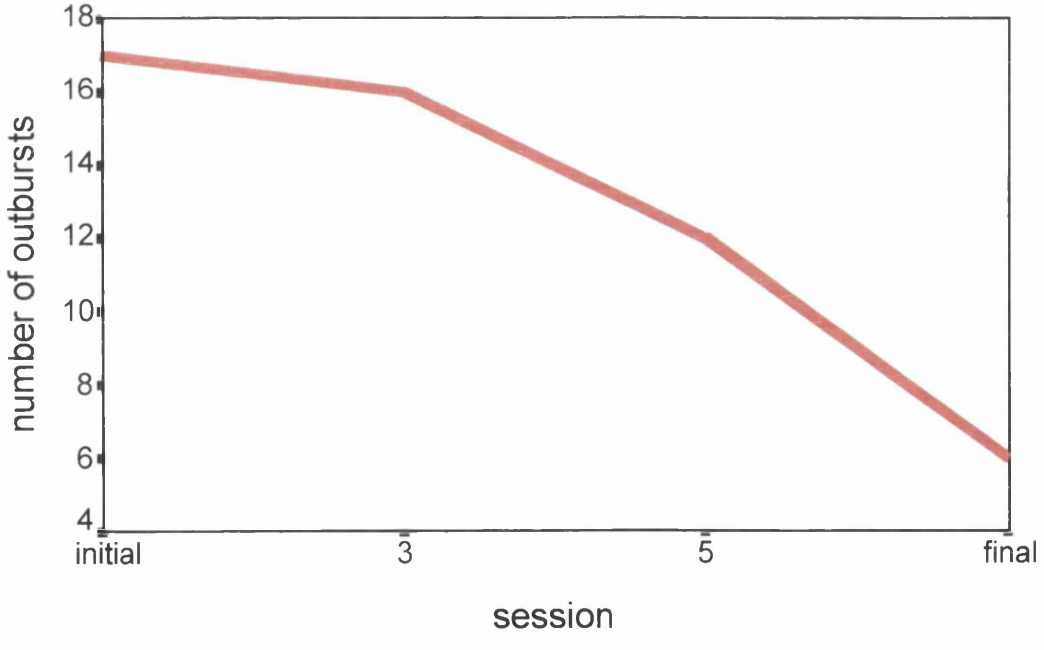
The difficulties with the school were addressed by helping the parents to improve their relationship with the school and facilitating discussion between the school and the parents. This discussion resulted in increased understanding and appreciation of the difficulties experienced by both parties. His teacher was encouraged to gradually increase the time spent in work-groups with other children and develop strategies for improving their management of S's anxious behaviour in the classroom. His parents were encouraged to discuss their concerns about his difficulties with the school and continue with similar management after school.

Measures at Final Session.

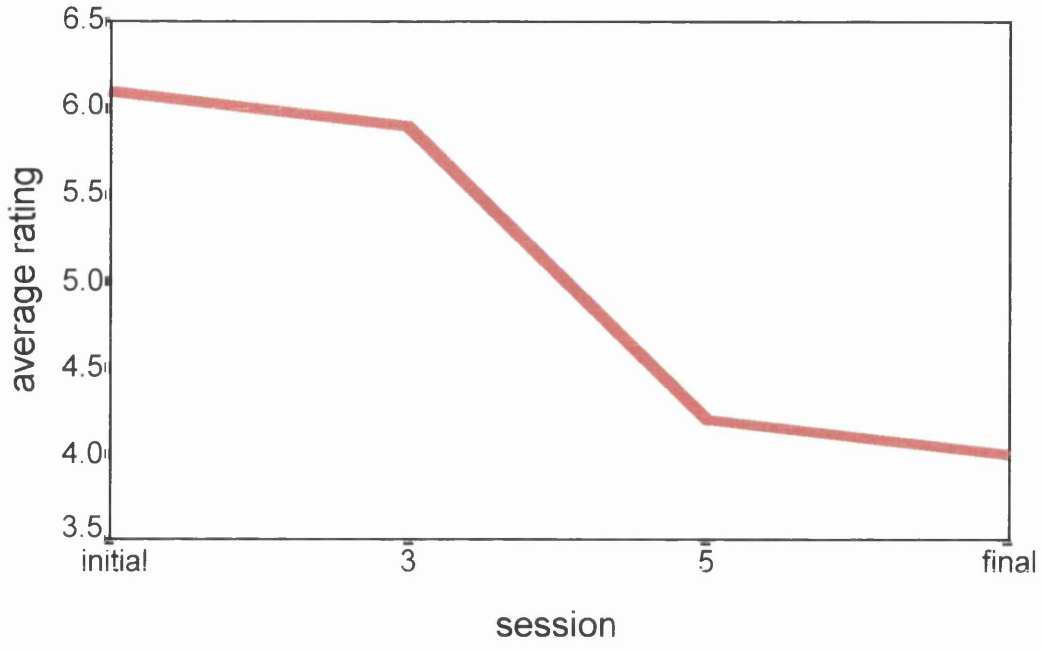
1. Measurement of outbursts.

The diary recordings and ratings indicated that the number of outbursts had reduced to 6 in the week before the final session with an average rating of 4 (see Graphs 1 & 2). The content of the diaries showed that they still mainly related to separations from his mother. However, his parents were dealing with them more effectively and allowing him to learn more effective coping skills than avoidance and over-dependency on his mother.

Graph 1. Weekly number of outbursts.



Graph 2. Average rating per outburst.



2. Family interactional patterns.

The final session was re-screened by the co-therapist and there was high concordance about the family's interaction. There had been increased number of periods of separation between S and his mother. S had also been spending more time with his step-father, by spending time in the park and by doing chores and errands. Both parents appeared more confident about their ability to limit S's outbursts and they reported increased communication about and consistency in dealing with his difficult behaviour. His mother felt less anxious seeing her son upset and his step-father felt that he was taking more action to reprimand S when needed. They both reported responding more positively to S's good behaviour especially in relation to separations. They both felt freed up by the removal of the secret about S's biological father. Although S had coped well with being told and had seemed happier after some initial distress, there were still some concern that he would want to

know more. His mother had spent less time at the school, only collecting him after school. S. had started taking a packed lunch to school, following several days of his step-father attending and having his lunch with him. S had returned to attending the Cub Scouts with much less distress and had started going to judo lessons with his cousin. In the interview room the family seemed more comfortable and S spent time playing with the toys and floating between his mother and step-father joining in on the conversation.

3. Individual session with S.

In the final individual session S separated from his parents with little trouble and was talkative in the session, giving good eye-contact and only requiring infrequent reassurances that his mother was waiting for him. He engaged well in discussion about recent events in the family and volunteered the story about his biological father with no distress. He played with the toys in the room freely as we talked and had taken a picture from home he had drawn for me.

4. School report.

A consultation with the school before the final session revealed some improvement with S spending more than half of his time in selected work groups with support from the teacher. There had been reduced absences and a more co-operative and constructive relationship with the parents and less distressed behaviour in the classroom. His concentration and work rate had improved a little but he continued to have difficulties with his peers resulting in fighting and disturbances in the playground.

Table 1 summarises the behavioural indicators from the initial and final sessions.

Table 1. Behavioural Indicators.

Behavioural indicators	Initial Session	Final Session
Family Interaction patterns	~ mother & child rarely apart, step-father and child spending little time together	~ increased separation from mother and more time spent in activities and chores with step-father
	~ no social activities after school	~ restarting clubs and activities after school
	~ mother at school in breaktimes and collected S for lunch and at hometime	~ S in school for his lunch and mother only collecting him at sometime
	~ fear and anxiety re possible disclosure of real father	~ less anxiety re disclosure with moderate concern re reaction
	~ inconsistency handling of outbursts	~ improved communication between mother & step-father re management of outbursts
Individual sessions with S	~ little eye contact	~ increased eye contact
	~ little discussion	~ increased discussion
	~ avoiding answering questions	~ less avoidance and was asking questions
	~ weeping and frequently asking for his mother	~ no weeping and only asked for his mother once
	~ refusing to draw	~ happy to draw and had taken in a drawing for me as a present
School report	~ often weeping in class	~ weeping in class reduced
	~ absent at least 2 days per week	~ absent approx. 1 day per week
	~ unable to work in groups	~ over half time in class within groups
	~ poor concentration	~ slight improvement in concentration
	~ outbursts and fighting in playground	~ no change in playground behaviour

In summary, there had been considerable improvement in the family's ability to separate and the parents ability to manage his difficult behaviour. However S continued to have difficulties with his peers. To improve this situation the co-therapist offered him a series of individual sessions to focus on these difficulties.

Discussion.

When considering an appropriate treatment approach for addressing this child's SAD, the family history and the complex pattern of interactions indicated a systemic approach. The approach also had to take into account the family's interactions with the child's school as the main influential system outwith the family. Treatment focused on working with each individual component within the system as well as how the components interacted. It can be considered that this approach was relatively successful in terms of improving the functioning within the family system and it's interactions with the school. There had been an improvement in the relationships with reduced anxiety and less avoidance behaviour thus placing the family in a stronger position to focus on the individual sessions. The sessions would focus on his social skills and peer difficulties.

The stages of change model *(Prochaska & DiClemente, 1982)*, describes how individuals move through a series of stages when attempting to change an aspect of behaviour they rely on. The stages described relate to pre-contemplation of change, eventually resulting in contemplation. This stage is followed by action to change and moderated by a relapse stage. An

interesting aspect of the process of change here is that they seemed to be stuck in the contemplation stage for the majority of treatment about the need to tell S about his biological father. The family moved into the action stage following the actions of a member of the wider family system. Despite this unplanned intervention, the preparation developed in the sessions were activated and the parents coped well and were able to overcome their anxieties about S knowing to both his and their benefit. This event had a considerable impact on the development of their increased confidence with increasing periods of separation and dealing with his behaviour. However, it is unclear if they would have entered the action stage without this external intervention. This is an important point to note for developing treatment strategies and emphasises the need to recognise the systemic elements of a patient's presentation remain adaptive to the world beyond the interview room.

In summary, this case illustrates the importance of adopting a systemic approach to anxiety disorders in children and SAD in particular, and the need for assessment and treatment to examine the context and functioning of the family as the unit of treatment.

American Psychiatric Association. (1987). *Diagnostic and Statistical Manual of Mental Disorders: Third Edition-Revised (DSM III-R).* American Psychiatric Association, Washington, DC.

American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition (DSM IV).* American Psychiatric Association, Washington, DC.

Bolton, D. (1994). Family system interventions. in T.H. Ollendick, N.J. King & W. Yule. *International Handbook of Phobic and Anxiety Disorders in Children and Adolescents.* Plenum Press, New York.

Combrinck-Graham, L. (1986). Family treatment for childhood anxiety disorders. *Family Therapy Collections*, 18, 22-30.

Gittelman-Klein, R. & Klein, D. F. (1980). Seperation anxiety in school refusal and it's treatment with drugs. in L. Hersov& I. Berg (eds) *Out of school.* 321-341. John Wiley, New York.

Hamilton, B. (1994). A systemic approach to a family and school problem: a case study in seperation anxiety disorder. *Family Therapy*, 21, 2, 149-152.

Herbert, M. (1992*). Working with children and their families- Psychology in action.* The British Psychological Society and Routledge Ltd.

Kagan, J. (1988). Biological basis of childhood shyness. *Science*, 240, 161-171.

Last, C. G., Hersen, M., Kazdin, A. E., Finkelstein, R. & Strauss, C.C. (1987). Comparrison of DSM III seperation anxiety and over-anxious disorders: Demographic characteristics and patterns of co-morbidity. *Journal of the American Academy of Child and Adolescent Psychiatry*, 26, 527-531.

Minuchin, P. (1988). Relationships within families: a systems perspective on development. in R.A. Hinde & J. Stevenson (eds). *Relationships within families - mutual influences.* Clarendon Press, Oxford.

Prochaska, J. & DiClemente, C. (1986). Towards a comprehensive model of change. in W. Miller & N. Heather (eds). *Treating Addictive Behaviours,* Plenum Press, New York.

Tongue, B. (1994). Seperation Anxiety Disorder. in T.H. Ollendick, N.J. King & W. Yule. *International Handbook of Phobic and Anxiety Disorders in Children and Adolescents.* Plenum Press, New York.

Weissman, M. M., Leckman, J. F., Merikangar, K. R., Gamman, G. D. & Prusoff, B. A. (1984). Depression and anxiety disorders in parents and children. *Archives of General Psychiatry*, 41, 845-852.