

The Relationship Between Paternal Anxiety and Risky Play in Childhood: Does Child  
Anxiety Mediate this Relationship?

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### **Declarations**

This 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.

I hereby certify that the work embodied in this thesis has been done in collaboration with other researchers Dr Emily Freeman, Dr Jennifer StGeorge and student researchers Michael Spark, Holly Rice, and Katie Rolfe. I joined this project which had prior ethics approval and participated in data collection, recruitment, coding of observational data, data preparation and data analysis. I was the sole writer of this thesis with appropriate supervision from Dr Freeman and Dr StGeorge.

The conduct of this report was approved by the Human Research Ethics Committee (Newcastle), Approval number: H – 2010-1300.

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### **Structured Abstract**

#### **Scope**

Historically, the majority of research examining child exploration has focused exclusively on mother-child relationships and the interplay between maternal factors and child development (Chak, 2010; Gray, Tracy & Lindberg, 1979; Grossman, Grossman & Kindler, 1999; Main, 1983). More recently however, there has been growing recognition of the unique and positive contributions fathers can have on child development (Dumont & Paquette, 2013; Fletcher, StGeorge & Freeman, 2013; Lamb, 2004; Paquette, 2004). One important difference that has been found between mothers and fathers and the facilitation of exploration has been a father's tendency towards exciting their children during interactions with them whereas mothers tend to do the opposite by trying to contain their children (Dixon, Yogman, Tronick, Adamson & Brazelton, 1981; Paquette, 2004).

A particular type of play in early childhood, termed 'risky play' has been an area of significant research in recent years with regard to the positive influences and impacts on a child's development (Cevher-Kalburan & Ivrendi, 2016; Humphreys et al., 2016; Lahat et al., 2012; Morrongiello & Dawber, 1999; Morrongiello & Matheis, 2004; StGeorge, Fletcher, Freeman, Paquette & Dumont, 2015). However, previous research examining the influence of parenting in regard to children's risky play behaviour has in the main only considered factors such as over-protection as well as some consideration of child psychopathology (Brussoni et al., 2014; Brussoni, Olsen, Pike & Sleet, 2012; Cevher-Kalburan & Ivrendi, 2016; Little, Wyver & Gibson, 2011; Sandseter & Kennair, 2011). Based on the emerging research of fathers' parenting as a support for infant and child exploration, it appears that further investigation is warranted to identify ways in which fathers' parenting may impact on risky play behaviour and therefore potentially child development.

An important influence on parenting styles is parental mental health. Parental anxiety for example, has been shown to impact on the attachment between a child and its caregiver, increase the chance of the child developing an anxiety condition themselves and result in the child being more likely to have poorer coping skills than their peers (Segrin, Wosidlo, Givertz & Montgomery, 2013). In fathers specifically, Moller, Majdandazic and Bogels (2014) found that fathers with social anxiety symptoms showed less challenging behaviours with their infant child, were less inclined to encourage risky behaviours, and be more over-involved with the child hence interfering with the facilitation of normal exploration for the child. Additionally, there was a positive relationship between father anxiety and infant anxiety.

### **Purpose**

This study aims to explore the relationship between paternal anxiety and child risky play behaviour in children between aged 18-24 months. In addition, we aim to determine whether child anxiety mediates this relationship and whether these relationships differ for boys and girls.

### **Methodology**

This study recruited 42 father-child dyads who participated in a risky play scenario. Child behaviour was coded using the Child Risky Behaviour scale (Little & Wyver, 2010). Paternal anxiety was measured using anxiety scale scores from the Depression, Anxiety and Stress Scale (DASS) (Lovibond & Lovibond, 1995). Child anxiety was measured using the anxiety disorders DSM oriented scale scores from the Child Behaviour Checklist, 1.5-5 year old version (CBCL/1.5-5) (Achenbach & Rescorla, 2000).

## Results

A path analysis was conducted to test the fit between the observed data and our proposed model separately for male and female children. The overall model between child risky play behaviour and father and child anxiety for male children,  $R^2 = .232$ ,  $F(2, 14) = 2.12$ ,  $p = .157$ , was not significant. However, there was a trend towards a significant partial negative effect for father anxiety and risky play behaviour ( $p = .065$ ). Male child anxiety was significantly related to father anxiety,  $R^2 = .293$ ,  $F(1, 15) = 6.214$ ,  $p = .025$ . Child risky play behaviour was significantly related to father and child anxiety for female children,  $R^2 = .327$ ,  $F(2, 17) = 4.135$ ,  $p = .034$ . However, only the partial positive effect of father anxiety on risky play behaviour was significant ( $p = .027$ ). Female child anxiety was not related to father anxiety,  $R^2 = .002$ ,  $F(1, 18) = .039$ ,  $p = .085$ .

## General Conclusions and Implications

To our knowledge, this is the first study that has examined the relationship between paternal anxiety and risky play behaviour in children. Paternal anxiety was found to be related to risky play, but had different effects depending on the gender of the child. Female children with anxious fathers engaged in greater risky play behaviour, whereas male children with anxious fathers engaged in less risky play behaviour. Furthermore, only male child anxiety was related to paternal anxiety. The implications of this study provide further support to the importance of caregiver facilitation of child exploration, in particular fathers' involvement in this process in supporting positive child development outcomes and in minimising potential negative outcomes for the child.

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