The Impact of Parenting Behaviours on Children's Social-Emotional Development
Nisa Mulholland
"This report is submitted in partial fulfilment of the Honours degree of Bachelor of Psychological Science (Honours)"
Word Count: 4,386

Declaration

"This report contains no material which has been accepted for the award of any other degree of diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this report to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time."

The Impact of Parenting Behaviours on Children's Social-Emotional Development

Social-emotional development plays a crucial role throughout a child's lifetime. Many early childhood developmental theorists have stressed the importance of social-emotional development in a child's ability to be effective within their social interactions and to be able to psychologically adjust to the demands in their environment (Eisenberg et al., 2007; Spinrad et al., 2006). The development of a child's social-emotional competencies during the preoperational period is fundamental as it provides the foundation for later functioning across all domains of a child's life. Children who can acquire the ability to demonstrate social-emotional competencies in response to differentiating environmental demands are some of the most fundamental skills that children develop in early childhood (Vohs & Baumeister, 2011; Williams & Berthelsen, 2017).

The plasticity of the preoperational period makes children extremely vulnerable to their environment (Housman, 2017). From infancy to five years old, a child develops the foundational capabilities on which their subsequent development progresses (Sameroff, 2010). Such that learning and development during the preoperational period are both rapid and cumulative. As a result, progression within the early years can have profound and lasting consequences towards a child's later social-emotional outcomes (Sameroff, 2010). A child who acquires the ability to maintain social-emotional competency when exposed to differentiating environmental demands is fundamental to a child's later social-emotional functioning (Vohs & Baumeister, 2011; Williams & Berthelsen, 2017).

Denham (1986) addresses how skills associated with social-emotional competencies emerge in early childhood. In the preoperational period, a child develops an emerging ability to manage and comprehend different emotions internally and within their environment (McFarland, 2017). Parents can facilitate this process by assisting their children in

understanding, expressing, and modulating their thoughts, behaviours, and feelings through supportive and responsive interactions (Schore, 2003). While parents who experience and express feelings of hostility, such emotional displays may have far-reaching effects on a parent-child relationship causing implications on their child's social-emotional development (Newland, Ciciolla and Crnic, 2014).

Social-Emotional Development and Functioning

Social-emotional development is a gradual, integrative process through which a child acquires the capacity to understand, express, and manage their internal states (Thompson, 1994; Thompson & Lagattuta, 2006). The emotional states during the preoperational period are complex, as a child in the early years depends on their emerging capacities to interpret their personal experiences and understand what others are doing and thinking (Landy, 2009). A child's social-emotional competencies develop through secure relationships that allow a child to observe, imitate and respond to the social behaviours of others. Experiences that encourage exploration, recognition of feelings and socialisation can help build social-emotional competencies for children concurrently and in later functioning (Eisenberg et al., 2007). These competencies will allow a child to maintain secure relationships with others, express emotions constructively and become independent in exploring their environment (Ashdown & Bernard, 2012).

Perry (2000) suggests that social-emotional development may be most optimal in the preoperational period as 90% of the brain develops in the first three years, referred to as a period of plasticity. During the preoperational period, a child's experiences assist in determining the development of their early neural circuitry and executive functioning within their brain. A child's environmental interactions in the preoperational period can often have a lasting effect on the predispositions that affect emerging brain architecture, serving long-term consequences on a child's social-emotional functioning in adolescence (Blair, 2002; Shonkoff

& Phillips, 2000; Shonkoff et al., 2012). Understanding the role of early social-emotional development and its influence on shaping the child's brain architecture plays a crucial role in fostering social-emotional functioning in adolescence. Identifying a child's early social-emotional development allows potential deficits towards later functioning to be identified, thus, helping to identify a child that may require early intervention (Collins & Laursen, 1999; Jones, Greenberg & Crowley, 2015).

Parenting Behaviours and Social-Emotional Development

Parenting behaviours are one of the primary mechanisms through which parents directly influence children's development and wellbeing. During the preoperational period a child learns to regulate their behaviours, emotions, and cognitive states with the assistance of their parents (Williams & Berthelsen, 2017). Parents assist in developing their child's social-emotional development through being responsive to their child's emotional needs and responding appropriately and consistently (Posner et al., 2014). Parenting behaviours play an integral role in defining the parent-child environment and forming secure attachment with the child, has been associated with the development of social-emotional competencies (Sroufe et al., 2005). Parents can model a child's social-emotional competencies through positive and stimulating parent-child interactions (Williams & Berthelsen, 2017).

Parent-child interactions assist in providing a child with the foundational basis, steady or unsteady, towards a child's social-emotional development that will follow (Eisenberg et al., 2001; Eisenberg et al., 2002). When parents are not responsive or attuned to their child's needs, a child is unlikely to learn to manage their emotions; straining a child's capacity to develop and practice social-emotional competencies (Cole, Martin & Dennis, 2004). Children with insecure attachments are less able to regulate their emotions which puts them at risk of developing problematic social-emotional functioning. Thus, responsive parenting can shape a child's development in ways that

support longer-term functioning (Williams & Berthelsen, 2017).

Several studies have assessed the association between specific parenting behaviours on a child's social-emotional outcomes. Parent-child interactions and parenting behaviours have consistently demonstrated an association between a child's social-emotional development and later functioning (e.g., Edwards,2012; Williams & Berthelsen, 2017; Lam, Chung & Li, 2018; Shewark et al.,2021;).

However, it is unclear the extent to which parenting behaviours affect children's social-emotional trajectories and if the strength of the relationship varies across different developmental periods (Ferreira et al., 2016). Bradley and Corwyn (2005) suggest that a child within the preoperational period is more likely to be predisposed by parenting behaviours than other developmental periods. In contrast, Edwards (2012) found that a child who was exposed to 'less optimal' parenting behaviours was more likely to be classified as having elevated difficulties, according to the cut-off points of the Strengths and Difficulties measure across developmental periods. To date, few studies have investigated the paternal contributions to a child's early competencies and later social-emotional behaviours, with mixed results. The Ferreira et al. (2016) found that the quality of the relationship between a paternal figure and child is directly associated with a child's social-emotional competencies, whereas maternal parenting was indirectly associated. In contrast, other studies have suggested that paternal parenting has a relatively small influence on children's social-emotional outcomes than maternal behaviours (Edwards, 2012; Baptista et al., 2016).

Current Study

A child's early experiences within their environment and their social-emotional development in the preoperational period may predispose the child to exhibit more significant (or less) concern towards later social-emotional functioning in adolescence. The aim of the current is therefore to assess the relationship between parenting behaviours and a child's early

social-emotional developmental competencies; with later social-emotional functioning. While also testing whether early social-emotional difficulties mediate the relationship between parental hostility and later social-emotional functioning in adolescence. Previous research has adressed the direct associations between parenting and early social-emotional development, without encapsulating an in-depth understanding of the different developmental pathways. The first research aim will examine the association between parenting behaviours (hostility and warmth), a child's preoperational social-emotional development and its association with later social-emotional difficulties into adolescence. Hypothesis 1: An increase in hostile parenting behaviours will positively correlate with a child's problematic social-emotional development and later functioning difficulties. In contrast, parental warmth will have a negative correlation with a child's problematic social-emotional development and functioning difficulties. The second research aim will assess whether an adolescent's social-emotional difficulties differ based on their early childhood classification (below or above) the cut-off score for social-emotional functioning. Hypothesis 2: Low social-emotional functioning in the preoperational period will be related to a higher level of social-emotional difficulties in adolescence. The third research aim will assess whether there is an indirect association between early parenting hostility (paternal and maternal) at 2–3 years and social-emotional difficulties at 12-13 years, through a child's problematic social-emotional development at 2-3 years. Hypothesis 3: Early social-emotional developmental problems will mediate the relationship between parenting hostility and social-emotional functioning difficulties.

METHOD

Data Source

The data for the study was sourced from the *Growing Up in Australia study* (Edwards,2012). The Longitudinal Study of Australian Children (LSAC) data set is a nationally representative sample of Australian children which commenced in 2004. The data set comprises 10,000 participants between two cohorts of children, the kindergarten (K) and birth (B) cohort. The data collection was obtained every two years to capture different developmental domains. The study provided insight into children's development across multiple domains. The current analyses focused on two waves within the B cohort (waves 2 and 7) when the children were 2–3 years of age and then again when the children 12–13 years of age. The data was collected via interviews, direct child assessments and self-report questionnaires (Edwards, 2012). The inclusion criteria for this study were Australian children who had data available for their social-emotional outcomes at wave 2 (2-3 years) and wave 7 (12-13 years) of the data collection. Additionally, data for the maternal and paternal parenting behaviours of the study child were also required as part of the inclusion criteria. A child was excluded from the current study if any data was missing. The final analytic sample resulted in 2,246 families' observations being utilised for this study.

Measures

Parental Psychological Difficulties

Parental psychological difficulties were evaluated using the *Kessler 6 Mental Health Scale* (K6), addressing non-specific psychological distress (Kessler et al., 2003). The respondent rated every six items ("worthless;" "hopeless;" "restless or fidgety;" "nervous;" "everything was an effort;" "so depressed that nothing could cheer you up") on a five-point

Likert scale ($1 = all \ the \ time$ to $5 = none \ of \ the \ time$. The scores for the six individual items were then averaged to collate a mean score.

Parental Hostility

Parental hostility was assessed through five items adapted from Statistics Canada (1999) *National Longitudinal Survey of Children and Youth* and items from the National Centre for Statistics (2004) *Early Childhood Longitudinal Study of Children*. The five items ("Angry with SC [Study Child];" "Shout at SC;" "SC get on your nerves;" "Lose temper with SC;" "Leave SC alone when upset") were reported on through a 10-point Likert scale (1 = *not at all* to 10 = *all the time*).

Parental Warmth

Parental warmth (paternal and maternal) was assessed using six items adapted from a questionnaire that Paterson and Sanson (1999) developed. Parenting warmth was assessed through six items ("Tell this child how happy he/she makes you;" "Hug or hold this child for no particular reason;" "Have warm, close times together with this child;" "Feel close to the child both when he/she was happy and when he/she was upset;" "Express affection by hugging, kissing and holding this child;" "Enjoy listening to the child and doing things with him/her") on a 5-point Likert scale (1 = Never/Almost never to 5 = Always/Almost always).

Social-Emotional Problems/Competence

The child's social-emotional competencies were evaluated through 43 items in Briggs-Gowan and Carter (2007), *Brief Infant-Toddler Social and Emotional Assessment* (*BITSEA*) questionnaire. The parent responded to the items ("Follows rules;" "Often gets very upset;" "Seems nervous, tense or fearful;" "Cries or tantrums until he/she is exhausted;" "Plays well with other children;" "Can pay attention for a long time") on a 3-point Likert scale (0=not true/rarely to 2=very true/always).

Adolescents Social-Emotional Difficulties

Social-emotional functioning in adolescence was assessed using Goodman (1997), Strengths and Difficulties Questionnaire (SDQ). The adolescent completed 20 items ("I am restless, I cannot stay still for long;" "I get a lot of headaches, stomach-aches or sickness;" "I would rather be alone than with people of my age;" "I am often accused of lying or cheating") on a 3-point Likert scale (0=not true/rarely to 2=very true/always).

RESULTS

Descriptive Statistics

The descriptive statistics and Pearson correlation coefficient among all variables for the 2,246 participants are presented in Table 1. The correlations between all variables were in the hypothesised directions. A child's social-emotional development problems (2–3 years) presented with a positive correlated with maternal and paternal hostile parenting and later social-emotional functioning difficulties and negatively correlated with social-emotional competence, as well as paternal and maternal warmth. In addition, the parenting warmth measures had a small positive relationship, whereas hostile warmth had a moderate effect on each other. A child's social-emotional development competencies (2–3 years) were negatively correlated with maternal and paternal hostility and later social-emotional difficulties were positively associated with maternal and paternal warmth. Social-emotional functioning difficulties in adolescence (12–13 years) were positively correlated with maternal and paternal hostility, while maternal warmth was but not significantly correlated. Finally, maternal and paternal hostility were positively correlated, as well as maternal and paternal warmth.

Children's social-emotional development problems (2–3 years) had a moderate effect size with maternal hostility. In contrast, social-emotional competencies, social-emotional functioning, paternal hostility, paternal and maternal warmth had small effect sizes. The effect size was also small between social-emotional developmental competencies (2–3 years), social-emotional functioning difficulties and parenting behaviours (maternal and paternal) for both hostility and warmth. The effect size between maternal and paternal hostility, paternal warmth, and social-emotional functioning difficulties at (12–13 years) was small. The effect

size was moderate between paternal and maternal hostility but small for paternal and maternal warmth.

Table 1

Descriptive Statistics and Pearson's Correlations for Study Variables

	Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. P	Paternal Parenting (Warmth)	4.32	0.53	-									
2. 1	Maternal Parenting (Warmth)	4.60	0.41	0.25***	-								
3. P	Paternal Parenting (Hostility)	3.18	1.39	-0.21***	-0.10***	-							
4. 1	Maternal Parenting (Hostility)	3.35	1.41	-0.10***	-0.11***	0.34***	-						
	Social-Emotional Competence (Wave 2)	26.4	2.28	0.14***	0.27***	-0.15***	-0.17***	-					
	Social-Emotional Problems (Wave 2)	29.7	4.12	-0.10***	-0.16***	0.18***	0.30***	-0.25***	-				
	Social-Emotional difficulties Wave 7)	8.89	5.50	-0.05*	-0.03	0.12***	0.10***	-0.09***	0.14***	-			
8. N	Maternal Mental Health	8.53	2.69	-0.05*	0.12***	0.09***	0.23***	-0.10***	0.36***	0.07***	-		
9. P	Paternal Mental Health	8.93	2.86	-0.13***	-0.06**	0.23***	0.06**	-0.03	0.11***	0.09***	0.16***	-	
10. S	SES	0.29	0.91	0.02	-0.05**	-0.07***	-0.09***	0.15***	-0.08***	-0.11***	0.00	-0.02	-

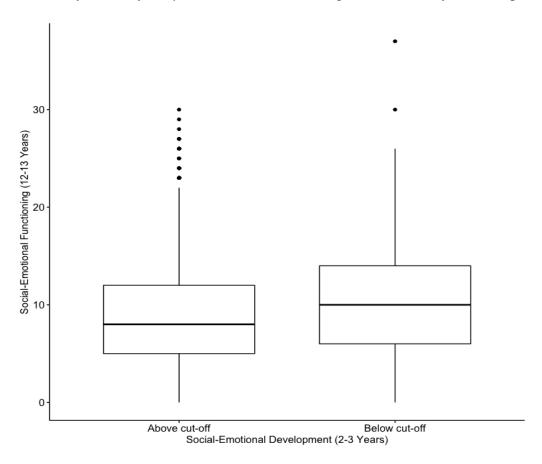
Note. *** p < 0.001** p < 0.01* p < 0.05, M and SD are used to represent mean and standard deviation, respectively.

Main Analyses

A Mann-Whitney U test was applied to address research question 2. The test evaluated the difference between below and above cut-off classifications for social-emotional functioning (2-3 years) and later social-emotional difficulties (12-13 years). The test revealed significant differences between later social-emotional outcomes for the below cut-off (Mdn = 10, N= 230) and above cut-off (Mdn = 8, N = 2,016), U = 189239, Z = -4.58, p = <.001, r = .10. As indicated in Figure 1, the analyses represent that the adolescents social-emotional difficulties differ based on their early childhood classification as being below or above the cut-off score for social-emotional development.

Figure 1

The classification of early social-emotional development and later functioning

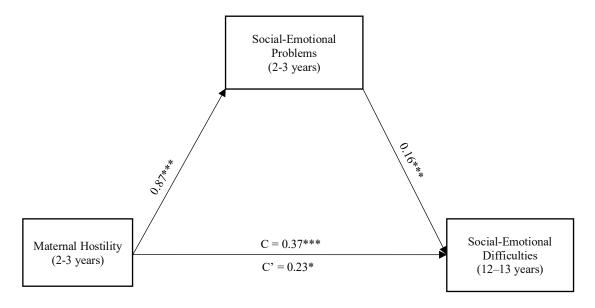


Note. The classification for social-emotional development problems are presented according to the cut-off values of the BITSEA scale.

Figure 2

Relationship Between Maternal Hostility and Later Social-Emotional Difficulties as

Mediated by Early Social-Emotional Problems



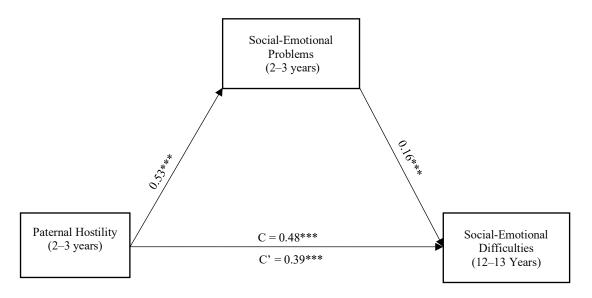
Note. The standardised regression coefficient between maternal hostility and social-emotional functioning difficulties (12-13 years) as Mediated by Social-Emotional Problems (2-3 years). *** p < 0.001** p < 0.01* p < 0.05.

The indirect effect between paternal hostility, social-emotional problems and social-emotional difficulties was (.87) *(.16) = .14. To test the significance of the indirect effect

a non-parametric bootstrapping procedure was applied. The unstandardized indirect effects were computed for 5,000 individual bootstrapped samples, and the 95% confidence interval was computed by determining the indirect effects at the 2.5th and 97.5th percentiles. The bootstrapped unstandardized indirect effect was .09, with a 95% confidence interval that ranged from 0.09 to 0.2. Therefore, the output of the indirect effect was statistically significant (p<.001).

Figure 3

Relationship Between Paternal Hostility and Later Social-Emotional Difficulties as Mediated by Early Social-Emotional Problems



Note. The standardised regression coefficient between paternal hostility and social-emotional functioning difficulties (12-13 years) as Mediated by Social-Emotional Problems (2-3 years). *** p < 0.001** p < 0.01* p < 0.05.

The indirect effect between paternal hostility, social-emotional problems and social-emotional difficulties was (.53) *(.16) = .09. To test the significance of the indirect effect a non-parametric bootstrapping procedure was applied. The unstandardized indirect effects were computed for 5,000 individual bootstrapped samples, and the 95% confidence interval was computed by determining the indirect effects between 2.5th and 97.5th percentiles. The bootstrapped unstandardized indirect effect was .09, with a 95% confidence interval that ranged from 0.05 to 0.12. Therefore, the output of the indirect effect was statistically significant (p<.001).

Discussion

The present study explored associations between early parenting behaviours and social-emotional competencies and developmental problems at 2-3 years and social-emotional functioning difficulties at 12-13 years while accounting for the family's socioeconomic position and rates of parental mental health. The study also addressed if the classification of early social-emotional developmental problems (below and above cut-off) would indicate an adolescent's later social-emotional functioning, suggesting that there would be a significant difference between groups. Of particular interest to this research report was whether the association between hostile parenting and later social-emotional functioning difficulties were direct or indirect through an influence on a child's early social-emotional developmental problems. While also assessing if the magnitude of the parenting behaviours effect on a child's social-emotional functioning differed between maternal and paternal parenting reports.

The baseline analysis found that self-reported levels of parental warmth for both maternal and paternal parenting had a small positive effect on social-emotional developmental competencies. In contrast, they had a small negative effect on social-emotional developmental problems for children at 2-3 years. Interestingly, maternal hostility had a more significant effect on a child's social-emotional developmental problems, which displayed a moderate positive effect compared to the small effect for the paternal counterparts. Both maternal and paternal hostility presented a small positive effect on an adolescent's social-emotional functioning, while only paternal warmth was associated with the child's later social-emotional functioning. The correlations noted maternal hostility presented with the most significant association to child-related behaviours, with a moderate effect on social-emotional developmental problems. The study indicates that more robust

associations with hostile parenting over warmth are related to child-related outcomes. The analysis also found that parental mental health had small positive associations with parenting behaviours. At the same time, maternal mental health also has a moderately positive impact on a child's social-emotional developmental problems. The families' socioeconomic positions negatively affected all variables, except for paternal warmth and parents' mental health.

The study was interested in whether the average data points for the two classification groups for social-emotional developmental problems had differed reports of social-emotional functioning in adolescence. The child was classified as either having below or 'low' social-emotional development in the preoperational period, compared to the above or 'high' functioning according to the BITSEA scale. As shown in Figure 1, the analysis showed a difference in the child's social-emotional functioning based on their earlier functioning classification. The study suggests that early social-emotional developmental outcomes in the preoperational period may help assess whether children are at risk for deficits in social-emotional functioning in adolescence. Understanding how social-emotional development can predict future social-emotional functioning outcomes could be of great value in helping children develop into healthy adolescents.

As shown in Figures 2 and 3, the mediation models tested the indirect associations between early hostile parenting behaviours (maternal and paternal) and later social-emotional functioning in adolescents through early social-emotional developmental difficulties, indicating a partial mediation for both models. Early parenting hostility for both mothers and fathers are associated with poorer social-emotional development in children 2-3 years. In turn, social-emotional development difficulties at 2–3 years were associated with problematic social-emotional functioning in children ten years later. The findings also indicated the relative impact of early social-emotional developmental problems on a child's later social-

emotional functioning in adolescence while also considering the contribution of parenting behaviours in the developmental path.

A child of a parent who presents with higher frequencies of self-reported hostility was noted to present with higher levels of social-emotional developmental problems. These children also presented with higher levels of social-emotional functioning difficulties in adolescence. The higher levels of parental hostility, which were assessed through selfidentified levels of shouting, anger, temper, and supports offered to the SC, could reflect the parents' levels of social-emotional functioning in addition to the child's social-emotional development problems. The correlation between maternal hostility and social-emotional problems in children 2–3 years could suggest that negative parenting behaviours results in a child not being subjected to behaviour modelling that supports their social-emotional developmental competencies (Healy, Sanders & Iyer, 2014). The correlation between maternal and paternal hostility supports Newland, Ciciolla and Crnic (2014), which found that hostility in one parent correlates with the other, leading to a harsh and unsupportive family environment. As a result, research in the future should aim to address the association of specific family characteristics on increases in parental hostility. The findings also indicated that low social-emotional classification in the preoperational period displayed differences in later social-emotional functioning in adolescence. The differences in low and above cut-off classifications for low social-emotional functioning during the preoperational periods suggest that early low functioning identification may be an essential indicator towards later functioning for children.

Bidirectional Parent-Child Relationships

As indicated by previous research (Williams & Berthelsen, 2017; Lam, Chung & Li, 2018), the figures in this study assessed the association between parenting behaviours and their lasting impact on the developmental components of a child's social-emotional functioning. While it is known that inherited traits and environmental influences affect parent-child interactions, not much is known about how child-related effects impact parenting behaviours and the child's later social-emotional outcomes. Shewark et al. (2021) conducted research that established that hostile parenting behaviours often result from a child's negative emotions. The presence of a bidirectional relationship is supported by Shaffer, Lindhiem, Kolko & Trentacosta (2012), who found significant influence of child-related developmental problems on multiple parenting practices, comparative to the parent-to-child effects. This study provides the basis for further research to explore the parent-child relationship from a bidirectional approach.

Parental Social-Emotional Functioning

Children primarily learn from parents modelling behaviours, including social-emotional developmental competencies and problems (Eisenberg & Fabes, 1994; Eisenberg, Fabes, Carlo, & Karbon, 1992). While this study assessed the association between parenting behaviours and developmental outcomes, further research should also consider the impact of a parent's social-emotional functioning regarding modelling a child's early behaviours (Sanders and Mazzucchellin, 2013). Sanders and Mazzucchelli (2013) study supported this, suggesting that a parent's responsiveness to their children's emotional development requires a parent to demonstrate a high level of social-emotional competence on their part. Further research should aim to explore whether parents with social-emotional difficulties may model

behaviours indicative of complex functioning. Further exploration into a parent's socialemotional functioning may suggest that a parent's social-emotional competencies reflect their parenting approach (Sanders and Mazzucchelli 2013).

Implications

The findings of the current study highlight the role of parenting behaviours on childrelated outcomes. As a result, emphasis should be placed on parental interventions to aid in equipping parents with tools to assist in fostering early social-emotional development competencies in their children (Vohs & Baumeister, 2011; Williams & Berthelsen, 2017). It is further implicated that a child developing early social-emotional competencies is essential towards later developing better relationships and interpersonal skills that will serve them into adolescence and across their lifespan (Collins & Laursen, 1999). This study also supports Blair (2002) research which suggests that understanding the relationship between a child's early development and later functioning from a biological perspective is essential. Further research into the development of a child's brain architecture reflective of their preoperational period experiences is essential. The association between early developmental competencies and later functioning may support the idea that a child's brain architecture development (or lack of) may affect their functioning across the lifespan (Blair, 2002; Shonkoff & Phillips, 2000; Shonkoff et al., 2012). Finally, the Thomas and Chess (1977) study was supported, suggesting that a child's optimum social-emotional functioning outcomes may depend on the type of parenting that the child receives. A child's social-emotional development is primarily shaped by a child's external environment, such as parental behaviours, highlighting the importance of providing a secure environment (Williams & Berthelsen, 2017).

Strengths and Limitations

A strength of this study is that it used a representative, community-based sample with longitudinal data over two waves of a child's development. The sample population used was sufficient in being able to accommodate for the analyses planned. Secondly, the measures that were employed in the LSAC study displayed both reliability and validity which supports the quality of the research within the study. Studies are often known to rely on a single parental respondent rather than both due to the mother being the primary respondent; this study also addresses the influence of paternal parenting behaviours on child-related outcomes. It is worth noting that further research should investigate how parenting behaviours interact with each other. Concerning generalisability, the findings need to be replicated in other national and cultural contexts. Another concern of mediation models, it that it can sometimes be compromised by low power (Preacher, 2015), although with 2,246 observation this was not a problem for the current study.

The current study also suffers from notable limitations; the ten-year increment between Wave 2 and 7, there is increased opportunities for extraneous variables to affect the results. Extraneous variables can be particularly problematic when working within the preoperational and early adolescence, where developmental change is rapid. The study did not control for contextual socio-demographic or cultural variables, which may influence children's developmental paths involving parenting behaviours and social-emotional outcomes. In the future research should address a broader range of contextual variables than what this study has accounted for. Further research should also address the child-related effects on their social-emotional functioning outcomes. The study established that the variance in social-emotional difficulties, which is explained by the models is low, despite the findings indicating role of early developmental social-emotional difficulties and parental

hostility on later social-emotional functioning. Finally, we cannot infer causation from these findings alone or rule out the potential for confounding variables.

Conclusions

The study established links between parenting behaviours and social-emotional developmental outcomes in the preoperational period and later functioning. This study contributes to the knowledge and understanding of the crucial role of quality parenting behaviours. The strength of the pathways from hostile parenting (maternal and paternal) behaviours through early social-emotional developmental outcomes was a primary concern of this study due to its potential impact over a child's later functioning. In the preoperational period, a parent's responsiveness and non-hostility are essential towards the child's outcomes. Further emphasis should be placed on providing parents with assistance to identify their parenting behaviours' influence on a child's ability to develop social-emotional competence. Early social-emotional competence is crucial in assisting a child with social-emotional functioning in adolescence and across their lifespan. Overall, the current study emphasises parents' role in shaping a child's social-emotional development while also addressing its significant impact on adolescence. Addressing early parenting behaviours and children's social-emotional capacities will likely have substantial lifelong learning and well-being outcomes.

References

- Amir, H. (2017). Psychology Child Emotions The Link between Inter-Parental Conflict and Health Emotional Development of Children. Journal Of Psychology & Clinical Psychiatry, 7(2). doi: 10.15406/jpcpy.2017.07.00431
- Ashdown, D., & Bernard, M. (2011). Can Explicit Instruction in Social and Emotional Learning Skills Benefit the Social-Emotional Development, Well-being, and Academic Achievement of Young Children?. *Early Childhood Education Journal*, 39(6), 397-405. doi: 10.1007/s10643-011-0481-x
- Baptista, J., Osório, A., Martins, E., Castiajo, P., Barreto, A., & Mateus, V. et al. (2016).
 Maternal and Paternal Mental-state Talk and Executive Function in Preschool
 Children. Social Development, 26(1), 129-145. doi: 10.1111/sode.12183
- Baron, R., & Kenny, D. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal Of Personality And Social Psychology*, *51*(6), 1173-1182. doi: 10.1037/0022-3514.51.6.1173
- Blair, C. (2002). School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American*Psychologist, 57(2), 111-127. doi: 10.1037/0003-066x.57.2.111
- Blandon, A., Calkins, S., & Keane, S. (2010). Predicting emotional and social competence during early childhood from toddler risk and maternal behavior. *Development And Psychopathology*, 22(1), 119-132. doi: 10.1017/s0954579409990307
- Briggs-Gowan, M., & Carter, A. (2007). Applying the Infant-Toddler Social & Emotional Assessment (ITSEA) and Brief-ITSEA in early intervention. *Infant Mental Health Journal*, 28(6), 564-583. doi: 10.1002/imhj.20154

- Bradley, R., & Corwyn, R. (2005). Caring for children around the world: A view from HOME. *International Journal Of Behavioral Development*, 29(6), 468-478. doi: 10.1177/01650250500146925
- Bush, G., Luu, P., & Posner, M. (2000). Cognitive and emotional influences in anterior cingulate cortex. *Trends In Cognitive Sciences*, 4(6), 215-222. doi: 10.1016/s1364-6613(00)01483-2
- Cole, P., Martin, S., & Dennis, T. (2004). Emotion Regulation as a Scientific Construct:

 Methodological Challenges and Directions for Child Development Research. *Child Development*, 75(2), 317-333. doi: 10.1111/j.1467-8624.2004.00673.x
- Collins, W. A., & Laursen, B. (Eds.). (1999). *Relationships as developmental* contexts. Lawrence Erlbaum Associates Publishers
- Davidson, R., Pizzagalli, D., Nitschke, J., & Putnam, K. (2002). Depression: Perspectives from Affective Neuroscience. *Annual Review Of Psychology*, *53*(1), 545-574. doi: 10.1146/annurev.psych.53.100901.135148
- Denham, S. (1986). Social Cognition, Prosocial Behavior, and Emotion in Preschoolers: Contextual Validation. *Child Development*, *57*(1), 194. doi: 10.2307/1130651
- Denham, S. A. (1998). Emotional Development in Young Children. New York, NY: Guilford Press.
- DeVries, R. (1997). Piaget's Social Theory. *Educational Researcher*, 26(2), 4-17. doi: 10.3102/0013189x026002004
- Edwards, B. (2012). Growing up in Australia: The Longitudinal Study of Australian Children—The first decade of life. Family Matters, 91, 7–17.
- Eisenberg, N., Fabes, R., & Murphy, B. (1996). Parents' Reactions to Children's Negative

- Emotions: Relations to Children's Social Competence and Comforting Behavior. Child Development, 67(5), 2227. doi: 10.2307/1131620
- Eisenberg, N., Gershoff, E., Fabes, R., Shepard, S., Cumberland, A., & Losoya, S. et al. (2001). Mother's emotional expressivity and children's behavior problems and social competence: Mediation through children's regulation. Developmental Psychology, 37(4), 475-490. doi: 10.1037/0012-1649.37.4.475
- Eisenberg, N., Guthrie, I., Cumberland, A., Murphy, B., Shepard, S., Zhou, Q., & Carlo, G. (2002). Prosocial development in early adulthood: A longitudinal study. Journal Of Personality And Social Psychology, 82(6), 993-1006. doi: 10.1037/0022-3514.82.6.993
- Eisenberg, N., Michalik, N., Spinrad, T., Hofer, C., Kupfer, A., & Valiente, C. et al. (2007).

 The relations of effortful control and impulsivity to children's sympathy: A longitudinal study. *Cognitive Development*, 22(4), 544-567. doi: 10.1016/j.cogdev.2007.08.003
- Ferreira, T., Cadima, J., Matias, M., Vieira, J. M., Leal, T., & Matos, P. M. (2016). Preschool children's prosocial behavior: The role of mother-child, fatherchild and teacher-child relationships. Journal of Child and Family Studies, 25(6), 1829–1839. doi: 10.1007/s10826-016-0369-x
- Goodman R (1997) The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, 38, 581-586.
- Healy, K., Sanders, M., & Iyer, A. (2014). Facilitative Parenting and Children's Social,

 Emotional and Behavioral Adjustment. *Journal Of Child And Family Studies*, 24(6),

 1762-1779. doi: 10.1007/s10826-014-9980-x

- Housman, D. (2017). The importance of emotional competence and self-regulation from birth: a case for the evidence-based emotional cognitive social early learning approach. *International Journal Of Child Care And Education Policy*, 11(1). doi: 10.1186/s40723-017-0038-6
- Jones, D., Greenberg, M., & Crowley, M. (2015). Early Social-Emotional Functioning and Public Health: The Relationship Between Kindergarten Social Competence and Future Wellness. *American Journal Of Public Health*, 105(11), 2283-2290. doi: 10.2105/ajph.2015.302630
- Kim, Y., & Baylor, A. (2006). Pedagogical Agents as Learning Companions: The Role of Agent Competency and Type of Interaction. *Educational Technology Research And Development*, 54(3), 223-243. doi: 10.1007/s11423-006-8805-z
- Kessler, R., Berglund, P., Demler, O., Jin, R., Koretz, D., & Merikangas, K. et al. (2003). The Epidemiology of Major Depressive Disorder. *JAMA*, 289(23), 3095. doi 0.1001/jama.289.23.3095
- Kochanska, G., Philibert, R., & Barry, R. (2009). Interplay of genes and early mother-child relationship in the development of self-regulation from toddler to preschool age. *Journal Of Child Psychology And Psychiatry*, 50(11), 1331-1338. doi: 10.1111/j.1469-7610.2008.02050.x
- Lam, C., Chung, K., & Li, X. (2018). Parental Warmth and Hostility and Child Executive Function Problems: A Longitudinal Study of Chinese Families. *Frontiers In Psychology*, 9. doi: 10.3389/fpsyg.2018.01063
- Landy, S. (2009). Pathways to competence: Encouraging healthy social and emotional development in young children (2nd ed.). Paul H Brookes Publishing.
- McFarland, M. (2017). Poverty and Problem Behaviors across the Early Life Course: The

- Role of Sensitive Period Exposure. *Population Research And Policy Review*, *36*(5), 739-760. doi: 10.1007/s11113-017-9442-4
- National Center for Education Statistics. (2004). Early Childhood Longitudinal Study, Birth cohort 9-month restricted-use data files user's manual. NCES 2004-093.

 Washington, DC: Author.
- Newland, R., Ciciolla, L., & Crnic, K. (2014). Crossover Effects Among Parental Hostility and Parent–Child Relationships During the Preschool Period. *Journal Of Child And Family Studies*, 24(7), 2107-2119. doi: 10.1007/s10826-014-0012-7
- Paterson, G., & Sanson, A. (1999). The association of behavioural adjustment to temperament, parenting and family characteristics among 5 year old children. *Social Development*, 8, 293-309.
- Pesonen, A., Räikkönen, K., Heinonen, K., Komsi, N., Järvenpää, A., & Strandberg, T. (2008). A Transactional Model of Temperamental Development: Evidence of a Relationship between Child Temperament and Maternal Stress over Five Years. *Social Development*, 17(2), 326-340. doi: 10.1111/j.1467-9507.2007.00427.x
- Preacher, K. (2015). Advances in Mediation Analysis: A Survey and Synthesis of New Developments. *Annual Review Of Psychology*, 66(1), 825-852. doi: 10.1146/annurev-psych-010814-015258
- Sameroff, A. (2010). A Unified Theory of Development: A Dialectic Integration of Nature and Nurture. *Child Development*, 81(1), 6-22. doi: 10.1111/j.1467-8624.2009.01378.x
- Sanders, M., & Mazzucchelli, T. (2013). The Promotion of Self-Regulation Through

 Parenting Interventions. *Clinical Child And Family Psychology Review*, *16*(1), 1-17.

 doi: 10.1007/s10567-013-0129-z
- Schore, A. (2001). The effects of early relational trauma on right brain development, affect

- regulation, and infant mental health. *Infant Mental Health Journal*, 22(1-2), 201-269. doi: 10.1002/1097-0355(200101/04)22:1<201::aid-imhj8>3.0.co;2-9
- Shonkoff, J. P., & Phillips, D. A. (Eds.). (2000). From neurons to neighborhoods: The science of early childhood development. National Academy Press.
- Spinrad, T., Eisenberg, N., Cumberland, A., Fabes, R., Valiente, C., & Shepard, S. et al. (2006). Relation of emotion-related regulation to children's social competence: A longitudinal study. *Emotion*, 6(3), 498-510. doi: 10.1037/1528-3542.6.3.498
- Sroufe, L. A., Egeland, B., Carlson, E. A., & Collins, W. A. (2005). The development of the person: The Minnesota study of risk and adaptation from birth to adulthood. Guilford Press.
- Statistics Canada (1999). *National Longitudinal Survey of Children & Youth Cycle 3 Survey Instruments 1998 99. Book 1 Parent & Child.* Retrieved from

 http://www.statcan.gc.ca/imdb-bmdi/instrument/4450 Q2 V2-eng.pdf
- Thompson, R. (1994). Emotional Regulation: A Theme in Search of Definition. *Monographs Of The Society For Research In Child Development*, *59*(2-3), 25-52. doi: 10.1111/j.1540-5834.1994.tb01276.x
- Thomas A, Chess S. Temperament and development. New York, NY: Brunner/Mazel; 1977.
- Thompson, R., & Lagattuta, K. Feeling and Understanding: Early Emotional

 Development. *Blackwell Handbook Of Early Childhood Development*, 317-337. doi: 10.1002/9780470757703.ch16
- Varni, J., Limbers, C., & Burwinkle, T. (2007). How young can children reliably and validly self-report their health-related quality of life?: An analysis of 8,591 children across age subgroups with the PedsQL™ 4.0 Generic Core Scales. *Health And Quality Of Life Outcomes*, 5(1). doi: 10.1186/1477-7525-5-1
- Vohs, K. D., & Baumeister, R. F. (Eds.). (2011). Handbook of self-regulation: Research,

theory, and applications (2nd ed.). Guilford Press.

Williams, K., & Berthelsen, D. (2017). The Development of Prosocial Behaviour in Early Childhood: Contributions of Early Parenting and Self-Regulation. *International Journal Of Early Childhood*, 49(1), 73-94. doi: 10.1007/s13158-017-0185-5