

Improving Antenatal Risk Assessment in a High-Risk Antenatal Population

by

Natasha Perry

BPsych (Hons) Assoc MAPS

A dissertation submitted to the School of Psychology to fulfil the requirements for the

Doctor of Clinical and Health Psychology post-graduate degree,

University of Newcastle

December, 2011

Statement of Originality

*The thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library**, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968. **Unless an Embargo has been approved for a determined period.*

Signed:

Date:

Table of Contents

Acknowledgements.....	5
Abstract.....	7
List of tables and figures.....	10
Extended literature review.....	11
Antenatal substance use.....	16
High-risk parenting.....	18
Attachment theory and research to-date.....	21
Parental reflective functioning.....	25
Antenatal reflective functioning.....	30
Emotional availability.....	35
Predicting maltreatment.....	37
Current study.....	38
Research aims.....	40
Hypotheses.....	41
Expected outcomes.....	41
Submitted manuscript.....	43
Introduction.....	43
Method.....	48
Participants.....	48
Measures.....	50
Procedure.....	54
Results.....	55
Discussion.....	67
Extended Discussion.....	76

Differences between the high-risk and control group.....	76
Reflective functioning.....	80
Measurement of relational concepts.....	84
Predictors of child protection involvement.....	88
Measuring impacts on child protection involvement.....	94
Study limitations.....	97
Future research.....	100
Clinical implications.....	103
Appendix A: Method extended.....	107
Appendix B: Results extended.....	111
Appendix C: Antenatal psychosocial assessment.....	120
Appendix D: Edinburgh postnatal depression scale.....	121
Appendix E: Childhood trauma questionnaire.....	122
Appendix F: Newborn developmental knowledge questionnaire.....	125
Appendix G: The pregnancy interview.....	129
Appendix H: Zanarini scale for borderline personality disorder.....	132
Appendix I: The parent development interview.....	140
Appendix J: Addendum to reflective functioning scoring manual.....	146
References.....	179

Acknowledgements

This research would not be possible without the support of NSW Health, John Hunter Hospital Antenatal Clinic, NSW Family and Community Services and the Mental Health Drug and Alcohol Office. My biggest thanks are to the women who participated in the study, without them we would not be able to continue to better understand the risk factors associated with child protection involvement.

I would like to extend my gratitude to my supervisor and clinical mentor, Professor Louise Newman. Her passion and dedication to clinical work and research to improve the lives of infants and children is admirable. Professor Newman has shared her brilliance and knowledge in the realm of attachment and parenting which has been my primary motivation in pursuing a career within this field. Moreover, I express my appreciation to Professor Newman for allowing me to work on an innovative, captivating and challenging project. I look forward to Professor Newman's continued research changing the face of Australian clinical practice for high-risk parenting.

I must show appreciation to my primary supervisor, Associate Professor Mick Hunter for his guidance and emotional support throughout every stage of my research. His calming presence, reassurance and belief in the value of the research was equally enthusing and encouraging compelling me to sustain my drive, focus and positivity during the difficult periods. I will be forever grateful for his dedication and commitment to my project, allowing me to fulfil my thesis requirements within a timely manner.

I am also extremely appreciative of Conjoint Associate Professor Adrian Dunlop; he has been very generous with his time and support, in particular, providing a research assistant to assist with recruitment. His analytical and research skills combined with his specialist knowledge in substance use were impressive and have significantly

refined my understanding research these populations. I must also thank Professor Dunlop for his personal encouragement to share this research at a variety of forums; the professional networks I have sustained from these events are invaluable.

Thanks must also be extended to Josie Byrne for greatly assisting me with recruitment; I have no doubt that I would not have completed this project without her. Likewise, I must also thank Joanne Allen and Melissa Harris for their extensive work in launching the project in its early phase. I must also thank the Anna Freud Centre and the International Center for Excellence in Emotional Availability for blindly scoring my materials.

I also acknowledge the support of Kim Colyvas for providing me with statistical support. His explanations and in depth of understanding of mathematical applications to psychological research was reassuring.

And to my closest friends and everyone else who has supported me on this journey; I thank-you for your understanding, flexibility and consideration over the past three years to the long awaited submission date. A special mention to the ladies who helped me sort through my references and assisted me with proof reading. Particularly, I must recognise Liz, who was also undertaking this arduous process. I thank her not only for her continued friendship and support but for her encouragement, empathy and appreciation of the highs and lows throughout the degree – especially the final six months!

Finally, my biggest acknowledgement is to my family – Mum, Kayla and Nanna. I could not have achieved this goal without their practical and emotional support. They have provided me with unconditional love, encouragement, understanding and patience to help me maintain my determination and dedication – I am truly grateful xxx.

Abstract

Infants aged under one and those in-utero are the most frequently reported age bracket to child protection services in NSW, Australia. Antenatal substance abuse and other psychosocial risk factors have been associated with poor developmental, emotional and behavioural outcomes for children. Substance use is also a significant risk factor known to increase the likelihood of child protection involvement, less is known about the predictive nature of maternal reflective functioning (RF). Mothers with substance use disorders are more likely to have an insecure attachment and lower levels of RF. Parents with low RF may fail to recognise their infant's feelings, or mental states, and often have a limited understanding of the impact of their behaviour leading welfare concerns. Moreover, low RF has also been associated with atypical maternal behaviour and low levels of emotional availability (EA). The current study aimed to improve antenatal risk assessment; it was hypothesised that substance dependent women would exhibit higher rates of psychosocial stress, mental health symptoms and past childhood trauma, as well as deficits in parenting capacity, when compared with controls. It was also anticipated that RF during the antenatal period would predict postnatal RF. Furthermore, a low level of parental RF was expected to mediate the impact of psychosocial risk factors associated with child protection involvement. Participants were 11 women on opiate substitution treatment (OST) deemed as 'high-risk' and the 'control' group comprised 15 women from a community sample without any substance abuse or child protection involvement. All women were recruited during the third trimester of pregnancy. At time one (T1) pregnant women participated in Pregnancy Interview-Revised (PI), Zanarini Rating Scale for Borderline Personality Disorder and completed Newborn Developmental Knowledge Questionnaire and Childhood Trauma Questionnaire. The routine Psychosocial Assessment Interview and Edinburgh

Postnatal Depression Scale were retrospectively obtained. At follow up (T2), when the infants were approximately three months old, the Parent Development Interview - Revised Short Version (PDI) was undertaken and mother-infant dyads were videotaped to assess EA. Child protection services were contacted to determine if there had been any involvement from T1 to T2. Significant differences were detected for demographics, psychosocial factors, trauma and mental health symptoms between the 'high-risk' and 'control' group. Unexpectedly, no significant between groups differences were found for RF (as measured by the PI and PDI) or EA. The majority of women in the 'high-risk' group became involved with child protection services. Reflective functioning was not significantly associated with psychosocial risk factors, therefore, did not mediate the outcome of child protection involvement. When comparing women who became involved with child protection services with those who did not, several psychosocial ('not living with the father of the baby', relationship status, poor education, history of forensic charges, being in OST) and psychological factors (depression, borderline personality disorder symptoms, history of childhood trauma) were identified as risks associated with child protection involvement. The study aimed to implement a comprehensive screening battery targeting mental health issues and parental capacity to aid the identification of women who may benefit from more focused intervention and child protection approaches. The work presented throughout provides evidence to support a need for an expansion of the current routine of psychosocial assessment. Particularly, to include a measure of impulsivity given the increased likelihood of impulsive parents becoming involved with child protection services. Identifying pregnant women who may benefit from targeted clinical and parenting intervention to improve reflective functioning and parenting capacity may reduce future child protection involvement.

Keywords: parenting, substance abuse, reflective functioning, risk, child protection.

List of Tables and Figures

Table 1: <i>Sample Characteristics</i>	50
Table 2: <i>Demographic and Psychosocial Differences Between ‘Control’ and ‘High Risk’ Groups</i>	57
Table 3: <i>Differences in Outcome Variables between the ‘Control’ and the ‘High Risk’ Groups</i>	59
Figure 1: <i>Changes in reflective functioning from Time 1 to Time 2.</i>	60
Table 4: <i>Correlation Matrix for Mental Health, Newborn Knowledge, Childhood Trauma, Reflective Capacity and Emotional Availability</i>	61
Table 5: <i>Demographic and Psychosocial Variables Associated with Child Protection Involvement</i>	64
Table 6: <i>Outcome Variable Means Across Groups, With and Without Child Protection Involvement</i>	65
Table 7: <i>Univariate Predictors of Child Protection Involvement Using Logistic Regression</i>	66
Table 8 (Appendix): <i>Correlation Matrix for Outcome Variables and Childhood Trauma and Borderline Symptom Subscales</i>	112
Table 9 (Appendix): <i>Intracorrelation Matrix for Childhood Trauma and Borderline Personality Disorder Subscales</i>	113
Table 10 (Appendix): <i>Prevalence of Demographic and Psychosocial Variables and the Differences among ‘High-Risk’ Women with and Without Child Protection Involvement</i>	115
Table 11 (Appendix): <i>Outcome Variables and the Differences among ‘High Risk’ Women with and Without Child Protection Involvement</i>	116
Table 12 (Appendix): <i>Significant Logistic Regression Models Predicting Child Protection Involvement.</i>	118