

*The Parental Empathy Measure:  
A New Approach to Assessing  
Child Maltreatment Risk.*

***Kym Lylie Kilpatrick***

A thesis submitted in fulfilment of the requirements for the degree of  
Doctor of Philosophy.

University of New England

ARMIDALE

January, 2000

## Declaration

I certify that the substance of this thesis has not been submitted for any prior degree and is not being currently submitted for any other degree.

Any help that I have received in preparing this thesis, and all sources, have been duly acknowledged.



Kym L. Kilpatrick

## Prefaces

### Table of Contents

	Page
List of Figures .....	v
List of Tables .....	vi
List of Symbols and Abbreviations .....	viii
Acknowledgments.....	ix
Abstract.....	xi
<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
Outline of Study.....	4
<b>CHAPTER 2: LITERATURE REVIEW .....</b>	<b>7</b>
Trends in Child Maltreatment Research History.....	7
Aetiological Explanations of Child Maltreatment.....	11
Psychological Maltreatment .....	16
<i>Impact of Psychological Maltreatment</i> .....	25
Underlying Processes of Psychological Maltreatment.....	28
Historical Overview of Empathy Research and Conceptualisations .....	30
Parental Empathy and Child Maltreatment Research.....	37
A Model of Empathy Devised for the Construction of an Empathy Measure.....	49
<i>Social information processing model of child abuse and neglect</i> .....	51
Relevance of the Four Proposed Empathy Variables to Child Abuse Research .....	53
<i>Attention to Children's Signals</i> .....	54
<i>Attributions</i> .....	56
<i>Emotional Responsiveness</i> .....	62
<i>Behavioural Responsiveness</i> .....	65
<b>CHAPTER 3: EVOLUTION OF THE PARENTAL EMPATHY MEASURE (PEM).....</b>	<b>70</b>
Preamble.....	70
Selection of Test Format.....	71
Research Plan .....	77
Development of the Parenting Scenarios and List of Beliefs about Children.....	78
<i>Study 1a</i> .....	79
<i>Study 1b</i> .....	79
<i>Study 2</i> .....	80
<i>New Sections</i> .....	86
First Series of Case Studies .....	87
<i>Further Modifications following initial case studies</i> .....	90
Second Series of Case Studies.....	91
Development of Encoding Procedures for Quantitative Analysis.....	92
<i>Encoding of the Primary Variables</i> .....	92
<i>Encoding of Secondary Variables</i> .....	99
Underlying Premises of the Parental Empathy Measure .....	105

	Page
CHAPTER 4: RESEARCH PLAN.....	107
CHAPTER 5: DESCRIPTION OF GENERAL METHODOLOGY.....	109
Participants .....	109
Measures .....	113
<i>The Parental Empathy Measure</i> .....	113
<i>The Child Abuse Potential Inventory</i> .....	116
Procedure .....	117
<i>Ethics</i> .....	117
<i>Recruitment of Agencies</i> .....	117
<i>Recruitment of Participants</i> .....	118
<i>Process of Selection of Participant</i> .....	120
<i>Interview Procedure</i> .....	121
Data Analyses .....	123
CHAPTER 6: STUDY OF THE RELIABILITY OF THE PARENTAL EMPATHY MEASURE..	124
Inter-Rater Reliability.....	124
Internal Consistency.....	126
Discussion .....	130
CHAPTER 7: STUDY OF THE VALIDITY OF THE PARENTAL EMPATHY MEASURE.....	133
Content Validity.....	133
Tests of Construct Validity.....	134
Test of Criterion Prediction (Concurrent) Validity.....	135
Hypotheses .....	137
Results .....	138
<i>Construct Validity Analyses</i> .....	138
<i>Concurrent Validity Analyses</i> .....	140
Discussion .....	143
<i>Construct Validity</i> .....	143
CHAPTER 8: STUDY OF THE PARENTAL EMPATHY MODEL.....	151
Hypothesis.....	154
Statistical Method.....	154
Results .....	155
Discussion .....	158
CHAPTER 9: MEDIATIONAL POTENTIAL OF PARENTAL EMPATHY.....	161
Introduction .....	161
<i>Parents' Childhood Abuse History</i> .....	162
<i>Drug and Alcohol Abuse</i> .....	165
<i>Insight</i> .....	167
<i>Beliefs</i> .....	170
<i>Hypotheses</i> .....	173
Method.....	173
<i>Statistical Design</i> .....	174

	<b>Page</b>
<b>Results</b> .....	<b>175</b>
<b>Discussion</b> .....	<b>180</b>
<i>Childhood Abuse History</i> .....	<i>181</i>
<i>Drug and Alcohol Usage</i> .....	<i>183</i>
<i>Insight</i> .....	<i>184</i>
<i>Cognitive Beliefs</i> .....	<i>185</i>
<i>The Mediation Role of the Parental Empathy Variables</i> .....	<i>187</i>
<b>CHAPTER 10: EXPLORATORY QUALITATIVE ANALYSES AND CASE STUDIES</b> .....	<b>188</b>
<b>Introduction</b> .....	<b>188</b>
<b>Qualitative Analyses of Clinically-Eased Assumptions</b> .....	<b>189</b>
<i>Negative blurred identity perception</i> .....	<i>189</i>
<i>Negative versus Positive Perception of their Children</i> .....	<i>193</i>
<i>Relational versus Internal Descriptors</i> .....	<i>197</i>
<i>Summary</i> .....	<i>200</i>
<b>Case studies</b> .....	<b>201</b>
<b>Case Study 1</b> .....	<b>202</b>
<i>Faking Good Score</i> .....	<i>202</i>
<i>Perception of Her Child</i> .....	<i>202</i>
<i>Attention to Child's Signals</i> .....	<i>203</i>
<i>Attributions of Child behaviour</i> .....	<i>204</i>
<i>Emotional Responsiveness to Children</i> .....	<i>204</i>
<i>Behavioural Responsiveness to Child</i> .....	<i>205</i>
<i>Beliefs about Children Scale</i> .....	<i>207</i>
<i>Parenting Insight</i> .....	<i>208</i>
<i>Other Observations</i> .....	<i>209</i>
<i>Summary of Parental Empathy Assessment</i> .....	<i>210</i>
<i>Action and Subsequent Case Developments</i> .....	<i>211</i>
<b>Case Study 2</b> .....	<b>212</b>
<i>Faking Good Score</i> .....	<i>212</i>
<i>Perception of her Child</i> .....	<i>212</i>
<i>Attributions of Child behaviour</i> .....	<i>213</i>
<i>Attention to Child's Signals</i> .....	<i>215</i>
<i>Emotional Responsiveness to Children</i> .....	<i>215</i>
<i>Behavioural Responsiveness to Child</i> .....	<i>216</i>
<i>Parenting Insight</i> .....	<i>217</i>
<i>Beliefs about Children Scale</i> .....	<i>217</i>
<i>Egocentricity</i> .....	<i>218</i>
<i>Other Concerns</i> .....	<i>219</i>
<i>Summary of PEM Assessment and Case Developments</i> .....	<i>220</i>
<i>Summary of Case Studies</i> .....	<i>221</i>
<b>CHAPTER 11: CONCLUSION AND IMPLICATIONS</b> .....	<b>222</b>
<b>Implications for Empathy Theory</b> .....	<b>223</b>
<b>Implications for Child Maltreatment Theory and Research</b> .....	<b>227</b>

	<b>Page</b>
<i>Relevance of Individual Variables</i> .....	228
<i>Relevance to Aetiological Understanding of Child Maltreatment</i> .....	236
<i>Parental Empathy as a Unifying Construct for Other Related Constructs</i> .....	239
<b>Implications for Psychological Maltreatment Theory and Research</b> .....	<b>241</b>
<b>Clinical Implications</b> .....	<b>245</b>
<i>Advantages of the Parental Empathy Measure</i> .....	246
<i>Implications of the Parental Empathy Model and the PEM for Intervention</i> .....	247
<i>Implications of Secondary Factors for Intervention</i> .....	250
<i>Policy Implications</i> .....	255
<b>CHAPTER 12: LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH</b> .....	<b>259</b>
<b>REFERENCES</b> .....	<b>267</b>
<b>APPENDIXES</b> .....	<b>289</b>
<b>Appendix A: Scenarios Used in Pilot Study</b> .....	<b>290</b>
<b>Appendix B: Pilot Study ‘Beliefs About Children’ Questionnaire</b> .....	<b>296</b>
<b>Appendix C: Pilot Study Ethics Approval Form</b> .....	<b>297</b>
<b>Appendix D: Pilot Study Form of Disclosure and Informed Consent</b> .....	<b>298</b>
<b>Appendix E: Factor Loading Tables</b> .....	<b>299</b>
<b>Appendix F: Ethics Approval Notice for Main Study</b> .....	<b>300</b>
<b>Appendix G: Parental Empathy Measure (PEM)</b> .....	<b>301</b>
<b>Appendix H: PEM Scoring Guide</b> .....	<b>329</b>
<b>Appendix I: PEM Scoring Sheet for Open-Ended Questions</b> .....	<b>352</b>
<b>Appendix J: PEM Scenario Scoring Sheet</b> .....	<b>356</b>
<b>Appendix K: Information Sheet for Workers</b> .....	<b>357</b>
<b>Appendix L: Plain English Statement</b> .....	<b>358</b>
<b>Appendix M: Consent to Make Contact</b> .....	<b>359</b>
<b>Appendix N: Generic Information Sheet</b> .....	<b>360</b>
<b>Appendix O: Case-Worker Information Sheet</b> .....	<b>361</b>
<b>Appendix P: Consent to Participate Form</b> .....	<b>362</b>
<b>Appendix Q: Group and Sample Means for Computed and Other Variables</b> .....	<b>363</b>
<b>Appendix R: Reliability Tables</b> .....	<b>364</b>
<b>Appendix S: Variable Coding and Computation Tables</b> .....	<b>372</b>
<b>Appendix T: Raw Data Tables</b> .....	<b>379</b>
<b>Appendix U: PEM Sub-scale Intercorrelation Matrix</b> .....	<b>419</b>

## Prefaces

### List of Figures

	<b>Page</b>
<b>Figure 1: Proposed model of empathy</b> .....	<b>51</b>
<b>Figure 2: Three-stage Social Information Processing Model with standardised path coefficients (explained variance in parentheses)</b> .....	<b>156</b>
<b>Figure 3: Four-stage Parental Empathy Model with standardised path coefficients (explained variance in parentheses)</b> .....	<b>157</b>
<b>Figure 4: A) Direct relationship between risk factors and behaviour; B) Mediational relationship between risk factors, empathy mediators and behaviour (variance accounted for in parentheses)</b> .....	<b>179</b>

## Prefaces

### List of Tables

	Page
Table 1: Demographics for each risk group and for total sample. ....	111
Table 2: Reliability statistics for variable scales.....	129
Table 3: Correlations between selected PEM and CAPI variables.....	139
Table 4: Percentage of parents correctly classified by group .....	142
Table 5: CAPI abuse and PEM total scores for “included” participants (n=86).....	143
Table 6: Zero-order correlations for variables in the path analyses.....	155
Table 7: Simple correlations ( $r$ ) and regression coefficients ( $\beta$ ) for the direct pathway between risk factors and Behaviour.....	176
Table 8: Simple correlations and regression coefficients for the indirect pathway between risk factors and empathy mediators.....	177
Table 9: Simple correlations and regression coefficients for the indirect pathway between empathy mediators and Behaviour .....	178
Table 10: Simple correlations and regression coefficients for the direct, but mediated, pathway between risk factors and behaviour .....	180
Table 11: Factor loadings for selected belief questions.....	299
Table 12: Computed (and other) variable means for risk-status groups and total sample .....	363
Table 13: Behaviour-stressed scale reliabilities .....	364
Table 14: Behaviour-stressed scale reliabilities .....	365
Table 15: Behaviour scale reliabilities .....	365
Table 16: Emotion-unstressed scale reliabilities.....	366
Table 17: Emotion-stressed scale reliabilities.....	367
Table 18: Emotion scale reliabilities.....	367
Table 19: Signals scale reliabilities.....	368
Table 20: Attributions scale reliabilities.....	369
Table 21: PEM Total scale reliabilities .....	369
Table 22: Belief scale reliabilities.....	370
Table 23: Insight scale reliabilities.....	371
Table 24: Childhood Abuse scale reliabilities.....	371
Table 25: Drug & Alcohol Use scale reliabilities .....	371
Table 26: Demographic variable labels, names and codes.....	372
Table 27: Belief and Scenario section variable labels, names and codes.....	372
Table 28: Variable codes and labels, and data codes (OEQs 1 to 12) .....	373



## Prefaces

### List of Symbols and Abbreviations

$\alpha$	Alpha
$\beta$	Beta (standardised regression coefficient)
$\chi^2$	Chi-squared
$\eta^2$	Eta squared
$\lambda$	Wilk's lambda
AAPI	Adult-Adolescent Parenting Inventory
ANOVA	Analysis of variance
CAPI	Child Abuse Potential Inventory
df	degrees of freedom
$D_1$	First discriminant function
DOCS	Department of Community Services
$F$	$F$ -ratio
GLM	General Linear Model
IRI	Davis Interpersonal Reactivity Index
$M$	mean
$n$	number of participants in sample sub-group
$N$	number of participants in overall sample
NS	not significant (at current test level)
OEQ	Open-ended Questions
$p$	test probability
PEM	Parental Empathy Measure
$r$	Pearson's coefficient of correlation
$R^2$	Coefficient of multiple determination
$SD$	Standard deviation
sem	Standard error of the mean
$t$	Student's $t$ statistic
y.o.a.	years-of-age
Z-score	standardised score

	Page
Table 29: Variable codes and labels, and data codes (OEQs 15 to 23).....	374
Table 30: Variable codes and labels, and data codes (OEQs 24 to 36).....	375
Table 31: Variable codes and labels, and data codes (OEQs 37 to 44).....	376
Table 32: CAPI variable codes and labels.....	376
Table 33: Primary PEM computed variable codes and names and computations.....	377
Table 34: Codes, labels and computation formula for secondary PEM and other variables.....	378
Table 35: PEM sub-scale intercorrelations .....	419

## Prefaces

### Acknowledgments

Many organisations and individuals have been instrumental in the completion of this research project. Without the financial assistance and support of the Department of Community Services the study would not have been possible. Special thanks go to the staff of the following Department of Community Service centres who made the time to contribute to the study: Glen Innes CSC, Narrabri CSC, Inverell CSC, Armidale CSC, Ingleburn CSC, Liverpool CSC, Campbelltown CSC, Moree CSC, Fairfield CSC, Tamworth CSC, and Ballina CSC.

My grateful appreciation also to the staff of the following community organisations for their support in referring participants: Burnside Family Based Services, Tweed Heads Family & Youth Support Services, Lismore Family Support Services, Casino Family Support Services, Ballina, Byron Bay & Mullumbimby Family Support Services, Wyong Family Support Services, Inverell Family Support Services, Armidale Women's Housing Service, Armidale Women's Refuge, Jainawi Family Support Services, Armidale Women's Centre, Tiny Towns Child Care Centre, Galloway Child Care Centre, and Coaldale Community Centre.

A number of individuals deserve special acknowledgment. They include: Dr. Judy Cashmore, Jeannette Rai, Jannette Brown, Roxanne Ramsey, Sue Davidson, Liz Falloon, Roslind Morris, Stephanie Irwin, Michelle Wainwright, Chuck Davis, Bruce Bowmaker, Tim Hewitt, and Mark Allerton. Special thanks also to John Lord, Annette Stephenson, Sally Collier, and Jenny Howell for their support and feedback. A special thank-you is owed to Jenny Granger for her form design artistry, transcribing, and loving support. Jenny Drewitt likewise survived the torture of transcribing many hours of poorly recorded interviews.

My supervisors, Associate Professor Harvey Irwin and Dr. Sabine Wingefeld, have provided support, reassurance, advice and optimism. My thanks to you both. Special thanks are also due to Dr. Don Hine for his statistical guidance.

My very special gratitude to my partner Stan for his encouragement, editing and number-crunching. My son Kel, as a neglected child himself, deserves my special appreciation for his patience and forgiveness.

Finally, my thanks to the mothers and fathers who gave their time and trust to participate in the study.

## **Prefaces**

### **Abstract**

The primary purpose of this thesis was to examine the role that parental empathy may play in the aetiology of child maltreatment (i.e., physical abuse and neglect). The foundations for this examination were established through a recognition in the literature that psychological maltreatment is a major factor in all forms of child maltreatment. Subsequently, theoretical and empirical investigations into alternative explanations of the underlying nature of psychological maltreatment supported a central premise that an impairment of parental empathy is the core issue of psychological maltreatment and, therefore, child maltreatment generally.

To explore the role of empathy in child maltreatment, a four-stage model of parental empathy was proposed. The four stages of parental empathy defined in the model were attention to the child's signals, attributions, emotional responsiveness, and behavioural responsiveness. Based on this model, an instrument, the Parental Empathy Measure (PEM), was developed. The PEM was designed as a semi-structured interview with the aim of capturing both normative and qualitative information and thus maximising both empirical and clinical utility.

Initial development of the PEM utilised a series of case studies and a pilot study. The major empirical phase of the thesis assessed the reliability and validity of the PEM. Participants in that phase comprised 50 registered maltreating parents (i.e., physically abusive and neglectful), 32 matched distressed parents (i.e., needing parenting assistance) and 21 matched control parents. The PEM was found to have satisfactory internal consistency and very good inter-rater reliability. Testing of the PEM's validity, via

comparison with the Child Abuse Potential Inventory (Milner, 1986), demonstrated that the instrument had satisfactory construct validity and very good concurrent validity.

The coherency and predictive utility of the parental empathy model was assessed using path analysis. In comparison to an adaptation of the social information processing model proposed to explain neglectful parenting (Crittenden 1993) and physical abusive parenting (Milner, 1993), the parental empathy model was found to be more coherent and to explain more of the variation in parenting behaviour.

To test the premise that impaired parental empathy is a core issue in child maltreatment, the potential of a sub-set of three empathy variables (attention to signals, attributions and emotional responsiveness) to mediate between child maltreatment risk variables and behavioural responsiveness was assessed. The four child maltreatment risk variables were estimates of parental insight, parents' own childhood abuse history, parents' cognitive beliefs about children and child-rearing, and parents' consumption of drugs and alcohol. Set correlational analyses identified that the three empathy variables totally mediated the relationship between the four child maltreatment risk variables and behavioural responsiveness thus providing initial support for the premise that parental empathy is the vehicle by which other variables may impact on parenting behaviour.

The PEM's capacity to provide both qualitative and normative data to assist in child maltreatment risk assessment was demonstrated in a consideration of two case studies. In these two case studies, predictions of further abuse of the two children concerned were substantiated. This also provided some evidence of the PEM's predictive validity. Additionally, qualitative analyses of the information from the PEM interviews

identified three variables that shared relationships with parental risk of maltreatment status. These variables were the ability of parents' to perceive their children as separate to their own needs, wants and issues, parents' perception of their children's personality as 'just-like' a disliked other person, and the overall polarity, either negative or positive, of the parents' perception of their children's personality. Maltreating parents were seen to be less able to describe their children as individuals, more likely to hold negative perceptions of their children's personalities, and more likely to blur their children's personalities with disliked other persons.

In conclusion, impaired parental empathy, as defined in the present parental empathy model and measured by the PEM, was found to be strongly related to child maltreatment risk. Further, the PEM showed substantial promise as a reliable and valid tool in the assessment of child maltreatment risk. The implications of these findings for empathy research and theory, psychological maltreatment research and theory, the aetiology of child maltreatment, and clinical practice and policy are discussed in detail.