Predictors of Mood and Anxiety in Employed Mothers with Preschool Children

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THESIS PORTFOLIO: CANDIDATE DECLARATION

Title of degree programme	**Professional Doctorate in Clinical Psychology**
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Declaration and signature of candidate
I confirm that the thesis submitted is the outcome of work that I have undertaken during my programme of study, and except where explicitly stated, it is all my own work. I confirm that the decision to submit this thesis is my own. I confirm that except where explicitly stated, the work has not been submitted for another academic award. I confirm that the work has been conducted ethically and that I have maintained the anonymity of research participants at all times within the thesis. Signed: Date:

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Preface

This thesis has been written in accordance with author guidelines for the Child Development Journal and Psychology of Women Quarterly. It is intended that the literature review will be submitted to the Child Development Journal and the empirical paper will be submitted to the Psychology of Women Quarterly. The journal guidelines can be found in Appendix A within the literature review and empirical paper chapters.

Word Count

Literature Review: 6897

Empirical Paper: 7998

Executive Summary: 2994

Thesis Abstract

This research thesis examines the influence of maternal employment on both mothers and their preschool infants (aged 0 to 4 years).

Paper one is a literature review, examining twelves studies on the relationship between maternal employment and the attachment of preschool infants to their mothers. Maternal employment was measured by the timing of return to employment, employment hours per week and employment status. The findings suggest that maternal employment may have limited influence on the attachment of preschool infants to their mothers. However, the timing of returning to employment was found to be associated with infant-mother attachment although more research is needed to understand the direction of this relationship. Clinical and future research implications are discussed, which include consideration of the overreliance on white, middle-class American samples. It is recommended that future research is needed with diverse samples from different socioeconomic and ethnic backgrounds.

Paper two is an empirical study on internet-mediated research which investigated whether marital (cohabiting) status, number of preschool children, perfectionism, perceived social support and number of employment hours per week were predictors of mood and anxiety in employed mothers of preschool infants. The study explored whether perfectionism significantly moderated the relationship between two of the variables, perceived social support and marital status, and mood and anxiety. Perceived social support and perfectionism significantly predicted mood and anxiety, accounting for 40.6% and 31.6% of the variance, indicating that they may be risk factors for poorer mood and higher anxiety. Perfectionism was not a significant moderator. Employed mothers reported better mood, lower anxiety and perfectionism than anticipated. The implications of the findings, clinical and research implications, limitations of the study and suggestions for future research are discussed.

Paper three is an executive summary that summarises the main points, findings and recommendations found in the empirical paper, ‘Predictors of Mood and Anxiety in Employed Mothers with Preschool Children.’ It is written to disseminate the findings of the empirical study to employed mothers and the general population.

Literature Review:

The influence of maternal employment on the mother-infant attachment of preschool infants

This paper has broadly been prepared in accordance with the submission guidelines of the Child Development Journal (Appendix A).

Total Word Count: 6897 (including abstract and excluding references and appendices).

Abstract Word Count: 127

Abstract

The literature review systematically searched and evaluated the existing literature on maternal employment and infant-mother attachment during the preschool period (0 to 4 years) because of increasing employment rates within this group. Twelve papers were reviewed, and only five studies reported a relationship between maternal employment and infant-mother attachment. Maternal employment was measured by timing of return to employment, employment status and employment hours. Timing of return to maternal employment was significantly associated with infant-mother attachment although the direction of this relationship was inconclusive. Overall, findings suggest that maternal employment may have limited association with infant-mother attachment. Findings should be treated cautiously because of overreliance on white, middle-class American samples and correlational data. Further research is needed with diverse samples from different socioeconomic and ethnic backgrounds.

Introduction

Attachment

Attachment theory is based on the work of Bowlby (1969) who wanted to understand children's emotional ties to their primary caregiver (often the mother). Bowlby drew on a range of disciplines such as evolutionary biology, ethology, and developmental psychology in his theory. From an evolutionary perspective, Bowlby postulated that infants are born with an innate need for closeness to their attachment figure because this increases the likelihood of their protection and survival (Bowlby, 1969, 1982). Proximity to their caregiver enables infants to be fed, to interact with others and to learn about their environment, all of which are imperative to their survival. Bowlby and Robertson (1952) noted that infants experience intense distress when separated from their caregiver (separation anxiety), requiring comfort upon their return. Infants display attachment behaviours such as crying because of a need such as hunger or distress and the caregiver responds sensitively and appropriately to that need providing them with comfort and security (Bretherton, 1987). This leads to the development and formation of attachment between the infant and caregiver. Furthermore, the primary caregiver acts as a secure base for exploring the world, as the infant looks to them to observe how they should respond to something new (Bowlby, 1982).

Attachment theory is a relational theory, proposing that an individual's earliest relationship acts as a model for all social relationships in the future. Therefore, what an individual may anticipate from others is based upon their experience of the primary attachment relationship (Bowlby, 1969, 1982). This early experience of attachment and the way the caregiver responds to the infant forms the infant's social identity and their understanding of the world and others (internal working model). Bowlby believed that infants who receive consistent, sensitive and responsive care by their primary caregiver form a secure attachment and internalise the belief that they are worthy of love, support and protection (Ainsworth, Blehar, Waters, & Wall, 1978). Subsequently, in future relationships, they may view others as being trustworthy, which guides their responsiveness to other people. Therefore, attachment in early life can impact upon

long term development such as social development, in the way an individual interacts with others and forms relationships in their later life.

Attachment between mothers and infants was measured using the 'Strange Situation' procedure, designed by Ainsworth and colleagues. The procedure was used to classify infants into patterns of attachment style based on observation of their reactions to a series of separations and reunions with their mother (Ainsworth, Bell, & Stayton, 1971; Ainsworth et al., 1978; Ainsworth & Wittig, 1969). Ainsworth et al., (1978) identified three major categories of attachment: secure attachment, ambivalent attachment (anxious-ambivalent) and avoidant attachment (anxious-avoidant). A fourth category, disorganised attachment was later identified by Main and Solomon (1990).

The attachment perspective proposes that infants may experience separations as an indication that their mother is unavailable to meet their needs. Past research has shown links between anxious-avoidant attachments in infants whose mothers were physically or psychologically unavailable which indicates that they were unresponsive to their children most of the time and disregarding of the infant's needs (Main & Western, 1982). Therefore, insecure attachments (anxious-ambivalent, anxious-avoidant and disorganised attachment) occur following disruptions in the early attachment relationship with the primary caregiver, impacting on subsequent social, emotional, cognitive and physical development (Sroufe, Egeland, Carlson, & Collins, 2005). The long-term implications of attachment can be explained in the case of ambivalently attached infants. These infants are reported to perceive that they are not safe with others because they may be hurt by them, that others do not love or support them and that they are unlovable. Therefore, infants with an ambivalent attachment appear highly suspicious of strangers, extremely distressed when separated from a caregiver and experience difficulties being comforted even upon the return of the caregiver. In adulthood, they are reluctant to become close to others, anxious about their partner not reciprocating feelings and they frequently experience relationship breakdowns (Bowlby, 1969).

Maternal employment

Maternal employment for this review refers to mothers in paid employment with the youngest child aged 0 to 4 years old (within the preschool period). The Office for National Statistics (ONS, 2017) reports that within England in 2017 there were 133,000 more employed mothers whose youngest child was 3 to 4 years old (65.1%) than in 1997 (55.8%). In September 2017, the British Government introduced a child care initiative offering parents in employment 30 hours of free childcare to encourage them to return to employment or to increase their employment hours (ONS, 2017). Maternal employment has also continued to rise in other Western countries. In the United States of America (USA) the proportion of employed mothers with children under six years old increased from 61.4% in 1997 to 65.1% in 2017 (Bureau of Labor Statistics, 2018). Increases in maternal employment rates within Western countries are particularly pertinent to this review because the current literature on the influence of maternal employment on the attachment of preschool children is based on findings that are mainly from Western countries.

The influence of early maternal employment on children

Following increases in maternal employment, concerns arose that infants may be deprived of consistent care, time and attention which may obstruct the development of a secure attachment with the mother (Huerta et al., 2011). Researchers interested in attachment, highlighted the importance of early life and attachment experiences, presenting the argument that maternal employment involves repeated separations between the mother and infant which may influence the quality of their attachment, impacting on the infant's subsequent emotional development (Bowlby, 1969; Nicol & Hardy, 2017).

Evidence also suggests that maternal employment affects the social, emotional, physical and cognitive development of children as links have been found with childhood obesity, poorer ability test scores and lower reading and mathematics achievements (Bernal, 2008; Waldfogel, Han, & Brooks-Gunn, 2002; Ruhm, 2004). However, findings by Baum (2003) suggest that negative effects of maternal employment are partially

offset by the positive effects of increased family income which is associated with better outcomes for children (Baum, 2003). Hence, it is important to comprehensively review the literature on the influence of maternal employment on child development to identify whether there is an overall positive or negative relationship between them.

Past research on the psychological impact of maternal employment in children has reported conflicting findings of it being detrimental or beneficial to children's wellbeing. Some studies have found that maternal employment is associated with parental stress due to mother's experiencing difficulties in balancing work with family life, resulting in increased stress within the home and in children's lives (Cooper, McLanahan, Meadows, & Brooks-Gunn, 2009; Heinrich, 2013).

Early literature reviews exploring the influence of maternal employment are based on comparative studies comparing children (preschool, school age and adolescents) of employed mothers with non-employed mothers. There have been mixed findings about the differences between children of employed and non-employed mothers across social attitudes and values, general mental health, social adjustment, independence and cognitive abilities such as achievement motivation and intellectual performance (Hoffman, 1984; Poznanski, Maxey, & Marsden, 1970; Wallston, 1973).

Previous reviews tended to focus on the influence of maternal employment on the cognitive and social development of infants rather than their attachment. Consequently, there have been limited reviews on the impact of maternal employment on attachment. Past literature has measured attachment and maternal employment in different ways, e.g. through measuring opportunities for breastfeeding, mothers' availability and the use of daycare or multiple caregivers (Etaugh, 1974; Nicol & Hardy, 2017; Schachere, 1990).

A review by Etaugh (1974) aimed to look at the influence of maternal employment on adjustment, school achievement, intelligence, activities and perceptions and attitudes of children. This review did not measure maternal employment specifically, but it looked at the role of mother-infant interactions on the attachment between infants and their employed mothers. Etaugh (1974) highlighted that secure attachments are formed

between preschool infants and their employed mothers based on frequent interactions between them rather than solely the mothers' availability. It also highlighted that there were fewer studies on the influence of maternal employment on preschool children in comparison to adolescents. The studies at the time of the review relied on self-report methods for measuring infant outcomes which proved difficult to administer with preschool infants.

The most recent literature review exploring the relationship between maternal employment and infant attachment was published by Schachere in 1990. This review looked at maternal employment and attachment within the context of the system of care that infants experience within their family. Schachere (1990) reviewed studies that measured both maternal employment and early entry into daycare. This review highlighted that there was conflicting evidence about the influence of maternal employment on attachment and that there was no definitive conclusion. Schachere (1990) suggested that only full-time work has been implicated in the development of insecure attachments and boys appear to be more vulnerable to the influence of maternal employment. It is unclear whether the timing of return to maternal employment in an infant's first year influences the quality of the infant-mother attachment. When drawing conclusions from this review, it is important to note that it was not conducted systematically and it is not clear how the studies included were identified or appraised. Schachere (1990) stated that the review looked at the attachment of infants to their mothers, but it did not define the age range or report the ages of infants in some of the studies which were appraised. Schachere (1990) suggested that although evidence is inconclusive regarding the influence of maternal employment on the attachment of infants, it may be beneficial for future research to further explore gender differences of infants and timing of return to maternal employment when investigating the relationship of maternal employment and attachment.

Review rationale and aims

Building on previous reviews, the current literature review will identify whether or not maternal employment influences the attachment of preschool infants (0 to 4 years) to their mothers using a systematic approach. There does not seem to be any further

literature reviews since 1990 on this topic. The review is particularly pertinent because maternal employment rates in many Western countries are continually increasing.

This review aims to identify from an attachment perspective, whether daily separations from the mother (attachment figure) due to maternal employment influences the quality of the infant-mother attachment (preschool infants' attachment to the mother). The review will help to further understand this relationship by identifying whether there is an overall trend that indicates if maternal employment is beneficial or detrimental to the infant-mother attachment, as previous evidence has been inconclusive. In order to answer this question, the review will include both early studies and more contemporary work since the last review in 1990 with the aim that this research will be reviewed in a more systematic manner (Schachere, 1990). It will focus on the preschool period because the numbers of mothers with preschool children in employment continue to increase in Western countries. Since the review carried out by Etaugh (1974), it is now easier to collect data on the outcomes of infants following developments in the use of observational methods rather than self-report measures. The review will conceptualise maternal employment as the measurement of the timing of return to employment, employment status (full-time, part-time and not employed) and number of employment hours per week. This will help to further understanding of the influence of these maternal employment factors on the attachment of preschool infants to their mothers.

This literature review aims to answer the following research question:

a) What is the influence of maternal employment on the attachment of preschool infants to their mothers?

Method

Search Strategy

The literature review was conducted systematically, and several databases were selected and searched through the online Healthcare Databases Advanced Search (HDAS). The HDAS was used to facilitate electronic searches across five databases: PsycINFO, MEDLINE (Medical Literature Analysis and Retrieval System Online), EMBASE (Excerpta Medica Database), CINAHL (Cumulative Index to Nursing and

Allied Health) and PubMed. Supplementary hand searching of existing research and electronic searching through Google Scholar was used to increase the breadth of literature reviewed**.** The literature search was conducted on the 4th June 2018 and yielded 691 studies, 158 duplicates were removed producing 533 studies. These 533 studies were reduced to 14 after screening of titles and abstracts before being reduced to 12 following a screening of the full-text (see *Figure 1.)*.

Publication bias was considered because the review was limited to studies from peer-reviewed journals and there are concerns that studies yielding statistically significant results are more likely to receive publication (Easterbrook, Gopalan, Berlin, & Matthews, 1991). A search for grey literature was carried out using the Google search engine and the Grey Literature Report website. Only one unpublished study, a dissertation, was found and it was limited to the abstract which was about maternal employment and attachment in Thailand (Nettip, 2004). Nettip (2004) did not find that maternal employment status and employment hours were related to attachment in infants and reported that attachment classifications identified were comparable to Western samples. These results are consistent with some findings reported in the studies included in this review.

Search Terms

Search terms (*Figure 2.)* were developed through initial scoping searches using Google Scholar, by examining the search terms used in published papers and using the Thesaurus function on the HDAS database, for each database, to include similar words or concepts.

child OR children OR toddler* OR babies OR baby OR infant* OR preschool* OR Pre-School* OR "0 to 4 years" OR "0-4 years"

AND

"Maternal Employment" OR " OR "Working Mothers" OR "Labour Force Participation" OR "Labor Force Participation" OR "Working Women" OR "Employment Status" OR "Employed Mothers" OR "Employed Mums" OR "Employed Moms"

AND

Attachment* OR “attachment relationship*” OR "secure attachment*" OR “infant-mother” OR “organized attachment*” OR “organised attachment*” OR “secure attachment*” OR “resistant attachment*” OR “disorganised attachment*” OR “disorganized attachment*” OR “avoidant attachment*” OR “insecure attachment*” OR “insecure ambivalent” OR “insecure-resistant” OR “insecure-disorganzied” OR “insecure-disorganised” OR “disorganised attachment” OR “disorganized attachment” OR “insecure avoidant” OR “anxious avoidant” OR “anxious ambivalent” OR “attachment disorders” OR “attachment behavio*” OR “stranger reactions” OR “internal working model”

Figure 2. Search terms

Search Criteria

The inclusion and exclusion criteria used to assess the eligibility of studies is listed below.

Inclusion Criteria:

1. Published in English due to lack of translation resources
2. Peer-reviewed
3. Participants to include both employed mothers and their preschool infants (0 to 4 years old)
4. A measure of the relationship of preschool infants’ attachment to their mothers
5. Maternal employment defined and measured by any number of hours spent in paid employment (part-time and full-time working hours) and timing of return to employment after birth in months

6. Statistical analysis of the relationship between preschool infants' attachment measure and maternal employment measure

Exclusion Criteria:

1. Studies which report maternal employment and mother-infant attachment statistics in combination with other variables that cannot be interpreted separately.

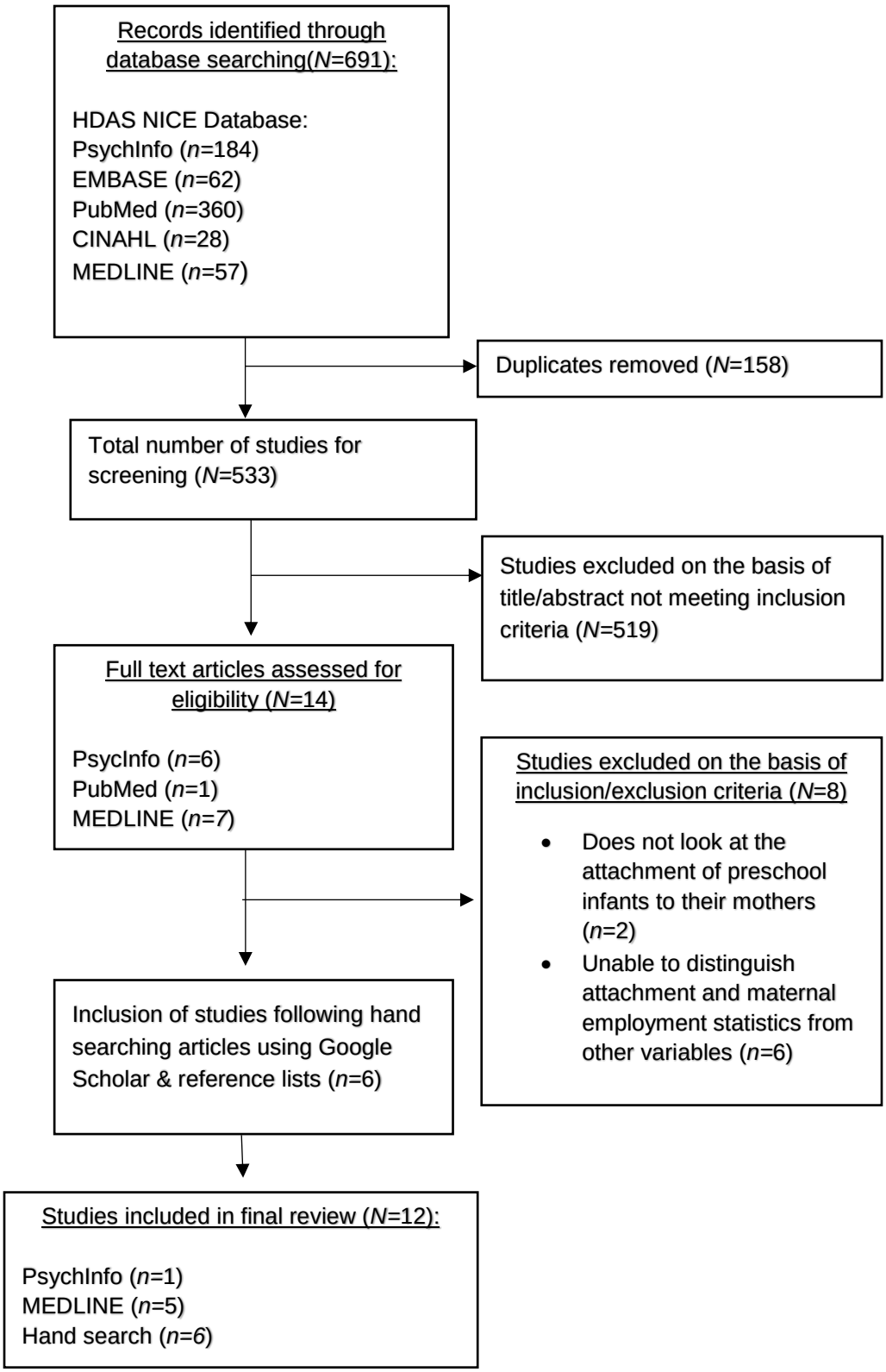

Figure 1. Flowchart demonstrating the literature screening process

Search Results

In total, there were 12 quantitative papers from 1984 until 2012 that were included in the literature review. A table was produced with an overview of these studies, describing sampling details, methodology, analysis, key findings, and methodological strengths and weaknesses (Appendix B).

Quality Assessment

The Crowe Critical Appraisal Tool (CCAT, Crowe, Sheppard, & Campbell, 2012) was used to appraise the quality of the studies that were included in the literature review (Appendix C). The quality ratings for each study were reported in a table (Appendix D). The CCAT was deemed to be the best appraisal tool because it covers a wide range of research designs, such as observational studies that consist of cross-sectional and longitudinal designs which were dominant in the studies included in this review.

The CCAT form is divided into eight categories and a total of 21-items for appraisal. The categories include preliminaries (title, abstract, writing style and presentation), introduction, design, sampling, data collection, ethical matters, results and discussion. Each of the categories has between one to four items which are rated on whether they are present, absent or not applicable to the study being appraised. Each category is scored on a six-point scale from 0 to 5 (0 being the lowest score and 5 being the highest). Adding the scores for each of the eight categories yields a total score (out of 40) for each study. The total score can be expressed as a percentage rounded to the nearest percent, and the higher the score, the higher the quality of the study. When reporting the appraisal of a study using the CCAT, the scores obtained in every category should be reported in addition to the total or total percentage score. This reporting method is encouraged to help distinguish between studies with overall high scores but very poor scores in one or more categories, from studies that consistently score highly across all categories. Domain scores and total percentages are presented in Appendix D.

Results

Participants & Settings

Of the 12 studies, eight were from the USA (Barglow, Vaughn, & Molitor, 1987; Benn, 1986; Brooks-Gunn, Han, & Waldfogel, 2010; Chase-Lansdale & Owen, 1987; Owen, Easterbrooks, Chase-Lansdale, & Goldberg, 1984; Easterbrooks & Goldberg, 1985; Weinraub, Jaeger, & Hoffman, 1988; Stifter, Coulehan, & Fish, 1993), one is from a rural town in Canada (Symons, 1998), one is from urban Australia (Harrison & Ungerer, 2002) and two are from non-Western countries, Israel (Scher & Mayseless, 2000) and China (Ding, Xiu, Wang, Li, & Wang, 2012). Six studies used a cross-sectional design and collected measures at a single point in time which ranged between infant ages of 12 and 20 months (Barglow et al., 1987; Benn, 1986; Ding, et al., 2012; Easterbrooks & Goldberg, 1985; Scher & Mayseless, 2000; Weinraub et al., 1988). The remaining six studies employed a longitudinal design and measured the same participants on repeated occasions, ranging from when infants were 5 months old to 2 years old (Brooks-Gunn et al., 2010; Chase-Lansdale & Owen, 1987; Harrison & Ungerer, 2002; Owen et al., 1984; Stifter, et al., 1993; Symons, 1998).

The number of participants in each study ranged from 30 to 900 comprising mother-infant dyads. One study included a sample of only male infants to investigate factors promoting secure attachment relationships between employed mothers and their sons (Benn, 1986). The participants in seven studies were predominantly of a Caucasian (White) background (Benn, 1986; Brooks-Gunn et al., 2010; Harrison & Ungerer, 2002; Chase-Lansdale & Owen, 1987; Easterbrooks & Goldberg, 1985; Stifter et al., 1993; Weinraub et al., 1988). Four studies did not report the ethnic background of their participants which makes it difficult to determine this influence on their findings and to establish if ethnicity was a confounding variable (Barglow et al., 1987; Ding, et al., 2012; Owen et al., 1984; Symons, 1998). One study was based on a sample of Jewish mothers from Ashkenzai (originally from Europe and North America) and Oriental (originally from North Africa or Asia) backgrounds to examine the influence of ethnicity on infants' attachment styles. Seven studies were based on participants from middle-class backgrounds (Barglow et al., 1987; Chase-Lansdale & Owen, 1987; Ding et al.,

2012; Easterbrooks & Goldberg, 1985; Owen, et al., 1984; Stifter et al., 1993; Weinraub et al., 1988). Four studies included participants from diverse socioeconomic backgrounds (Benn, 1986; Ding et al., 2012; Harrison & Ungerer, 2002; Scher & Mayseless, 2000) and one study reported family income the year before the infant's birth (Brooks-Gunn et al., 2010). The majority of the studies tried to maintain an overall homogenous sample by including participants with the same ethnicity and socioeconomic status to control for the influence of these factors on their findings.

Three of the studies were written by the same named researchers, and these studies recruited participants from a range of different settings including child birth classes, and family day-care homes (Owen et al., 1984; Easterbrooks & Goldberg, 1985; Chase-Lansdale & Owen, 1987).

Six studies recruited from previous longitudinal studies and the majority of these originally recruited from maternity wards (Harrison & Ungerer, 2002; Barglow et al., 1987; Weinraub et al., 1988; Brooks-Gunn et al., 2010; Symons, 1998; Scher & Mayseless, 2000). One study recruited participants from previous cross-sectional studies on maternal employment (Owen et al., 1984). Three studies recruited by placing advertisements in local newspapers and local venues in the community (Chase-Lansdale & Owen, 1987; Benn, 1986; Easterbrooks & Goldberg, 1985). One study recruited through a child health care network in Shanghai (Ding et al., 2012). Stifter et al., (1993) reported limited details on their recruitment of participants except that they included mothers at the time of birth who agreed to take part in a longitudinal study.

In relation to the sample size, nine of the studies did not report power calculations. Therefore, it is difficult to determine whether these studies were underpowered and thus unable to report significant effects because of a small sample. Owen et al. (1984) reported that they achieved a small sample which limited the statistical power to test for differences. Weinraub et al. (1988) was the only study to report the statistical power of the study and this was 0.69; however, they reported that their sample size *(n*=30) might have limited the power to find small to moderate differences. Harrison and Ungerer (2002) stated that they attempted to maintain the power of the study to detect an effect by limiting the number of variables they investigated.

Aims

Overall, the studies reported clear and focused aims. Two of the studies investigated the relationship between maternal employment and infant-mother attachment as part of a wider aim to explore the influence of maternal employment on the social, emotional and cognitive development of children (Brooks-Gunn et al., 2010; Weinraub et al., 1988). Two of the studies focused on the influence of infant gender on the relationship between maternal employment and infant attachment to both parents (Chase-Lansdale & Owen, 1987; Easterbrooks & Goldberg, 1985; Owen et al., 1984). One study by Benn (1986) focused on factors promoting secure attachments between infant sons to their employed mothers by looking at the influence of maternal psychological functioning on the infant-mother attachment. One study set out to explore the antecedents of ambivalent attachment patterns by measuring maternal employment and infant-mother attachment (Scher & Mayseless, 2000). Harrison and Ungerer (2002) wanted to determine whether maternal employment contributed to the infant-mother attachment security above and beyond other predictors of attachment (maternal sensitivity, demographic factors, social support and so forth).

Measures

Attachment

Attachment was measured by either quality of attachment security using Waters and Deane's (1985) Attachment Q-sort or by type of attachment pattern using Ainsworth's (1978) 'Strange Situation' Procedure. The 'Strange Situation' procedure is standardised and carried out in laboratory settings (Ainsworth et al., 1978). The 90 item Attachment Q-sort uses self-reports from mothers about the secure-behaviours of their infants and is completed by sorting a series of cards with standard vocabulary to describe the behaviour of their child, in a naturalistic setting such as in participants' homes (Waters & Deane, 1985).

Ten studies measured attachment by infants' attachment patterns in five categories: (secure, ambivalent/anxious-ambivalent, avoidant/anxious-avoidant and disorganised attachment (Barglow et al., 1987; Benn, 1986; Brooks-Gunn et al., 2010; Chase-

Lansdale & Owen, 1987; Ding et al., 2012; Easterbrooks et al. Owen et al., 1984; Harrison & Ungerer, 2002; Scher & Mayseless, 2000; Stifter et al., 1993). Two studies measured the quality of attachment security (Symons, 1998; Weinraub et al., 1988).

Maternal employment

Eleven studies explored the influence of maternal employment within the first 12 months of an infant's life with one study measuring the influence of maternal employment during the infant's first two years (Symons, 1998).

Maternal employment was measured according to maternal employment status: employed and not-employed (Chase-Lansdale & Owen, 1987; Ding et al., 2012; Stifter et al., 1993; Weinraub et al., 1988), employment hours: part-time, full-time and not-employed (Barglow et al., 1987; Easterbrooks & Goldberg, 1985). Scher and Mayseless (2000) categorised employed mothers according to those working more than 30 hours per week and those working less than 30 hours per week.

A majority of these studies included employed mothers who were employed full-time (Chase-Lansdale & Owen, 1987; Ding et al., 2012; Stifter et al., 1993; Weinraub et al., 1988) and one study did not report information about the characteristics of the employed group (Ding et al., 2012).

Measures of other factors

The aims of the studies included in the review, as previously discussed included many factors that were measured in addition to maternal employment and infant-mother attachment. Some of these factors were not relevant to the current research question and therefore they were not included in this review. Examples of such factors are the infant-father attachment which was measured in three of the studies (Chase-Lansdale & Owen, 1987; Easterbrooks & Goldberg, 1985; Owen et al., 1984), maternal depression and separation anxiety (Brooks-Gunn et al., 2010; Stifter et al., 1993), infant demographics (birth order, gender, non-maternal care) and family characteristics (socioeconomic status, parental education, family income, father's participation, family time, child-rearing attitudes, Barglow et al., 1987; Ding et al., 2012; Easterbrooks &

Goldberg, 1985; Owen et al., 1984; Scher & Mayseless, 2000; Symons, 1998; Weinraub et al., 1988).

Main Findings

Maternal employment status

Maternal employment status during an infant's first year was not significantly associated with the quality of infant-mother attachment when employed mothers were compared with non-employed mothers. This is supported by findings of four out of five studies measuring this association (Chase-Lansdale & Owen, 1987; Ding et al., 2012; Stifter et al., 1993; Weinraub et al., 1988). Two of the studies found that the proportion of insecure and secure attachment classifications were not associated with maternal employment status and thus employed and non-employed mothers did not differ on the number of secure and insecurely attached infants (Chase-Lansdale & Owen, 1987; Ding et al., 2012). Subsequently, based on these studies it was found that infants of employed and non-employed mothers do not significantly differ in their attachment.

In contrast, one study found that employed mothers were reported to have more insecurely attached infants in comparison to non-employed mothers. However, it is important to note that this association was only evident in the case of first-born infants (Barglow et al., 1987).

Maternal employment hours (part-time, full-time and non-employed)

Maternal employment hours during an infant's first year, in the case of part-time, full-time and no employment hours did not significantly predict infant attachment based on the findings of three studies (Brooks-Gunn et al., 2010; Easterbrooks & Goldberg, 1985; Owen et al., 1984)

Three of the studies concluded that secure and insecure infant-mother attachments were not significantly different for full-time, part-time and non-employed mothers (Brooks-Gunn et al., 2010; Easterbrooks & Goldberg, 1985; Owen et al., 1984). Furthermore, it is suggested that this finding remains stable because two of the studies measured infant-mother attachment across two time points and consistently found that

mothers working part-time, full-time or no employment hours did not significantly differ in the attachment of their children (Brooks-Gunn et al., 2010; Owen et al., 1984). One study also reported that employment changes in the second year of an infant's life are associated with more stability in the infant-mother attachment compared to more stable conditions of full-time or no employment (Owen et al., 1984).

One study presented contradictory findings, and their results showed that mothers employed full-time had a higher proportion of infants with insecure attachments (particularly ambivalent-attachment) in comparison to part-time employed and non-employed mothers (Scher & Mayseless, 2002). This study compared attachment according to ambivalent and secure attachment categories.

Timing of return to employment

Timing of return to maternal employment was significantly associated with attachment of infants to their mothers; however, there is inconclusive evidence about the direction of this relationship. This is based on the findings of three studies (Benn, 1986; Harrison & Ungerer, 2002; Symons, 1998). One study reported that mothers returning to employment before infants were five months old had the highest proportion of securely attached infants in comparison to mothers returning to work after infants were five months old or non-employed mothers (Harrison & Ungerer, 2002). These findings are also supported by Benn's (1986) study which concluded that in a sample of employed mothers those returning to work before infants were three months old had the highest proportion of securely attached infants. This study was limited to a sample of employed mothers and infant sons, and so it is difficult to generalise these findings to the infant daughters of employed mothers.

Symons (1998) found that the timing of mothers returning to employment was associated with infant-mother attachment quality. However, they found that mothers returning to employment later (after infants were six months old) had infants with higher infant-mother attachment quality (greater levels of secure-base behaviours) in comparison with mothers returning to employment before six months or non-employed mothers.

Therefore, based on the findings of these three studies it is difficult to establish if it is better for mothers to return to employment earlier or later during the first year of an infant's life in order to form a secure attachment with their infant.

Discussion

This review examined research on the relationship between maternal employment and the attachment of infants to their mothers. Subsequently, twelve papers were reviewed on measures of maternal employment and infant-mother attachment. The findings indicated that overall maternal employment has limited influence on the attachment of infants to their mothers because little association was found between this relationship in seven of the studies included in this review. The findings were based on three measurements of maternal employment which were maternal employment status, maternal employment hours per week and timing of return to maternal employment. Maternal employment status and employment hours did not predict whether these mothers had infants who were securely attached, while the timing of mothers returning to employment was found to be related to how securely attached infants were. Therefore, based on these findings there may be an overall trend that maternal employment (in the case of these three measures) does not influence the quality and attachment of infants to their mothers. This conclusion is in contrast to Schachere's (1990) review which reported that the overall evidence about the influence of maternal employment on infant attachment was inconclusive because of a large proportion of mixed findings in the studies that were included.

The current review did not support Schachere's (1990) findings that only full-time work is associated with insecure attachments. In contrast, it was found overall that full-time, part-time and non-employed mothers do not differ from one another in the proportion of securely or insecurely attached infants and this appears to remain stable over time (Brooks-Gunn et al., 2010; Owen et al., 1984). However, one study found that stability of the mother-infant attachment appears to be greater for mothers who may experience changes to their employment status in their infants' second year compared to mothers that consistently remain in full-time employment or non-employed mothers (Owen et al., 1984).

Timing of return to maternal employment was associated with attachment of infants to their mothers in three studies. However, there is inconclusive evidence about the direction of this relationship. It is unclear whether returning to employment earlier or later in an infant's first year increases the likelihood of mothers having securely attached infants. It is also unclear what constitutes late and early employment, as studies classified early return to employment in different ways, e.g. before infants are 3, 5 or 6 months old (Benn, 1986; Harrison & Ungerer, 2002; Symons, 1998). However, the overall findings of this review indicate that the timing of mothers' return to employment is linked to how securely attached their infants are, which builds upon previous literature that did not find a conclusive association between these factors (Schachere, 1990).

Considerations

While most of the studies were methodologically rigorous, several points need to be considered before conclusions can be made. Three of the maternal employment measurements included in this review were based on a limited number of studies. An example is that the influence of maternal employment status on mother-infant attachment was measured in five studies. It is difficult thus to reliably draw conclusions about maternal employment from such a small number of studies. Furthermore, the conclusions are limited because there were only three measures of maternal employment included in this review. It was not possible to include all of the studies on maternal employment and infant-mother attachment, which means that there are several other factors that influence the development of attachment that remain unconsidered through this review.

There are a number of factors which make it difficult to generalise the overall findings of this review to the wider infant-mother population, such as a large number of earlier studies being included in the review and only two studies from within the last decade (Brooks-Gunn et al., 2010; Ding et al., 2012). Consequently, it is difficult to generalise the findings of this review to the current climate whereby there is an increasingly larger proportion of employed mothers. Additionally, participants of the studies were mainly from Caucasian (White), middle-class backgrounds in the USA and were homogenous across demographic variables to effectively measure the influence of maternal

employment on infant-mother attachment. However, this limits the generalisability of the review's findings to other infant-mother populations. Two of the studies were from non-Western countries, Israel and China (Scher & Mayseless, 2000; Ding et al., 2012) and a further two were from countries other than the USA, Canada and Australia (Harrison & Ungerer, 2002; Symons, 1998). Cross-cultural differences in relation to child-rearing practices, social policy on maternal employment and conceptualisation of the mother-infant attachment may act as confounding variables which may affect the reliability and validity of the findings.

The measures used to assess infant-mother attachment may also compromise the reliability and validity of the results. The 'Strange Situation' procedure is standardised, and sessions are recorded for independent raters to review the procedure in order to improve the reliability of the infant-mother attachment classifications; however, it is not without criticism. In the past, the procedure has been criticised for its validity in measuring infant attachment because infants who encounter daily non-maternal care may not react to the separation and reunion with their mothers in the same manner as infants of non-employed mothers (Clarke-Stewart & Fein, 1983). The AQS is considered a more naturalistic measure as it takes place in participant's homes. However, it relies on self-reports from the mother about the infant's behaviour which poses the risk of increased social desirability with mothers answering according to what they believe the interviewer may wish to hear (Seale, 2011).

Limitations

The review was conducted by one researcher, and thus the process of appraising the quality of the studies will have limited the reliability and validity. The absence of an independent researcher to corroborate the quality of the studies included is a limitation of the review. Therefore, there is an increased chance of bias in the interpretation of the findings of this review. The study focused on three main measures of maternal employment due to the vast number of studies on this topic. However, this means that other studies with similar topics such as length of maternity leave were not considered, although they may have provided findings that were beneficial to the literature search.

This may have led to a narrow focus of research within this field, and a broader research stance may need to be considered.

Clinical Implications & Future Direction

In relation to attachment, the evidence from this review would suggest that daily separations between infant and mother as a result of early maternal employment does not, on the whole, appear to obstruct the development or quality of the infant-mother attachment. This is based on the findings that only timing of return to employment, out of maternal employment hours and status is associated with the infant-mother attachment. The review does not support attachment theorists' early concerns about maternal employment taking mothers time, attention and consistent care away from their infant (Huerta et al., 2011). The findings according to the attachment theory would suggest that despite being in employment, overall mothers are still able to respond to their infants in a predictable, comforting and sensitive manner, making them feel secure so they are able to form a secure attachment (Bowlby, 1982).

Recent studies have proposed that although attachment is important to consider when looking at the outcomes of children, it may not necessarily be a significant mechanism between maternal employment and children's development. Mediators such as quality of parenting and experience of childcare are thought to be pertinent in explaining the effects of maternal employment on children and may be a focus for future research (Brooks-Gunn et al., 2010)

The review suggests that the timing of return to employment may have implications for the development of the infant-mother attachment. According to one of the studies, mothers had more securely attached children when they returned to work later in the infant's first year which suggests that these mothers may have had the opportunity to consolidate the attachment relationship within the first six months of their infant being born (Benn, 1986). This finding did conflict with two other studies that reported more secure infant-mother attachments for mothers returning to work before three and five months. However, overall the findings point to the possibility that returning to employment may be a transition for both mother and infants which may influence the

subsequent attachment relationship. Further research on the timing of return to maternal employment, will help to develop an understanding about particular time scales that may contribute to the development of secure attachments in infants. The findings are helpful in the context of shared parental responsibility because it highlights that mothers returning to employment earlier in the infant's first year (based on two studies) does not adversely affect the attachment relationship because infants were more likely to be securely attached to their mothers. This finding is important to consider in light of shared parental leave which enables mothers to return to employment earlier while their partner can use the remaining leave in order to provide care for the infant in their first year.

One of the possible clinical implications of this finding is that when working with children, as part of collecting information on the infant's developmental history, it may be useful to consider if and when mothers returned to employment during the child's preschool period. The level of distress that the child may have experienced to their mother's transition into employment may provide some indication of the type of attachment that they have to their mother and whether this was affected by the timing of this transition.

The current review highlights the dominance of studies on maternal employment conducted in the USA. Further research is required based on participants from more diverse populations (across different ethnic and socioeconomic backgrounds) to establish whether there is still an overall trend indicating that maternal employment has a limited influence on the infant-mother attachment. Socioeconomic status has been reported to include access to resources such as housing, education and health care which are thought to be linked to the development of attachment (Schecter, 2013). It will also be useful to measure broader aspects of maternal employment beyond employment hours, maternal employment status and timing of return to work within future research on the infant-mother attachment. Factors such as type of occupation and amount of overnight travel for a job may be useful to consider because roles such as rail operatives can involve longer working hours and greater separation from infants.

This literature review used a correlational design, and therefore it does not infer that aspects of maternal employment such as the timing of return to employment cause secure or insecure attachments. Future studies are needed to understand how particular aspects of maternal employment contribute to certain types of infant-mother attachments.

Conclusion

The twelve studies included in this review varied in quality. Five studies reported a relationship between an aspect of maternal employment (maternal employment hours, employment status and timing of return to employment) and infant-mother attachment. Therefore, maternal employment may have limited association with infant-mother attachment. The findings provide support to the notion that when in employment, mothers still develop secure attachments with their infants. However, the timing of mothers return to employment may have implications for the attachment relationship, although the direction of this relationship is inconclusive. The findings should be interpreted with caution because of methodological limitations such as overreliance on samples from White, middle-class, American populations and limited measures of maternal employment. Further research is needed to strengthen the basis of this review, and this may be achieved through increasing the size of samples and including more ethnic groups and those from a lower socio-economic background. Future research is needed to understand further how the timing of return to maternal employment may impact on the infant-mother attachment.

References

Ainsworth, M. D. S., Bell, S. M., & Stayton, D. J. (1971) Individual differences in strange- situation behavior of one-year-olds. In H. R. Schaffer (Ed.), *The origins of human social relations* (pp.17-58). London and New York: Academic Press.

Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment.* Hillsdale, NJ: Erlbaum.

Ainsworth, M. D. S., & Wittig, B. A. (1969). Attachment and exploratory behavior of one-year-olds in a strange situation. In B. M. Foss (Ed.), *Determinants of infant behavior* (Vol. 4, pp. 111-136). London: Methuen.

American Psychological Association. (2010). *Preparing Manuscripts for Publication in Psychology Journals: A Guide for New Authors.* Washington, DC: American Psychological Association.

Balbernie, R. (2013). The importance of secure attachment for infant mental health. *Journal of Health Visiting, 1* (4), 210-217.

Barglow, P., Vaughn, B. E., & Molitor, N. (1987). Effects of maternal absence due to employment on the quality of infant-mother attachment in a low-risk sample. *Child Development, 58*(4), 945-954. DOI: http://dx.doi.org/10.2307/1130535

Baum, C. L. (2003). Does Early Maternal Employment Harm Child Development? An Analysis of the Potential Benefits of Leave Taking. *Journal of Labor Economics, 21*(2), 409-448. DOI: 10.1086/345563

Benn, R. (1986). Factors Promoting Secure Attachment Relationships between Employed Mothers and Their Sons. *Child Development, 57*(5), 1224-1231. DOI: 10.2307/1130445

Benoit, D. (2004). Infant-parent attachment: Definition, types, antecedents, measurement and outcome. *Paediatrics & Child Health*, *9*(8), 541–545.

Bernal, R. (2008). The Effect of Maternal Employment and Child Care on Children's Cognitive Development. *International Economic Review*, *49*(4), 1173-1209. DOI: http://dx.doi.org/10.1111/j.1468-2354.2008.00510.x

Bowlby, J. (1969/1982). *Attachment. Attachment and loss: Vol. 1. Loss*. New York: Basic Books.

Bowlby, J., & Robertson, J. (1952). A two-year-old goes to hospital. *Proceedings of the Royal Society of Medicine, 46,* 425–427.

Bretherton, I. (1987). New perspectives on attachment relations: Security, communication and internal working models. In J.D. Osofosky (Ed.). *Handbook of infant development.* New York: John Wiley.

Brooks-Gunn, J., Han, W., & Waldfogel, J. (2010). First Year Maternal Employment And Child development in the First 7 Years. *Monographs of the Society for Research in Child Development, 75*(2), I-148. Retrieved from http://www.jstor.org/stable/25747950

Bureau of Labor Statistics. (2018) .*Maternal employment rates.* Retrieved from http://www.bls.gov.

Calfee, R. C., & Valencia, R. R. (2007). *APA guide to preparing manuscripts for journal publication* (Revised) [Technical guide]. Washington, DC: American Psychological Association.

Chase-Lansdale, P., & Owen, M. (1987). Maternal Employment in a Family Context: Effects on Infant-Mother and Infant-Father Attachments. *Child Development, 58*(6), 1505-1512. DOI: 10.2307/1130690

Clarke-Stewart, A., & Fein, G. (1983). Early childhood programs. In M. M. Haith & J. J. Campos (Eds.), P. H. Mussen (Series Ed.), *Handbook of child psychology: developmental, Vol 2. Infancy and developmental psychology,* pp. 917-999. New York: Wiley.

Cooklin, A. R., Rowe, H. J., & Fisher, J. R. (2012). Paid parental leave supports breastfeeding and mother-infant relationship: a prospective investigation of maternal postpartum employment. *Australian and New Zealand Journal of Public Health, 36*, 249-256. DOI: 10.1111/j.1753-6405.2012.00846.x

Coolican, H. (2004). *Research methods and statistics in psychology*. London: Hodder & Stoughton.

Cooper, C. E., McLanahan, S. S., Meadows, S. O., & Brooks-Gunn, J. (2009). Family Structure Transitions and Maternal Parenting Stress. *Journal of Marriage and Family*, 71, 558-574. DOI: 10.1111/j.1741-3737.2009.00619.x

Crowe, M., Sheppard, L., & Campbell, A. (2012). Reliability analysis for a proposed critical appraisal tool demonstrated value for diverse research designs. *Journal of Clinical Epidemiology*, *65*(4), 375–383. DOI: https://doi.org/10.1016/j.jclinepi.2011.08.006

Ding, Y. H., Xiu, X., Wang, Z. Y., Li, H. R., & Wang, W. P. (2012). Study of mother-infant attachment patterns and influence factors in Shanghai. *Early Human Development, 88*(5), 295-300.

Dumas, J., & Lavoie, Y. (1992). *Report on the demographic situation in Canada 1992: Current demographic analysis.* Ottawa: Statistics Canada, Minister of Science, Industry, and Technology.

Easterbrooks, M. A., & Goldberg, W. A. (1985). Effects of early maternal employment on toddlers, mothers, and fathers. *Developmental Psychology, 21*(5), 774-783. DOI: http://dx.doi.org/10.1037/0012-1649.21.5.774

Easterbrook, P. J., Gopalan, R., Berlin, J. R. & Matthews, D.R. (1991). Publication bias in clinical research. *The Lancet, 37* (8746), 867-872. DOI: https://doi.org/10.1016/0140-6736(91)90201-Y.

Etaugh, C. (1974). Effects of maternal employment on children: A review of recent research. *Merrill-Palmer Quarterly, 20*(2), 71-98.

Hackshaw, A. (2008). Small studies: strengths and limitations. *European Respiratory Journal, 32*, 1141-1431. DOI: 10.1183/09031936.00136

Harrison, L. J., & Ungerer, J. A. (2002). Maternal employment and infant-mother attachment security at 12 months postpartum. *Developmental Psychology, 38*(5), 758-773. DOI: http://dx.doi.org/10.1037/0012-1649.38.5.758

Heinrich, C. J. (2013). Parents' Employment and Children's Wellbeing. *The Future of Children*, *24* (1), 121–146. DOI: www.jstor.org/stable/23723386.

Hock, E. (1980). Working and nonworking mothers and their infants: A comparative study of maternal caregiving characteristics and infant social behaviour. *Merill Palmer Quarterly,* 26, 79-101

Hock, E., DeMeis, D., & McBride, S. (1988). Maternal separation anxiety: Its role in the balance of employment and motherhood in mothers of infants. In A. Gottfried

& A. Gottfried (Eds.), *Maternal employment and children's development: Longitudinal Research,* pp.191-299. New York: Plenum Press.

Hoffman, L. W. (1984). Maternal employment and the young child. In M. Perimutter (Ed.), *Minnesota symposium in child psychology* (pp. 101-172). Hillsdale, NJ: Erlbaum.

Huerta, M. C., Adema W., Baxter, J., Corak, M., Deding, M., Gray, M. C., … Waldfogel, J. (2011). Early Maternal Employment and Child Development in Five OECD Countries. OECD Social, Employment and Migration. (Working Paper No. 118). Australia: OECD Publishing. Retrieved from http://dx.doi.org/10.1787/5kg5dlmtxhvh-en

Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M.T. Greenberg, D. Cicchetti & E.M. Cummings (Eds.), *Attachment in the Preschool Years* (pp. 121–160). Chicago, University of Chicago Press.

Main, M., & Western, D. (1982). Avoidance of the attachment figure in infancy. In C. M. Parkes & J. Stevenson-Hinde (Eds.), *The Place of Attachment in Human Behaviour.* Tavistock: London.

Nettip, N. (2004). *Linking Maternal Employment to Attachment in Thailand: The Mediating Role of Maternal Sensitivity* (Unpublished dissertation, Saint Louis University). Saint Louis University, Missouri, USA.

NICHD Early Child Care Research Network (1997a). The effects of infant child care on infant-mother attachment security: Results of the NICHD Study of Early Child Care. *Child Development, 68*(5), 860–879.

Nicol, T., & Hardy, T. (2017).The impact of early maternal employment on infant wellbeing and attachment. *Journal of Health Visiting*, *5*(4), 178-183. DOI: https://doi.org/10.12968/johv.2017.5.4.178

Owen, M. T., Easterbrooks, M. A., Chase-Lansdale, L., & Goldberg, W. A. (1984). The Relation between Maternal Employment Status and the Stability of Attachments to Mother and to Father. *Child Development*, *55*(5), 1894. DOI: 10.1111/1467-8624.ep7304606

Office for National Statistics. (2017). *Annual Survey of House and Earnings: 2017 Provisional Results and 2016 Revised Results.* Retrieved from https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/2017provisionaland2016revisedresults

Office for National Statistics. (2017). *Labour Force Survey (LFS) Household datasets and Annual Population Survey: Families and the Labour Market, England 2017*. Retrieved from https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/familiesandthelabourmarketengland/2017

Pannucci, C. J., & Wilkins, E. G. (2010). Identifying and Avoiding Bias in Research. *Plastic and Reconstructive Surgery, 126*(2), 619–625. DOI: http://doi.org/10.1097/PRS.0b013e3181de24bc

Poznanski, E., Maxey, A., & Marsden, G. (1970). Clinical implications of maternal employment: A review of research. *Journal of the American Academy of Child Psychiatry, 9*(4), 741-761. DOI: http://dx.doi.org/10.1016/S0002-7138(09)61716-7

Ruhm, C. (2004). Parental Employment and Child Cognitive Development. *Journal of Human Resources, 39*(1), 155-192.

Rutter, M. (1981). Social-emotional consequences of daycare for preschool children. *American Journal of Orthopsychiatry,* 51, 4-28.

Schachere, K. (1990). Attachment between working mothers and their infants: The influence of family processes. *American Journal of Orthopsychiatry, 60*(1), 19-34. DOI: http://dx.doi.org/10.1037/h0079159

Schecter, I. (2013). *A secure place: Attachment patterns and socioeconomic status* (Unpublished master's thesis, Pacific University). Pacific, University, Oregon, USA. Retrieved from https://commons.pacificu.edu/spp/1110

Scher, A. & Mayseless, O. (2000). Mothers of Anxious/Ambivalent Infants: Maternal Characteristics and Child-Care Context. *Child Development, 71*(6), 1629-1639.

Sroufe, L. A., Egeland, B., Carlson, E., & Collins, W. A. (2005). Placing Early Attachment Experiences in Developmental Context: The Minnesota Longitudinal Study. In K. E. Grossmann, K. Grossmann, & E. Waters (Eds.), *Attachment from infancy to adulthood: The major longitudinal studies* (pp. 48-70). New York, NY, US: Guilford Publications

Stifter, C. A., Coulehan, C. M., & Fish, M. (1993). Linking employment to attachment: The mediating effects of maternal separation anxiety and interactive behavior. *Child Development, 64*(5), 1451-1460. DOI: http://dx.doi.org/10.2307/1131545

Symons, D. K. (1998). Post-partum employment patterns, family-based care arrangements, and the mother-infant relationship at age two. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement, 30*(2), 121-131. DOI: http://dx.doi.org/10.1037/h0085802

Waldfogel, J., Han, W. J., & Brooks-Gunn, J. (2002). The effects of early maternal employment on child cognitive development. *Journal of Demography, 39*(2), 369-392. DOI: https://doi.org/10.1353/dem.2002.0021

Wallston, B. (1973). The effects of maternal employment on children. *Child Psychology & Psychiatry & Allied Disciplines, 14*(2), 81-95. DOI: http://dx.doi.org/10.1111/j.1469-7610.1973.tb01177.x

Wangmann, J. (1995). *Towards integration and quality assurance in children's services* (Early Childhood Study Paper No. 6). Melbourne: Australian Institute of Family Studies.

Waters, E. & Deane, K.E. (1985). Defining and assessing individual differences in attachment relationships: Q-methodology and the organisation of behaviour in infancy. In I. Bretherton & E. Waters (Eds.). Growing points of attachment: Theory and research. *Monographs of the Society for Research in Child Development, 50* (209), 41-65.

Weinraub, M., Jaeger, E., & Hoffman, L. (1988). Predicting infant outcome in families of employed and nonemployed mothers. *Early Childhood Research Quarterly, 3*(4), 361-378. DOI: http://dx.doi.org/10.1016/0885-2006(88)90035-X

Appendix A: Journal Submission Requirements (Child Development Journal)

Child Development

Submission Guidelines
Updated March 2015

Manuscript Requirements

Child Development invites for consideration manuscripts that are neither identical to nor substantially similar to work published or under review elsewhere. Editors retain the right to reject manuscripts that do not meet established ethical standards for research or dissemination.
The following points are requested of all papers submitted to *Child Development*, and are required for any paper ultimately accepted for publication. Failure to comply with these requirements may lead to delays in processing, review or publication. Failure to comply may also lead to the manuscript being returned to you for revision.

Formatting

All manuscripts must:

- Be double-spaced (abstract, body text, references)
- Use 12-pt. Times New Roman font
- Have 1-inch margins
- Be submitted as Word files (.doc or .docx; exceptions may be made by contacting the editorial office)

Page Limits

40 pages for Empirical Articles, inclusive of everything, with a reference list no longer than 8 pages.

4,000 words for Empirical Reports, excluding the title page, abstract and references but inclusive of body text, tables, figures and appendices.

Manuscript Structure

Empirical Articles and Reports must have the following major sections (other article types may vary):

INTRODUCTION (but not labeled as such)

METHOD

RESULTS
DISCUSSION

REFERENCES

TABLES and FIGURES

The METHOD section **must** include participant demographic information, such as sex, SES, race or ethnicity, recruitment method, etc.

Abstracts

- Must be 120 words or fewer
- Include participants' numerical age
- Include the total number of participants (Ns)
- Must be written in the third person, not first person

References

- Do not exceed 8 pages
- Are cited both in the body text and on the reference list
- Are listed in alphabetical order by authors' surname
- Include the DOI # when available

Figures

Color figures publish online for free, but there is a $ 325 cost to *print* in color. More technical information on images (accepted file types, image quality, etc.) is available at Wiley-Blackwell Author Services.

Footnotes and Endnotes

Child Development does NOT publish footnotes or endnotes of any kind. All such notes must be incorporated into the body text.

Blinding

Child Development uses a double-blind reviewing procedure. Please ensure any information that might identify authors is either removed or sufficiently masked.

Information such as the author list, affiliations, acknowledgments, etc. should be removed from the main manuscript file and uploaded as a separate Title Page file during submission.

In-text references to any work by the authors should be referred to in the third person to mask the authors' identities (for example: "We have shown in previous work that children…(Martin 2011)" should instead be written as "It has been shown in previous work that children…(Martin 2011)"

APA Style Reminders

Child Development follows the Sixth Edition of the Publication Manual of the American Psychological Association (APA).

The following are reminders on oft-forgotten points of APA style. However, ultimately it is the author's responsibility to comply with APA regulations. We regret that failures to follow APA rules may well result in slowing down the production process and hence the publication of your manuscript.

Sexism

Avoid sexist language; use plural phrases such as, "children and their toys" for "a child and his toy."

Refrain from referring to children with "it."

Figures

Please keep figures as clear and simple as possible. For example, do not use a 3-dimensional bar graph unless you are presenting data along three dimensions. Be sure that labels are large enough to be visible when the figure is reduced in size. Remember to provide figure numbers and captions separately, not on the figure itself.

"Relationship" vs. "Relation"

These are not interchangeable. "Relationship" is used to describe a social bond, such as between a mother and a child, a teacher and a child, etc. "Relation" is used to describe non-animate associations, including those between variables.

Uses of Slash (*/*)

Uses of slash in the abstract and body text must be avoided. Examples include "and/or," "his/her," etc. "His/her" can (and should) be rewritten as "his or her," etc. Slashes may be used in references, tables and figures. Slashes may also be used when citing previously written material, such as including in the paper a test question that was used with participants.

Submission Guidelines

Updated March 2015

Types of Manuscripts

Child Development considers manuscripts in formats described below. Inquiries concerning alternative formats should be addressed to the Editor prior to submission. All submissions are expected to be no more than 40 manuscript pages, including tables, references, and figures (but excluding appendices). If the submission is more than 40 pages, it will be returned to the author for shortening prior to editorial review.

Empirical articles comprise the major portion of the journal. To be accepted, empirical articles must be judged as being high in scientific quality, contributing to the empirical base of child development, and having important theoretical, practical, or interdisciplinary implications. Reports of multiple studies, methods, or settings are encouraged, but single-study reports are also considered. Empirical articles will thus vary considerably in length, but should be no longer than 40 manuscript pages; text and graphics should be as concise as material permits. All modes of empirical research are welcome.

Empirical Reports are reserved for short cutting-edge empirical papers that are no longer than 4,000 words in length (including body text, tables, appendices, etc. but *excluding* references), which advance research and knowledge in an area through noteworthy findings and/or new methods.

Reviews focus on past empirical and/or on conceptual and theoretical work. They are expected to synthesize, analyze and/or critically evaluate a topic or issue relevant to child development, should appeal to a broad audience, and may be followed by a small number of solicited commentaries.

Special sections is a format in which papers on a focal topic, written by different authors, are published simultaneously. In some cases, calls for submissions on particular topics will be disseminated through SRCD (via e-mail or SRCD publications), and submissions will undergo normal editorial review. In some cases, a submitted manuscript (e.g., an empirical article) may be selected as a lead article for this format, with invited commentaries providing additional perspectives. The editors also welcome suggestions from readers for topics for this format.

Manuscript Submission, Review Process, and Publication Process

Manuscripts should be submitted online at http://mc.manuscriptcentral.com/childdev

Full instructions and support are available on the site and a user ID and password can be obtained on the first visit. If you cannot submit online, please contact the Editorial Office by telephone (734-926-0615) or by e-mail (cdev@srcd.org)

Cover Letter

Please include a cover letter that contains the name(s) of the author(s) and affiliation(s), and the street address, telephone, fax, and electronic mail address of the corresponding author. Please also provide details about other published or submitted papers having substantial overlap (including data sets) with the new *CD* submission to enable editors to judge whether the new submission is sufficiently distinct from other work.

Corresponding Author Responsibilities

A corresponding author's submission to *Child Development* implies that all coauthors have agreed to the content and form of the manuscript and that the ethical standards of SRCD have been followed (see the SRCD website or pp. 283–284 of the 2000 SRCD Directory). Any financial interest or conflict of interest must be explained to the Editor in the cover letter. The corresponding author is responsible for informing all coauthors, in a timely manner, of manuscript submission, editorial decisions, reviews, and revisions.

Manuscript Review

Child Development conducts a double -blind review process. Each manuscript is handled by the Editor or an Associate Editor who consults with one or more Consulting Editors and/or ad hoc reviewers who have relevant expertise. To ensure blind review, cover sheets are removed before review; authors should avoid including any other information about identity or affiliation in submissions. Copies of the submission and associated correspondence are retained in the SRCD archives.

Associate Editors review each assigned submission and invite 2-4 reviewers who have pertinent areas of expertise. Authors are encouraged to recommend possible reviewers during the submission process, but this is neither required nor are the editors required to abide by the recommendations.

Once the Associate Editor receives the requested number of reviews they will make an editorial decision based on the reviews and reviewer recommendations. The Associate Editor's decision letter, and accompanying reviews, are blinded and processed by the Editorial Office staff. These materials are then sent to the authors and all reviewers who contributed to the review process.

Child Development strives to deliver decisions within 60 days of submission. However given the nature of the review process turnaround times may vary. If you have any questions about your submission, please inquire at cdev@srcd.org or call (734) 926-0615.

Publication Process

When a manuscript is accepted authors will be asked to send a final version and accompanying materials via email to the Editorial Office (cdev@srcd.org). These materials include:

- A final version of the manuscript that follows all requirements listed in the Publication Checklist (provided upon acceptance).
- A 300-500 layperson summary for public dissemination purposes (details and examples provided upon acceptance).
- Signed Exclusive Licensing Forms (ELFs) from all authors.
- Signed Full Disclosure of Interest forms from all authors.

- A completed Color Charge Form for figures to be printed in color, if applicable (color figures publish online for free).

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Appendix B: Data summary table of studies included in the literature review

No.	Reference & [Country]	Study Aims	Sample	Data Collection & Analysis	Results/Key Findings	Strengths (+) & Limitations(-)	Quality Score (/40)
1	Harrison, L. J., & Ungerer, J. A. (2002). Maternal employment and infant-mother attachment security at 12 months postpartum. *Developmental Psychology, 38*(5), 758-773. [Australia]	Does maternal employment predict mother-infant attachment beyond proximal (maternal sensitivity) and distal (demographic, maternal and child characteristics) factors?	Mothers (*n=145)* and their firstborn, full-term. Infants (*n*=77 boys & *n*=68 girls). By 5 months 31% (*n*=46) mothers returned to work (early returners).By 12 months, overall rate of employment increased to 67% (*n*=98), non-working mothers 32% (*n*=47).	Recruited during middle trimester of pregnancy for a longitudinal study. Assessments of infant-mother attachment (12 months) using Strange Situation procedure. Attachment categorised by four categories A, B, C & D. Maternal employment (hours per week); timing of return to work (before 5 months, between 5 to 12 months) Univariate ANOVA & Chi-Squared.	Only timing of the return to work differentiated infant–mother attachment classifications (maternal hours not significant). Employment return before 5 months, the highest proportion of secure infants (71%). Higher incidence of insecurity (55%, with 40% insecure ambivalent) in children of stay-at-home mothers. Earlier separation is less stressful for infants.	+ Standardised measure of infant-mother attachment. -Stratified procedure to obtain a sample. -Limited generalisability due to the Australian context and social policy.	19

2	Stifter, C. A., Coulehan, C. M., & Fish, M. (1993). Linking employment to attachment: The mediating effects of maternal separation anxiety and interactive behavior. *Child Development, 64*(5), 1451-1460. [USA]	Effect of maternal employment on maternal behaviour over time.	73 mother-infant dyads, comprised of healthy, term infants (male *n*=38, female *n*=35). Majority white, middle-class families (*n*=2, African American, *n*=1, Hispanic, & *n*=1, Asian American). Firstborn (*n*=34) infants.	Part of a longitudinal study. Assessment of infant-mother attachment (18 months) using laboratory Strange Situation Procedure that was videotaped (Ainsworth & Wittig, 1969). Maternal employment measured according to employment status (working or non-working). Return to work before 5 months (employed mother), at home for the first 10 months (non-employed mother). Chi-Squared.	Proportion Attachment A (13%), B (73%) & C (11%). Non-employed (A, *n*=3, B, *n*=22, C, *n*=2). Employed (A, *n*=6, B, *n*=19, C, *n*=5). Predictions to Mother-Infant Attachment Analyses using the A/B/C attachment groups revealed no significant main effects for work status. Or when grouped into secure and insecure attachment. Employment status alone is not a significant predictor of attachment at 18 months.	+Videotaped sessions scored by two blind trained coders, 86% inter-rater reliability. -Reliability calculated on 30% of subjects. -Does not report raw data or scores on the relationship between employment status and attachment only. -Small sample size, predominantly White Americans difficult to generalise.	17
3	Chase-Lansdale, P., & Owen, M. (1987). Maternal Employment in a Family Context: Effects on Infant-Mother and Infant-Father Attachments. *Child*	Impact of maternal employment on the quality of infant-mother and infant-father at 1 year. Further investigation	In relation to attachment to mother: Mother-infant dyads (*n*=97) comprising of	Strange Situation procedure, 2 sessions, 6 weeks apart. Mean infant ages session 1 (*M*=11.8 months) & session 2(*M*=13.3	Whole sample: 77.7% of infants securely attached (B) to mother, 9.6% insecure-avoidant (A), and 12.8%	+ Two independent coders in 63% of cases, attachment classification	22

	Development, 58(6), 1505-1512. [USA]	into sex differences in quality of attachment to mother and father.	employed-mother families (*n*=40, boys *n*=21, girls *n*=19) and Non-employed mothers (*n*=57, boys *n*=34, girls *n*=23). Predominantly White, middle class. Mothers' aged between 19 and 39 years (M = 27.4, SD = 3.8). All first-born infants.	months). Maternal employment, returned to work between 2 weeks and 6 months of giving birth (M =2.74 months, SD = 1.27). Employed full-time, 38 hours per week. Chi-Squared & MANOVA (MANOVAs were performed separately for each sex of child/sex of parent combination).	insecure-resistant (C). No relation between mothers' work status and girls' interactive behaviour with mother or father, also not found between boys' scores with mother. Employment to full-time work resumed early in the postpartum period, found no association between mother's work status and quality of mother-infant attachment.	reliability 96.7% (mother-infant). +At least one coder blind to information. -Recruited sample when infants 12 months old, self-selection factor, parents decline to take part if difficult mother-infant relationship. -White middle class, difficulty generalising findings.	
4	Barglow, P., Vaughn, B. E., & Molitor, N. (1987). Effects of maternal absence due to employment on the quality of infant-mother attachment in a low-risk sample. *Child Development, 58(*4), 945-	Effects of maternal absences on infant-mother attachment quality considered within the context of maternal parity (primi- vs multiparous mother).	A middle-class, low-risk opportunity sample of mothers (*N*=110) from larger study (*N*=178) aged 20 to 37 years (*M*=30, *SD*=3.4).	A large group of infant and mothers followed at the Michael Reese and Medical Center in Chicago & (Joffe, Vaughn, Barglow, Benveniste, 1985). Recruited during mother's pregnancy.	Limits analysis to at work, full-time group. Distribution of attachment classifications, significantly different for at-work.	+ Homogenous group, common medical and psychosocial risk factors. -Limited demographic information, e.g. gender of infants	19

	954. [USA]		60% primiparous, 40% non-primiparous Approximately 50% of infant sample girls. At-work group, subgroup (part time, <20 hours, *N*=18) & full-time >20 hours per week (*N*=54). At home group (*N*=56), mother primary caregiver, absent for less than 4 hours per week (paid/voluntary work).	Attachment measured using Strange Situation Procedure. Maternal employment measured by work status by 12 months, infants cared by substitute non-family caregiver at home for a minimum of 4 months before attachment assessment at 12-13 months. Chi-Squared.	Collapsed insecure-avoidant and insecure-resistant categories, found a significant proportion of insecure attachments in the at-work group. Part-time work, not significant to attachment. Association between work status and attachment classification significant for first-born only. Work status affects attachment quality of mother-infant.	"approximately 50%". -Does not report the reliability of coding for attachment. -Difficulties with conclusion for maternal employment status and attachment for second born (3/6 cells had expected frequencies less than 5 for chi-square analysis).	
5	Owen, M. T., Easterbrooks, M. A., Chase-Lansdale, L., & Goldberg, W. A. (1984). The Relation between Maternal Employment Status and the Stability of Attachments to Mother	Effect of maternal employment on mother-infant and father-infant attachment and the effects of maternal employment or change in maternal	59 mother-infant dyads (female infants *n*=23, male infants *n*=36). Firstborn, predominantly middle-class	Attachment measured using Strange Situation Procedure at 12 months and 20 months.	At 12 months 85% securely attached to mothers, 6.8% insecure-avoidant and 8.5% insecure-ambivalent. At 20 months	+ Different coders at 12 and 2 months, over 75% was coded by 2 or more observers with 95% agreement (12 months) and	16

	and to Father. *Child Development*, *55*(5), 1894 [USA]	employment on the stability of parent-child attachments.	families.	Maternal employment measured by work status (full-time, part-time, non-employed) held 3 months continuously before 12 months or 20-month attachment assessment. 4th group change of maternal employment status within infants second year. Chi-Squared.	86.4% securely attached to mothers, 10.2% insecure-avoidant and 3.4% insecure-ambivalent. No significant difference in the proportion of secure vs non-secure attachment with mother amongst work-status groups (full-time, part-time and non-employed) at either 12 or 20 months. Found no relation between maternal employment and the quality of infant-mother attachment.	74% agreement at 20 months for 3 major groups. -Poor reporting of demographic information. -Limited reporting or information on results, table difficult to interpret in relation to the results	
6	Weinraub, M., Jaeger, E., & Hoffman, L. (1988). Predicting infant outcome in families of employed and nonemployed mothers. *Early Childhood Research Quarterly, 3*(4), 361-378	Differences in infant outcome outcomes and important predictor variables between families with employed and non-employed mothers (3 infant outcomes cognitive development,	Mothers (*n*=30, *M*=31 years) and 18-month infants (*M*=18.4 months, 17-19 months) of which 60% were first born, 33% were second born and 7%	Part of larger study, interviewed twice once in the laboratory once at home. Attachment measured using Attachment Q-Sort (Waters & Deane, 1985), mothers set 75 item cards according	No group differences observed between employed and non-employed mothers on children's attachment. Mean attachment Security scores for children of both	+Attachment scores of Q-sort remains stable between 12 and 36 months. -Small sample, difficult to generalise	16

[USA]	security attachment and dependency) & 2 levels of predictor variables (external influences & phenomenological variables). Relationships between predictor variables & infant socioemotional development. Integrated pattern interrelationships of employed vs non-employed mothers.	were 3rd born. White middle class.	to most characteristic of infant behaviour at 18 months. Maternal employment measured by employment hours and then categorised into employed (*n*=15) and non-employed (*n*=15). Employed if working continuously at least 30 hours per week (*M*=40.4 hours per week, ranging 35-47 hours per week). Returned to work full-time when the infant was 1 to 4 months (*M*=2.1 months old). Non-employed if working less than 5 hours per week (*M*=2.7 hours per week, ranging 0 to 5 hours per week). Pearson's correlation and *z* tests.	employed and non-employed mothers were .36.	findings. -Measures attachment using mother's self-report of child behaviour in the home and unfamiliar places, may be subject to social desirability. -Does not define attachment or interpret the meaning of attachment security score.

7	Brooks-Gunn, J., Han, W., & Waldfogel, J. (2010). First year maternal employment and child development in first 7 years. *Monographs of the Society for Research in Child Development, 75*(2), 1-148. Retrieved from http://www.jstor.org/stable/25747950 [USA]	1st year maternal employment and cognitive, social and emotional outcomes for children's first 7 years	From longitudinal data source (the NICHD Study of Early Child Care). 1,364 children born in 1991. Full-time mothers (55%); part-time 23%, Non-working (22%) in first year. Non-working White American (*n*=900), African-American (*n*=113).	Attachment measured first time at 15 months and 36 months. Strange Situation used to measure attachment. Maternal employment measured by employment category. Multiple regression using Ordinary Least Squares (OLS), SEM Analyses.	Early maternal employment in the first year affects child development outcomes but not attachment. Little or no evidence that it affects attachment. Other more important variables.	+Control for confounding variables. -Structural Equation Modelling for early attachment not included (available on request). -Large sample, mainly White American difficult to generalise. -No information on attachment categories of children.	18
8	Benn, R. (1986). Factors Promoting Secure Attachment Relationships between Employed Mothers and Their Sons. *Child Development, 57*(5), 1224-1231. DOI: 10.2307/1130445	Effect of maternal psychological functioning on quality of infant son-mother attachment with (preschool infants).	*N*=30 Caucasian mothers (*M*=31 years, range 26-40 years) with 17-21-month-old firstborn sons.	Recruited from birth announcements and advertisements Median infant age at the time of the Strange Situation (18.6 months). Standard 'Strange Situation'	Secure (*n*=19) and Insecure (*n*=19) attached infants do not differ according to no. of hours mother works a week (secure *M*=42.1, insecure	+Attempt to control for confounding variables to try to make it a homogenous sample. -Does not report	18

	[USA]			procedure used (Ainsworth et al., 1978), attachment classified into 3 categories avoidant (A), Secure (B) & avoidant (C). Maternal employment, all mothers working a minimum of 30 hours per week outside of the home. Returned to work at 12 months postpartum. Multivariate Hotelling's T^2 test.	*M*=43.6, N.S). Mother-son attachment mediated by mothers underlying emotional state.	significance values (only states not significant).	
9	Easterbrooks, M. A., & Goldberg, W. A. (1985). Effects of early maternal employment on toddlers, mothers, and fathers. Developmental Psychology, 21(5), 774-783. http://dx.doi.org/10.1037/0012-1649.21.5.774 [USA]	Relationship between maternal employment status and family adaption dimensions, examine direct and indirect effects of maternal employment on pre-schoolers relationships and any variations according to child gender.	*N*=73 Caucasian middle-class families, 20-month-old first born infants. Mothers mean age=30 years.	Recruited from advertisements. Strange situation (Ainsworth et al., 1978) with 3 classifications of attachment. Maternal employment status through interview and questionnaire. Non-employed mothers (*n*=24), employed part time (*n*=23, 8-25	High proportion across all groups (86%) of secure attachments (non-employed 88%, employed 86%, part-time 83%, full-time 89%). Maternal employment does not affect infant-mother attachment quality. It is not related to the	+ Attempt at homogeneity of the group to measure direct effects. -Findings are only generalisable to White, middle-class Americans. -Few limitations acknowledged to the study.	14

				hours/week, *M*=18 hours/week), employed full-time (*n*=26, 32-50 hours/week, *M*=41 hours/week). 63% (*n*=29) resumed employment 6 months postpartum, 85% *(n*=42) for at least 12 months postpartum. All employed prior to birth. Chi-squared.	gender of the child.	-Unsure of how they worked out the proportion of secure and insecure given numbers.	
10	Symons, D.K. (1998). Post-Partum Employment Patterns, Family-Based Care Arrangements and the Mother-Infant Relationship at Age Two. Canadian Journal of Behavioural Science, 1998,30:2,121-131 [Canada]	Impact of non-maternal care profiles on secure-base behaviour and maternal sensitivity.	57 mothers (21-37 years, *M*=28.4 years) & 23-27 month old infants (*n*=30 male, 40% first born). Rural Canada, range of SES. No pre-existing group effects of demographic variables.	Recruited from a maternity ward. Initial assessment on the ward and phone interviews/mail questionnaires at 6 and 24 months Attachment Q-Sort used to observe attachment security. MANCOVA, ANCOVA & Tukey's test.	Post 6 months returners (AQS *M*=0.60, SD=0.11), pre 6 month returners (*M*=0.39, SD=0.21) and home-makers (*M*=0.41, SD=0.27). A significant effect for attachment security. Post 6-month returners' higher attachment security scores than non-employed and pre 6-month returners. Later mothers	+Measuring attachment using Q-sort in a natural setting (home-based observation). +Measure and control for pre-existing group differences. -Less commonly used measure of attachment.	20

					return to work (after 6 months and within the first 2 years postpartum) the more securely attached their infants will be. Timing of employment linked to attachment.		
11	Scher, A & Mayseless, O. (2000). Mothers of Anxious/Ambivalent Infants: Maternal Characteristics and Child-Care Context. *Child Development, 71*(6), 1629-1639. [Israel]	Maternal, Infant and childcare antecedents of ambivalent attachment patterns in Israel.	98 Jewish mother (21-40 years, *M*=28.4 years, *SD*=4.2) and infants (49%=male, 39% first-born) from in-tact families.	Recruited from a longitudinal study on sleep from maternity ward hospital in Haifa. Questionnaires at 9 months for maternal employment status and the strange situation at 12 months. Maternal employment (status and number of hours per week). Status is non-employed, mothers working more than 30 hrs/week & mothers working< less than 30 hrs/week. Chi-square	Attachment security and employment status was significant. Mothers working full-time had higher rates of ambivalently attached infants than non-employed mothers or mothers working less than 30 hours per week. Low maternal education, high stress and tension in parental role, high separation anxiety, longer working hours and group day care associated with	+Homogenous sample (in-tact family) to test influence of maternal employment hours and employment status. -Limited generalisability, unique socio-cultural context (Israel). -Selection effect (caution when interpreting results) mothers whose infant placed in daycare may	20

					ambivalent attachment. Important to consider a general model of direct and indirect factor that predict attachment security.	have lower SES and levels of education. -Lack of statistics reported for quality attachment and birth order and infant gender.	
12	Ding, Y. H., Xiu, X., Wang, Z. Y., Li, H. R., & Wang, W. P. (2012). Study of mother-infant attachment patterns and influence factors in Shanghai. *Early Human Development, 88*(5), 295-300. [China]	Examine patterns of mother-infant attachment in Shanghai and factors influencing this.	160 mothers (*M*=28.9 years) and infants (*M*=14.2 months) from in-tact families, no previous birth complications, full-term and healthy mother and infant dyads.	Recruited from different areas in Shanghai through child health care network when they were between 12 to 18 months. Infant attachment measured by strange situation procedure. Maternal employment measured by status (at home or employed). Chi-Square.	68.2% secure, 21.8% resistant, 7.5% avoidant & 2.5% disorganised. No significant difference in employment status between insecure and secure infant's mothers. No gender differences in infants. Other factors influence attachment relationships: Weaker approachability in infants, lower marital satisfaction, increase in number	-Unequal groups of employed (*n*=133) and at home mothers (*n*=23). The small sample may reduce the power of the study to detect difference, increases the likelihood of type 2 error. -Poor background information and lack of details about the study given. -Difficult to generalise	14

		of caregivers in daily life, increase in time spent overnight with other caregivers and lower maternal sensitivity associated with insecure attachment.	beyond this particular sample. Confounding influence of factors specific to Chinese culture.

Appendix C: Critical Appraisal Tool

Category Item	Item descriptors [Present, Absent, Not Applicable]	Score [0-5]
1. Preliminaries		
Title	1. Includes study aims and design	
Abstract (assess last)	1. Key information; 2. Balanced and informative	
Text (assess last)	1. Sufficient detail others could reproduce; 2.Clear/concise writing, table(s), diagram(s), figures(s)	
	Preliminaries [/5]	
2. Introduction		
Background	1. Summary of current knowledge; 2. Specific problem(s) addressed and reasons(s) for addressing	
Objective	1. Primary objective(s), hypothesis(es), or aim(s); 2. Secondary question(s)	
	Introduction [/5]	
3. Design		
Research Design	1. Research design(s) chosen and why; 2. Suitability of research design(s)	
Intervention, Treatment. Exposure	1. Intervention(s)/treatment(s)/exposure(s) chosen and why; 2. Precise details for each group; 3. valid and reliable	
Outcome, Output, Predictor, Measure	1. Outcome(s)/output(s)/predictor(s)/measure(s) chosen and why; 2. Clearly defined; 3. Valid and reliable	
Bias, etc	1. Potential bias, confounding variables, effect modifiers, interactions; 2. Sequence generation, group allocation, group balance, and by whom; 3. Equivalent treatment of participants/cases/groups.	
	Design [/5]	
4. Sampling		
Sampling method	1. Sampling method(s) chosen and why; 2. Suitability of sampling method.	
Sampling size	1. Sample size, how chosen and why; 2. Suitability of sample size.	

Sampling protocol	1. Target/actual/sample population(s): description and suitability; 2. Participants/cases/groups: inclusion and exclusion criteria; 3. Recruitment of participants/cases/groups.
	Sampling [/5]
5. Data collection	
Collection method	1. Collection method(s) chosen and why; 2. Suitability of collection method(s).
Collection protocol	1. Include date(s), location(s), setting(s), personnel, materials, processes; 2. Method(s) to ensure/enhance quality of measurement/instrumentation; 3. Manage non-participation, withdrawal, incomplete/lost data.
	Data collection [/5]
6. Ethical matters	
Participant ethics	1. Informed consent, equity; 2. Privacy, confidentiality/anonymity;
Researcher ethics	1. Ethical approval, funding, conflict(s) of interest; 2. Subjectivities, relationship(s) with participants/cases.
	Ethical matters [/5]
7. Results	
Analysis, Integration, Interpretation method	1. A.I.I method(s) for primary outcome(s)/output(s)/predictor(s) chosen and why; 2. Additional A.I.I. methods (e.g. subgroup analysis) chosen and why; 3. Suitability of analysis/integration/interpretation method(s).
Essential analysis	1. Flow of participants/cases/groups through each stage of research; 2. Demographic and other characteristics of participants/cases/groups; 3. Analyse raw data, response rate, non-participation/withdrawal/incomplete/lost data.
Outcome, Output, Predictor analysis	1. Summary of results and precision for each outcome/output/predictor/measure; 2. Consideration of benefits/harms, unexpected results, problems/failures; 3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes).
	Results [/5]
8. Discussion	
Interpretation	1. Interpretation of results in the context of current evidence and objectives; 2. Draw inferences consistent with the strengths of the data; 3. Consideration of alternative

		explanation for observed results; 4. Account for bias, confounding/effect modifiers/interactions/imprecision.
Generalisation	1.	Consideration of overall practical usefulness of the study; 2. Description of generalisability (external validity) of the study
Concluding remarks	1.	Highlight study's particular strengths; 2. Suggest steps that may improve future results (limitations; 3. Suggest further studies.
		Discussion [/5]
9. Total		
Total Score	1.	Add all scores for categories 1-8
		Total Score [/40]

Appendix D: CCAT Appraisal Total Scores/Percentages

			Total score & percentage for each category							
Reference	**CCAT Total Score**	**CCAT Percentage**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Symons (1998)	20	50%	2 40%	3 60%	3 60%	2 40%	3 60%	1 20%	3 60%	3 60%
Easterbrooks & Goldberg (1985)	14	35%	2 40%	2 40%	2 40%	2 40%	2 40%	0 40%	2 40%	2 40%
Benn (1986)	18	45%	3 60%	3 60%	3 60%	2 40%	2 40%	0 0%	3 60%	2 40%
Brooks-Gunn et al. (2010)	18	45%	3 60%	4 80%	2 40%	2 40%	2 40%	0 0%	2 40%	3 60%
Weinraub et al. (1988)	16	40%	2 40%	2 40%	2 40%	2 40%	2 40%	0 0%	3 60%	3 60%
Owen et al.										

(1984)	16	40%	2 40%	3 60%	2 40%	1 20%	3 60%	0 0%	2 40%	3 60%
Barglow et al. (1987)	19	48%	3 60%	2 40%	2 40%	3 60%	3 60%	0 0%	3 60%	3 60%
Chase-Lansdale & Owen (1987)	22	55%	3 60%	4 80%	3 60%	3 60%	3 60%	0 0%	3 60%	3 60%
Stifter et al. (1993)	17	43%	3 60%	4 80%	3 60%	2 40%	2 40%	0 0%	2 40%	2 40%
Harrison & Ungerer (2002)	19	48%	3 60%	5 100%	2 40%	2 40%	1 20%	0 0%	3 60%	3 60%
Scher & Mayseless (2000)	20	50%	3 60%	3 60%	3 60%	2 40%	3 60%	0 0%	3 60%	3 60%
Ding et al. (2012)	14	35%	2 40%	1 20%	2 40%	2 40%	2 40%	0 0%	2 40%	3 60%

*Categories for appraisal are as follows: 1) preliminaries, 2) introduction, 3) design, 4) sampling, 5) data collection, 6) ethical matters, 7) results and 8) discussion.

Empirical Paper:

Predictors of Mood and Anxiety in Employed Mothers with Preschool Children

This paper has broadly been prepared in accordance with the requirements of the Psychology of Women Quarterly.

Author Guidelines are listed in Appendix A.

Supplementary information is presented within this paper to aid overall cohesion for thesis submission; this will be removed prior to journal submission.

Total Word Count: 7998 (including tables and abstract, excluding references and appendices)

Abstract Word Count: 186

Abstract

Employment rates for mothers with preschool children (0 to 4 years old) have significantly increased since 1997 in the United Kingdom. There is conflicting evidence about the influence of maternal employment on mood and anxiety in mothers, particularly in the context of women working alongside motherhood. The current study investigated the predictors of mood and anxiety in employed mothers. The predictors were: number of maternal employment hours, marital status, perceived social support, perfectionism, and number of preschool children. The study explored whether perfectionism significantly moderated the relationship between two of the variables, perceived social support and marital status with mood and anxiety. The sample of 127 employed mothers with preschool children was recruited online using social media. A quantitative, cross-sectional design was used and participants completed standardised questionnaires online. Regression analysis identified that perfectionism and perceived social support predicted mood and anxiety, accounting for 40.6% and 31.6% of the variance. The results suggest that employed mothers report better mood, lower anxiety and perfectionism than anticipated. The implications of the findings, clinical and research implications, limitations of the study and suggestions for future research are discussed.

Keywords

Maternal employment, psychological wellbeing, mood, anxiety, preschool mothers, perfectionism, social support.

Maternal Employment

The Office for National Statistics (ONS, 2017) reported that in 2017 there were 133,000 more employed mothers in England whose youngest child was aged between three and four years (65.1%) than in 1997. The Labour government came into power in 1997, introducing New Labour policies and rhetoric such as increased choices for women in work. Sure Start Children's Centres were introduced to provide affordable childcare in disadvantaged areas to support mothers and their ambitions towards employment, with an emphasis on lone single mothers. Recently, the Childcare Payments Act (2017) was introduced by the British Government providing 30 hours of free childcare for parents in employment, encouraging mothers to return to employment and increase their employment hours.

Mothers may choose to work for different reasons which may be financial, as an outlet for their ambition and drive, due to increased pressure to return to work because of motherhood wage penalty and the gender pay gap. Grimshaw and Rubery (2014) report that mothers' experience a fall in their pay after childbirth while fathers' earnings remain unaffected. Mothers may also feel under pressure to adhere to the "superwoman" identity, which refers to a woman performing multiple roles of being a wife, mother, worker, homemaker and caregiver. The idea of "doing it all" and balancing work and domestic responsibilities has become a valued social norm (Sumra & Schillaci, 2015).

Changes in the working patterns of women have seen more women entering employment during their mid-20s and early 30s. It appears that women are now also choosing to have fewer children, later in their life, which may be partially explained by their increasing participation in paid employment (Kabeer & Natali, 2013). In 2017, there were 679,106 births in England and Wales, the lowest birth-rates since 2006 and a decrease of 2.5% from 2016 (ONS, 2018). Women are more likely to remain in employment after having their first child and in the following years. A longitudinal study of mothers completing childbearing in 2015, reported that 41% of women born in 1958 were still in employment two years after the birth of their first child compared with 58% of women born in 1970 (Roantree & Vira, 2018).

The number of single employed mothers has also increased from 42% in 1983 to 70% in 2017 (ONS, 2017; Roantree & Vira, 2018). The rise of single mothers of preschool children entering employment may be partly attributed to the 'Lone Parent Obligation' reform introduced by the British Government in 2012. The reform proposed a change to the benefits system for lone parents with an emphasis on increasing their participation in employment. Since then, single mothers are required to actively look for employment when their youngest child is of school age (5 years old).

Marriage rates have gradually declined since the 1970s, in 2015 they were at their lowest level on record in the United Kingdom (UK, ONS, 2018). There has been an increasing trend towards cohabiting instead of marriage, or before marriage, and the number of cohabiting families increased from 1.5 million in 1996 to 3.3 million in 2017 (ONS, 2017).

Impact of Maternal Employment

An increase in maternal employment is likely to have led to the reallocation of mothers' time away from the home and into the workplace (Baker & Milligan, 2010). From an attachment perspective, there may be concerns about the negative impact that repeated separations from mothers in employment may have on the child. In particular, that these separations would obstruct the development of a secure attachment between the child and mother, impacting upon the child's development (Bowlby, 1969; Harrison & Ungerer, 2002; Nicol & Hardy, 2017). There is extensive research examining the influence of maternal employment on children and findings suggest that maternal employment is associated with higher levels of childhood obesity and poorer cognitive outcomes (Bernal, 2008; Ruhm, 2008; Waldfogel, Han, & Brooks-Gunn, 2002). In comparison to the breadth of research on children, less is known about the influence of maternal employment on the mothers of these children, particularly concerning their psychological wellbeing.

Research has struggled to provide a single universal definition of psychological wellbeing, resulting in various definitions (Dodge, Daly, Huyton, & Sanders, 2012). Psychological wellbeing and wellbeing are often used interchangeably. The hedonic definition is high levels of positive affect and low levels of negative affect, and a cognitive aspect, a sense of satisfaction with one's life (Carruthers & Hood, 2007).

Mood and anxiety have been used as broad measures of wellbeing in different samples including caregivers and students (Fava, 2012; Hendrix et al., 2016; Steinmayr, Crede, McElvany, & Wirthwein, 2016). It is important to understand wellbeing or components of wellbeing in employed mothers because research indicates that poorer wellbeing increases disruptions in mothers' ability to fulfil work, familial and parental roles (Price, Nam, Choi, & Vinokur, 2002). Poor wellbeing is reported to influence the quality of care and parenting, which impacts upon children's wellbeing (Osborne, Berger, & Magnuson, 2012). Past research on employed mothers has been criticised for measuring levels of depression as indicating components of wellbeing rather than other indicators such as stress and anxiety (Roxburgh, 2004). Maternal difficulties with mood and anxiety can reportedly impact children's development because of adverse effects on breastfeeding, mother-child interactions, health and an increased likelihood of conduct disorder in adolescents (Field, 2017; Stewart, Robertson, Dennis, Grace & Wallington, 2003). Therefore, it is important to understand the factors that influence this component of wellbeing (mood and anxiety) in employed mothers of preschool children.

There are conflicting arguments about the influence of employment on mothers' psychological wellbeing. Arguably maternal employment is beneficial (role enhancement hypothesis) because an increased number of identity roles (being a mother and paid employee) enhances sense of wellbeing through increased stimulation, enhanced social networks, social validation and satisfaction (Chrouser & Ryff, 2006; Roxburgh, 2004). This occurs when there are high levels of support and job control, and low work or family demands (Artazcoz, Borrell, Benach, Cortes, & Rohlfs, 2004). Employed mothers previously reported less depression and greater psychological health and self-esteem compared with non-employed mothers (Arber & Cooper, 2000; Baruch & Barnett, 1985; Thoits, 1983).

Conversely, there is research suggesting maternal employment is detrimental to wellbeing (role strain theory) because multiple roles can increase demands on mother's finite resources (energy, time and attention) used to balance their work or family obligations (Marks, 1977). This may result in stress for mothers when trying to manage multiple roles and their demands, which may decrease wellbeing. The number of maternal employment hours worked per week predicts wellbeing as evidence suggests longer employment hours, limits the time available to meet family

demands, which can increase role strain and anxiety while reducing wellbeing and mood (Chatterji, Markowitz, & Brooks-Gunn, 2013; Floderus et al., 2009). The presence of more than one preschool child, absence of a partner and social support also increases demands on employed mothers, and role strain, leading to poorer wellbeing (Hoffman, 1989).

Past research found that employed mothers who report higher levels of social support also report better mood (Gjerdingen, McGovern, Attanasio, Johnson, & Kozhimannil, 2014; McGovern et al., 2011). The stress-buffering theory proposes that social support enables an individual to receive active support, advice and coping strategies to manage strain resulting from a stressful event, which helps to maintain wellbeing (Dagher et al., 2009; Schwarzer & Leppin, 1991).

Current Study

The study will investigate predictors of mood and anxiety, which are components of wellbeing, in employed mothers, particularly maternal employment hours per week, the number of preschool children at home and perceived social support. In comparison to previous studies, this study will focus on employed mothers of preschool children (aged 0 to 4 years) because of the significant increases in this group recently (ONS, 2017). Furthermore, there is a limited understanding of these components of psychological wellbeing (mood and anxiety) in this group.

Past research has been criticised for investigating the influence of maternal employment in a simplified and rigid manner by focusing on the experience being either detrimental or beneficial to mothers' wellbeing (Elgar & Chester, 2007). The role strain or role enhancement hypotheses was dominant in past research and constructed the issue of maternal employment as a difficulty of identity and energy (Sharpe, 1984). The research may be influenced by society's construction of maternal stereotypes (good versus bad or employed versus at-home), leading researchers to construe the issue of maternal employment according to either positive or negative experiences according to their own biases (Johnston & Swanson, 2004). Johnston and Swanson (2004) propose that the relationship is more complex, as highlighted by decades of research which has yielded inconsistent evidence in support of either hypothesis. Therefore, future research should combine

both hypotheses and also increase understanding of the processes involved in the relationship between maternal employment and wellbeing (Elgar & Chester, 2007).

Literature has documented that partnered mothers report better wellbeing compared with single mothers (Hewitt, Turrell, & Giskes, 2010). However, despite findings that marital status may be a predictor of wellbeing in employed mothers, research has been limited to mothers from dual families (Parasuraman & Greenhaus, 2002). Despite the role enhancement hypothesis, single employed mothers report poorer health, wellbeing and higher levels of depression in comparison with partnered, employed mothers (Afifi, Cox, & Enns, 2006; Robinson, Magee, & Caputi, 2014). Single employed mothers are reportedly more likely to experience greater demands in looking after children and the home, increasing strain and reducing wellbeing. (Ali & Avison, 1997). Therefore it would be expected that these mothers may experience greater difficulties with mood and anxiety.

Robinson, Magee, and Caputi (2014) investigated factors underlying the psychological differences between cohabiting and non-cohabiting employed mothers with children under 18 years. Single mothers were defined as those living without a partner (including single, divorced, never-married and widowed mothers), and partnered mothers were defined as a couple in a relationship cohabiting together (legally married or defacto). They found that single employed mothers had poorer self-reported physical health, mental health and increased psychological distress compared with partnered employed mothers. Perceived social support and work hours were found to be significant moderators of the association between marital (cohabiting) status and the wellbeing of employed mothers. Poorer health of single employed mothers was more pronounced with lower social support and fewer working hours. The authors concluded that further research is required to enhance understanding of the underlying factors that increase the vulnerability of single employed mothers to experiencing poorer wellbeing.

The current study will build on the work of Robinson et al. (2014) to investigate whether marital status (based on cohabiting status) and perceived social support are predictors of components of wellbeing, mood and anxiety in employed mothers of preschool children. The study will also investigate if perfectionism moderates the relationship between marital (cohabiting) status and mood and anxiety within this

group. The study will aim to understand whether higher levels of perfectionism increases the likelihood of employed single mothers experiencing lower mood and higher anxiety.

To further understand the nature of mood and anxiety in employed mothers of preschool children, the study will examine other predictors that may be pertinent to this group. In particular, perfectionism is a known predictor of low mood in women through reducing self-esteem, self-confidence, promoting a lack of acceptance of personal limitations and unrealistic thinking (Geranmayepour & Besharat, 2010; Rosan, Finnis, Biaggi, Pawlby, & Pariante, 2016). Perfectionism is essential to consider in the case of employed mothers who may experience conflict when trying to build and maintain their career while focusing on their family. Mothers with higher perfectionism and drive to achieve high personal standards in their work and home life may experience increasing emotional conflict about the competing demands of different aspects of their life (Mitchelson & Burns, 1998).

One definition of perfectionism is excessive self-criticism associated with high expectations of oneself, concern over meeting social expectations and doubts about the effectiveness of one's actions (Frost, Marten, Lahart, & Rosenblate, 1990; Greco, 2006). Individuals with perfectionist tendencies may have unhelpful beliefs about themselves and significant others, which may impair their interpersonal relationships (Shahar, Blatt, Zuroff, Krupnick, & Sotsky, 2004). Perfectionism may reduce an individual's perceived social support and increase interpersonal stress (Dunkley, Zuroff, & Blankstein, 2003). Another feature of perfectionism is the belief that failure or making mistakes can lead to loss of respect and rejection from others, leading to withdrawal from significant others (Frost et al., 1990). The social disconnection model proposes that individuals with higher levels of perfectionism can experience social disconnection through being overly dependent on others, rejecting in response to perceived criticism, with the tendency to seek acceptance from others (Sherry, Mackinnon, & Gautreau, 2016). Therefore, the current study will not only investigate if perfectionism is a predictor of mood and anxiety but also if it moderates the relationship between perceived social support, and mood and anxiety in employed mothers with preschool children. It will identify whether higher levels of perfectionism strengthens the relationship between low perceived social support and lower mood and higher anxiety.

Hypotheses

The study will test the following hypotheses:

1. Perfectionism, employment hours per week, and the number of preschool children will have a significant positive correlation, and perceived social support will have a significant negative correlation with mood and anxiety.
2. Higher levels of perfectionism, more employment hours per week, lower perceived social support, more than one preschool child at home and single (non-cohabiting) marital status will predict lower mood and higher levels of anxiety in employed mothers of preschool children.
3. Perfectionism moderates the relationship between marital (cohabiting) status and anxiety and mood of employed mothers with preschool children.
4. Perfectionism moderates the relationship between perceived social support and anxiety and mood of employed mothers with preschool children.

Method

Participants & Design

An observational and cross-sectional, online survey design was used to collect quantitative data at a single point in time. One hundred and ninety-eight employed mothers in the UK took part in the current study. Seventy-one participants did not complete the entire online survey and were excluded from the study. In the final sample (*n*=127), participants were aged between 29 and 49 years (*M*=33.13, *SD*=4.75). Eleven participants (8.7%) were single or not living with a partner/spouse, and 116 (91.3%) were married or cohabiting with partner/spouse. Most participants identified as White British (81.1%, *n*=103) and Table 1. includes details on participants' ethnicity. The participants were working between 16 and 48 hours per week (*M*=28.59, *SD*=8.18). A large proportion of participants only had one preschool child (*n*=94, 74%) or no other children under the age of 18 years (*n*=75, 59.1%). Information was collected on the number of other children under the age of 18 years to describe the sample and is detailed in Table 2.

The inclusion criteria were mothers over the age of 18 years with at least one preschool child, working at least 16 hours per week, who had access to a computer,

with a good understanding of English, as the researchers did not have the resources to fund an interpreter, and were living in the UK. Mothers were included on the basis of working 16 hours per week because this is the current cut off for claiming benefits in the UK. The exclusion criterion was employed mothers in voluntary work because there is no single definition for a volunteer, making it difficult to distinguish between individuals who offer their time without payment or obligation and those that may receive payment for their time.

A power calculation was carried out before recruitment to determine the required sample size for the regression analyses with five predictors (marital cohabiting status, more than one preschool child, maternal employment hours, perceived social support and perfectionism). A medium effect size (0.15) with power set at 0.8 and alpha at 0.05, indicated a sample of 91 participants was required (Soper, 2019). A medium effect size was selected because of the potential limitations of recruitment for a time-limited student research project, as previous similar studies used large sample sizes (e.g. Chatterji et al., 2013; Robinson et al., 2014). The number of participants included in this study was above that of the required power sample because of significant interest in the research. A large number of surveys were completed in a short period before the study was closed, and the researchers agreed that it would be unethical to exclude completed participant data.

Table 1. Descriptive Statistics of Ethnicity including frequency and percentages of each Ethnicity group.

Ethnicity	Frequency	Percentage
White British	103	81.1%
White Irish	3	2.3%
White & Asian	1	0.8%
Other Mixed	2	1.6%
British Caribbean	4	3.1%
British Indian	1	0.8%
British Pakistani	9	7.1%
British Bangladeshi	3	2.4%
Prefer not to say	1	0.8%
Total	127	100.0%

Table 2. Frequency and percentage table of the total number of preschool children and the total number of other children under the age of 18 years of participants.

Demographic Details		Number of participants	Percentage
No. of Preschool Children			
	1	94	74%
	2	28	22%
	3	5	4%
No. of Children under 18 years			
	0	75	59%
	1	36	28%
	2	12	9%
	3	4	3%

Procedure & Recruitment

The study was approved by the Research Ethics Committee at Staffordshire University. Participants were recruited for the online study by advertising on social media (Twitter and Facebook) and online parenting forums (Net Mums and Mums Net) between 23rd November 2018 and 21st January 2019 (Appendix C). Permission was sought from Net Mums and Mums Net to advertise the study on their forums.

Participants completed the study via a Qualtrics survey (Qualtrics, Provo, UT). They completed four screening questions based on the exclusion criteria to determine eligibility and were provided with an information sheet with further details about the study (see Appendix D). Participants gave their informed consent on a form before they were given access to the questionnaire and they completed six demographic

questions on their age, ethnicity, marital (cohabiting) status, number of employment hours per week, number of preschool children and other children under 18 years old (Appendices E & F). The questionnaire included four standardised measures on mood, anxiety, perceived social support and level of perfectionism (Appendix G). Participants were given an electronic and downloadable debrief before submitting their responses, which included details of support for any participants experiencing difficulties with the study or with their mental health, (Appendix H).

Measures

Patient Health Questionnaire (PHQ-9, Kroenke, Spitzer, & Williams, 1999). The PHQ-9 is a 9-item questionnaire rating symptoms of depression and their frequency over the last two weeks. Items such as "Feeling down, depressed or hopeless" are rated on a 4-point Likert scale of 0, not at all, to 3, nearly every day. The total score was calculated by adding together all 9 items yielding scores from 0 to 27. Scores between 0 and 4 indicate minimal symptoms of depression, 5 to 9 mild depression, 10 to 14 moderate depression, 15 to 19 moderately severe, and 20 to 27 severe depression. The PHQ-9 demonstrated good internal reliability, with a Cronbach's α of .86 and .89 across two studies (Spitzer et al., 1999). They reported a good test-retest reliability, with a Cronbach's α of .84. In the current study, a reliability analysis was carried out and Cronbach's alpha was α =.89, indicating good reliability.

Generalised Anxiety Disorder Questionnaire (GAD-7, Spitzer, Kroenke, Williams, & Löwe, 2006). The GAD-7 is a 7-item self-report questionnaire rating the frequency of symptoms of anxiety over the last two weeks. Items such as "Feeling nervous, anxious or on edge" are rated on a 4-point Likert Scale (0, not at all, to 3, nearly every day). The total score was calculated by adding together scores from the 7-items, ranging from 0 to 21. Scores between 0 to 4 indicates minimal symptoms of anxiety, 5 to 9 mild symptoms, 10 to 14 moderate anxiety, and 15 to 21 severe anxiety. The GAD-7 has previously shown good internal consistency (α =.92) and test-retest reliability (α= .83) (Spitzer et al., 2006). In the current study, reliability analysis denoted a Cronbach's alpha was α =.93, indicating good reliability.

Frost Multidimensional Perfectionism Scale (FMPS, Frost, Marten, Lahart, & Rosenblate, 1990). The FMPS is a 35-item questionnaire measuring perfectionism and items such as "It is important to me that I am thoroughly competent in everything

I do" are rated on a 5-point Likert Scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The total score was calculated based on three total subscales: Concern over Mistakes and Doubts about Actions, Parental Expectations, and Criticism and Personal Standards. The Organisations subscale was excluded from the total score because Frost et al. (1990) found 29 items from the three subscales to be more reliable. The total score was between 29 (low perfectionism) and 145 (high perfectionism) with higher scores indicating higher levels of general perfectionism. Frost et al. (1990) reported the coefficients of internal consistency varied from α=.77 to α=.93 for the subscales and the reliability of the total perfectionism score was α =.90. The current study, which focused on general perfectionism, used the total score to measure general perfectionist tendencies. Reliability analysis on the 29-item FMPS found a Cronbach's alpha (α =.93) showed to reach good reliability.

Multidimensional Scale of Perceived Social Support (MSPSS, Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS is a measure of the amount of support someone feels they receive from their family, friends and significant other, and consists of 12 items on a 7-point Likert scale, ranging from 1 (very strongly disagree) to 7 (very strongly agree). Items include: "My family really tries to help me." The MSPSS consists of three subscales of Significant Other, Family and Friends. A total scale score based on the mean scores of each item, yields scores ranging from 1 to 2.9 (low support); 3 to 5 (moderate support) and 5.1 to 7 (high support). Zimet et al. (1988) found a Cronbach's coefficient alpha of α=.99 for the full scale, and test-retest reliability was α=.85. In the current study, reliability of the full scale was α =.92, indicating good reliability.

Data Analysis

IBM Statistical Package for the Social Science (SPSS version 25, 2017) software was used to carry out the data analyses for this study. A multiple regression analysis was used to identify whether the predictor variables: perfectionism, marital (cohabiting) status, number of maternal employment hours worked per week, number of preschool children at home, and perceived social support predicted mood and anxiety in employed mothers. A moderator analysis was employed to identify whether perfectionism was a key moderator of the relationship between marital

status and mood and anxiety, as well as perceived social support and mood, and anxiety.

Data checks were carried out to ensure that data did not violate the assumptions for a regression, including normality, linearity and homoscedasticity. Histograms, probability plots (P-Plots), scatterplots, skew and kurtosis statistics were checked (Appendix J). Multicollinearity (high correlation between predictor variables) was also checked by examining correlation coefficients and variance inflation factor (VIF) values. The data met all the assumptions of normality.

Results

Descriptive Statistics

The descriptive statistics show that participants scores on the PHQ-9 (*M*=7.04, *SD*=5.89) ranged from 0 to 24 and scores on the GAD-7 (*M*=8.03, *SD*=6.08) were between 0 and 21. Most participants reported mild symptoms of depression and anxiety. With the predictor variables, participants reported overall high levels of perceived social support (*M*=5.54, *SD*=1.01) with scores ranging from 2.3 to 7.0 and overall moderate perfectionism (*M*=81.56, *SD*=19.16) with scores between 47 and 138. The average maternal employment hours worked per week (*M*=28.59, *SD*=8.18) were fewer than what would be classified as full-time hours (37.5 hours per week).

Correlation

Correlation analyses (see Tables 3. and 4) were carried out during the regression analysis to examine correlations between all variables using Pearson's correlations. Mood scores in Table 3. show that perfectionism was moderately positively correlated (r=.448, p=.001) with mood, and perceived social support was moderately negatively correlated (r= -.576, p=.001) with mood (PHQ-9), meaning that those with high levels of perfectionism had lower mood whilst those with high levels of perceived social support reported better mood. Table 4. shows that perfectionism had a moderately positive correlation (r=.52, p=.001) with anxiety (GAD-7), suggesting that participants reporting higher levels of perfectionism had higher anxiety. Social support (MSPSS) had a weak negative correlation (r=-.37, p=.001)

with anxiety (GAD-7) indicating that those reporting higher levels of perceived social support had less anxiety.

There was a weak positive correlation (r=.041, p=.322) between mood (PHQ-9) and number of maternal employment hours, indicating a general trend that those working longer employment hours had lower mood. There was a weak positive correlation between mood (PHQ-9) and number of preschool children (r=.011, p=.450), indicating the trend that those with more preschool children had lower mood. The correlation of mood (PHQ-9) with marital (cohabiting) status was a weak negative correlation (r=-.122, p=.086). The number of preschool children (r=.07, p=.234) had a weak positive correlation with anxiety; marital (cohabiting) status (r=-.10, r=.143) and the number of maternal employment hours per week (r= -.01, p=.461) were shown to have a weak negative correlation with anxiety.

Table 3. Pearson's correlational analysis between Mood (criterion variable) and marital status, number of preschool children, number of maternal employment hours per week, FMPS and MSPSS (predictor variables).

	Mood (PHQ-9)	**No. Preschool Children**	**Marital Status**	**No. Maternal Employment Hours**	**Perfectionism (FMPS)**	**Social support (MSPSS)**
Mood (PHQ-9)	1	.01	-.12	.04	.45**	-.58**
No. Preschool Children	.01	1	.12	-.17*	-.09	-.06
Marital Status	-.12	.12	1	-.11	.03	.16*

No. Maternal Employment Hours	.04	-.17*	-.11	1	-.08	.05
Perfectionism (FMPS)	.45**	-.09	.03	-.08	1	-.33**
Social Support (MSPSS)	-.58**	-.06	.16*	.05	-.33**	1

*<.05, **<0.001

Note: Patient Health Questionnaire (PHQ-9, Kroenke, Spitzer, & Williams, 1999), Frost Multidimensional Perfectionism Scale (FMPS, Frost, Marten, Lahart, & Rosenblate, 1990), Multidimensional Scale of Perceived Social Support (MSPSS, Zimet, Dahlem, Zimet, & Farley, 1988).

Table 4. Pearson's correlational analysis between anxiety (criterion variable) and marital status, number of preschool children, number of maternal employment hours per week, FMPS and MSPSS (predictor variables).

	Anxiety (GAD-7)	**No. Preschool Children**	**Marital Status**	**No. Maternal Employment Hours**	**Perfectionism (FMPS)**	**Social support (MSPSS)**
Anxiety (GAD-7)	1	.07	-.10	-.01	.52**	-.37**
No. of Preschool Children	.07	1	.12	-.17*	-.09	-.06
Marital Status	-.10	.12	1	-.11	.03	.16*
No. Maternal Employment Hours	-.01	-.17*	-.11	1	-.08	.05
Perfectionism (FMPS)	.52**	-.09	.03	-.08	1	-.33**
Social Support (MSPSS)	-.37**	-.06	.16*	.05	-.33**	1

*<.05, **<0.001

Note: Generalised Anxiety Disorder Questionnaire (GAD-7, Spitzer, Kroenke, Williams, & Löwe, 2006).

Regression Analysis

Multiple regression analyses (Tables 5. & 6.) were carried out separately for the two criterion variables, mood and anxiety. The mood model was significant (F (5,121) =17.36, p=.001), explaining 41.8% (R^2) of variance and 39.4% when adjusted. Two variables significantly predicted mood in employed mothers, perfectionism (β=.31, p=.001) and perceived social support (β=-.47, p=.001). The anxiety model was significant (F (5,121) =12.26, p=.001) explaining 33.6% (R^2) of the variance and 30.9% when adjusted. Two variables significantly predicted anxiety, perfectionism (β= .48, p=.001) and perceived social support (β= -.19, p=.02).

Table 5. Multiple regression analysis of the number of preschool children, marital status, maternal employment hours per week, perfectionism (FMPS), and social support (MSPSS) as predictors of mood (PHQ-9).

	B	**SE**	**β**	***p***	**95% CI**
Constant Mood	13.31	4.22		.002	4.96-21.67
No. Preschool Children	.38	.78	.04	.63	-1.17-1.93
Marital Status	-1.10	1.49	-.05	.46	-4.06-1.86
Maternal Employment Hours	.07	.05	.09	.21	-.04-.17
Perfectionism (FMPS)	.09	.02	.31	.001	.05-.14
Social Support (MSPSS)	-2.76	.44	-.47	.001	-3.62--1.88

Note: R^2= .418; Adjusted R^2= .394. B=unstandardised regression coefficients, SE=standard error, β=standardised regression coefficients, CI=95% confidence intervals.

Table 6. Multiple regression analysis of the number of preschool children, marital status, maternal employment hours per week, perfectionism (FMPS), and social support (MSPSS) as predictors of anxiety (GAD-7).

	B	**SE**	**β**	***p***	**95% CI**
Constant Anxiety	1.15	4.65		.81	-8.06-10.35
No. Preschool Children	1.33	.86	.12	.13	-.38-3.04
Marital Status	-1.94	1.65	-.09	.24	-5.20-1.32
Maternal Employment Hours	.04	.06	.05	.53	-.08-.15
Perfectionism (FMPS)	.15	.03	.48	.001	.10-.20
Social Support (MSPSS)	-1.16	.49	-.19	.02	-2.13- -.20

Note: R^2= .336; Adjusted R^2= .309. B=unstandardised regression coefficients, SE=standard error, β=standardised regression coefficients, CI=95% confidence intervals.

To improve the precision of the model, the regressions were re-run with the two significant predictors: perfectionism and perceived social support (Table 7. & 8). The mood model was significant (F (2,124) =42.44 p=.001), explaining 40.6% (R^2) of the overall variance and 39.7% when adjusted. The anxiety model was significant (F

(2,124) =28.70, p=.001), explaining 31.6% (R^2) of the overall variance and 30.5% when adjusted.

Table 7. Multiple regression analysis of perfectionism and perceived social support, as predictors of mood (PHQ-9).

	B	**SE**	**β**	***p***	**95% CI**
Constant (Mood)	15.39	3.48		.001	8.51-22.27
Perfectionism (FMPS)	.09	.02	.29	.001	.04-.13
Social Support (MSPSS)	-2.82	.43	-.48	.001	-3.67- -1.97

Note: R^2= .406; Adjusted R^2= .397. B=unstandardised regression coefficients, Se=standard error, β=standardised regression coefficients, CI=95% confidence intervals.

Table 8. Multiple regression analysis of perfectionism and perceived social support, as predictors of anxiety (GAD-7).

	B	**SE**	**β**	***p***	**95% CI**
Constant (Anxiety)	3.73	3.85		.34	-3.89-11.35
Perfectionism (FMPS)	.14	.03	.45	.001	.09-.19
Social Support (MSPSS)	-1.33	.48	-.22	.006	-2.27- -.39

Note: R^2= .316; Adjusted R^2= .305. B=unstandardised regression coefficients, Se=standard error, β=standardised regression coefficients, CI=95% confidence intervals.

As marital (cohabiting) status was not a predictor of either mood or anxiety, the moderator analysis was not carried out for this predictor. As perfectionism and social support were predictors, a moderator analysis was undertaken. Both models (mood and anxiety) showed that the predictor (perceived social support) and moderator (perfectionism) failed to reach a significant effect with the interaction term added (perceived social support z-score x perfectionism z-score). The interaction between perfectionism and perceived social support with mood (F (1, 123) =1.06, p=.31, R^2 change =.01) and anxiety (F (1,123) =1.44, p=.23, R^2 change=.01) did not meet statistical significance. Therefore, perfectionism did not moderate the relationship between perceived social support and mood and anxiety.

Discussion

The study investigated the predictors of components of psychological wellbeing, mood and anxiety in employed mothers with preschool children. The number of maternal employment hours, number of preschool children and marital (cohabiting) status did not predict mood and anxiety in employed mothers. Perfectionism was investigated to measure whether it moderates the relationship between perceived social support with mood and anxiety, and marital status with mood and anxiety.

The results did not support previous findings that longer maternal employment hours are associated with negative outcomes for mothers perhaps because of differences in the study's design compared with past studies (Floderus, Hagman, Aronsson, Marklund, & Wikman, 2009). The study did not compare employed mothers with non-employed mothers, and it did not include mothers working less than 16 hours per week. This may explain differences in the study's results compared with Chatterji et al.'s (2013) findings that mothers working longer hours reported more significant depression in their longitudinal study which compared non-working mothers (0 hours) with mothers working 1-20 hours, 21-39 hours, and over 40 hours per week when infants were six months old. The current study found a weak trend of longer employment hours associated with lower mood and higher anxiety, although this relationship was not statistically significant. Another explanation for this relationship

not being significant is that the mean employment hours reported in the current study were 28.59 hours per week (*SD*=8.18), fewer than what would be classified as full-time hours. The study supports findings by Buehler and O'Brien (2011) that fewer employment hours are associated with better mood in mothers of preschool children because they experience the benefits of employment (support and resources which enhance wellbeing) while reporting less work and family conflicts due to having more time and energy to balance and meet differing demands.

The results do not support findings by Robinson et al. (2014) that single (non-cohabiting) status is associated with poorer mental health in employed mothers. Robinson et al. (2014) compared single employed mothers with partnered, employed mothers. The current study did not find that marital (cohabiting) status was a predictor of anxiety and mood in mothers of preschool children. There was a large proportion of participants (91.3%) who identified themselves as married or cohabiting with their partner, which was higher than Robinson et al.'s (2014) study which reported 79.9% partnered mothers. The data in the current study was not weighted to adjust for unequal groups of single (or non-cohabiting) and married (or cohabiting) mothers because it would reduce the accuracy of analyses particularly with smaller sample sizes (Kott, 2007; Thomas, 2017). The large proportion of married or cohabiting mothers may have confounded the results by overestimating levels of perceived social support and thus reporting better mood and lower anxiety. Research shows that mothers perceive higher social support levels when they have a resident spouse which acts as a buffer to stress, enhancing wellbeing (Cairney, Boyle, Offord, & Racine, 2003). The current study measured marital status according to cohabiting based on this being a predictor of wellbeing in past research (Cairney et al., 2003; Robinson et al., 2014) and because it reflects the increasing numbers of cohabiting mothers within the UK. This measure of marital status is limited because it is difficult to distinguish whether a mother is married but not cohabiting with her partner and it assumes that cohabiting or being married are the same experiences which may not be the case.

The hypothesis that low perceived social support predicts lower mood and higher anxiety was supported by the study's results, explaining 40.6% and 31.6% of the variance, respectively. This evidence supports past research that perceived social support is a buffer to life stresses because it is considered to be a resource and

source of support to enable mothers to manage and balance demands (Cohen & Wills, 1985; Schwarzer & Leppin, 1991). Perceived social support, in turn, is a protective factor against lower mood and higher anxiety and helps to maintain wellbeing (Cairney et al., 2003). These results may be explained by Thoits (2011) findings that when major stressors occur, members of the support network provide visible deliberate assistance, focusing on changing the individual's current situation and feelings. This response validates and reinforces feelings of support being available when needed, providing the individual with active coping assistance such as advice or emotion-focused coping strategies, reducing the demands or emotional response to the demands and increasing feelings of personal control (Thoits, 2011).

There is no known research as far as the author is aware, investigating the influence of perfectionism on components of wellbeing in employed mothers with preschool children. The results support previous findings that perfectionism predicts low mood in women (Geranmayepour & Besharat, 2010; Rosan et al., 2016). Perfectionism was the strongest predictor of both mood and anxiety in the current study which may be explained by Henderson, Harmon, & Newman's (2015) findings that mothers experiencing pressure to be perfect and guilt for not meeting their parenting expectations have lower self-efficacy, increased stress and anxiety, impacting on their wellbeing. The average FMPS score was 81.56 (*SD*=19.16) indicating moderate scores of perfectionism although this was an arbitrary classification given by the researchers because the categories of perfectionism according to the total score are broad from 29 (indicating low perfectionism) and 145 (indicating high perfectionism). Moderate perfectionism scores suggest that employed mothers may not experience as high levels of perfectionism as anticipated.

The findings did not support the hypothesis that perfectionism moderates the relationship between perceived social support and anxiety and mood of employed mothers. One explanation is that mothers did not report high levels of perfectionism and so perfectionism may not have had a significant influence as a moderator. Alternatively, the high level of perceived social support reported by participants suggests that this factor acts as a buffer against stress linked to perfectionism which helps to maintain mood and wellbeing (Dunkley et al., 2003).

The results suggest that employed mothers with preschool children reported better mood and lower anxiety than expected. Overall, participants reported mild or minimal symptoms of low mood and anxiety, indicating that they were experiencing positive wellbeing. These findings imply that maternal employment is more beneficial than detrimental to these mothers' mood and anxiety. It appears that maternal employment, in combination with having a preschool child and a cohabiting partner/spouse, may also be protective factors against lower mood and higher anxiety. These findings may be explained according to the PERMA Theory of Wellbeing (Seligman, 2011), which proposes that five elements contribute to wellbeing: positive emotions, engagement, relationships, meaning and accomplishment. Most participants in this study reported better mood and lower anxiety indicating that they were experiencing positive emotions, thought to help individuals to flourish in their work and relationships (Frederickson, 2001; Khaw & Kern, 2015). This theory suggests that high levels of engagement (an interest or being absorbed within a particular activity, organisation or cause) contribute to wellbeing (Khaw & Kern, 2015). The current study indicates that employment may provide high levels of engagement for these mothers, although further research is needed to establish this. Evidence proposes that creating relationships, feeling integrated within a community and increasing satisfaction with one's social network enhances mood and wellbeing (Perissinotto, Cenzer, & Covinsky, 2012). For this group of employed mothers, their roles may provide them with opportunities to build and develop relationships with others. This also lends support to the role enhancement theory that having multiple identity roles enhances wellbeing through increasing social networks and social validation (Chrouser & Ryff, 2006; Roxburgh, 2004). These factors may also, according to Seligman's theory, bring about a sense of purpose or meaning for mothers and further opportunities to gain a sense of accomplishment through being a mother, a partner/spouse, and having a career (Seligman, 2011). Employment may also provide an outlet for mothers to continue with their personal ambition (Butler & Kern, 2016).

Clinical & Research Implications

The implications of the study's findings are that perceived social support and perfectionism are risk factors for lower mood and higher anxiety. The results indicate that mothers with high levels of general perfectionist tendencies, as measured by the FMPS, may be at increased risk of experiencing higher levels of anxiety and lower mood. It may be helpful to consider screening employed mothers with preschool children for high levels of perfectionism and low perceived social support as a method of early detection and prevention. The National Institute for Health and Care Excellence (NICE, 2014) emphasises service delivery for effective identification and treatment of mental health problems during the antenatal and postnatal periods within primary and secondary care. Mothers are in frequent contact with health professionals during this period, and it would be important for these professionals to be made aware of risk factors for lower mood and higher anxiety to increase their awareness and confidence in detecting these emotional difficulties (NICE, 2014).

The study's findings highlight that it may be important to address these risk factors using psychological interventions. In relation to low perceived social support, evidence suggests that interventions tailored at enhancing close relationships are effective in improving social functioning, perceived social support and in turn, mood and anxiety. Based on this previous evidence, the following interventions may be relevant to employed mothers: family-focused therapy to improve family interactions and functioning, providing support groups tailored to employed mothers of preschool children, and interpersonal therapy to help build individual skills to enhance social functioning (Barbato & D'Avanzo, 2006; Hollon et al., 2002; Zabalegui, Sanchez, Sanchez, & Juando, 2005). There is evidence that Cognitive Behavioural Therapy (CBT) strategies may be effective in managing high personal standards and excessive criticism through promoting flexible thinking and adjusting unrealistic beliefs. Strategies include developing skills in compromising with self and others and using behavioural experiments to gather evidence from reliable sources to challenge unrealistic beliefs (Egan, Wade, Shafran, & Antony, 2014). A CBT assessment and formulation would also be useful in eliciting cognitions about standards or expectations that employed mothers may have about their multiple roles to address and limit the potential impact it has on their mood and anxiety.

Limitations & Future Research

The finding that being employed with a preschool child may enhance mood highlights the importance of approaching research on components of wellbeing in this group using a strengths-based approach. These ideas were emphasised by Elgar and Chester (2007), who suggested that research often assumes that maternal employment has a detrimental influence on mothers. Future research may benefit from considering factors which enhance mood in mothers to help identify and increase their wellbeing.

The study was limited to measuring mood and anxiety as a component of wellbeing, and it did not directly measure psychological wellbeing. Future research may directly measure wellbeing using specific questionnaires such as the The Warwick-Edinburgh Mental Well-being Scale (WEMWBS, Tennant et al., 2007). Alternatively, life satisfaction alongside mood and anxiety can be used to measure wellbeing according to the hedonic definition (Joseph & Wood, 2010). It will also be pertinent to consider different definitions of wellbeing. Ryff's (2008) model is based on aspects of wellbeing including self-acceptance, purpose in life, positive relationships, autonomy, environmental mastery and personal growth (Joseph & Wood, 2010; Ryan & Huta, 2009; Ryff, 2008; Ryff & Singer, 2008), which may be used as alternative measures of wellbeing.

The current study did not include parental related measures such as the Parental Stress Scale (PSS, Berry & Jones, 1995). The PSS includes statements about the experience of being a parent based on the parent's relationship with their child or children. The self-report scale includes items representative of positive aspects of being a parent, such as personal development and negative aspects such as demands placed on them. Future research may benefit from considering the use of the PSS to measure stress in employed mothers because this questionnaire is specific to their role as a parent and may evaluate the impact that this has on their levels of stress.

General perfectionist tendencies were measured using the FMPS and according to concerns over mistakes, doubts about actions, parental expectations and criticism and personal standards. Perfectionism can affect individuals across different domains of their life, including performance at work or relationships and family life

(Egan et al., 2014). Future research will benefit from investigating what aspects of perfectionism may be helpful or unhelpful to employed mothers across these domains. Hewitt & Flett (1991) define one aspect of perfectionism as socially prescribed perfectionism which is the tendency to hold the belief that others expect high standards from that individual, which is significantly associated with stress (Chang, 2002). This may be particularly relevant to employed mothers because of their multiple roles within the home and workplace. Therefore, it would be interesting to see if perfectionism measured according to socially prescribed perfectionism, moderates the relationship between perceived social support and mood, and anxiety in employed mothers.

Perfectionism and perceived social support only accounts for 40.6% and 31.6% of overall variance (39.7% and 30.5% adjusted) of mood and anxiety in employed mothers, respectively. These results suggest that there are a number of other variables that are not accounted for in the current study. Houle et al. (2009) found that self-efficacy significantly predicted mood in employed mothers. According to the social-cognitive theory, self-efficacy is an individual's belief in their ability to produce a given behaviour and this constitutes a key component of agency which is the ability to coordinate skills, motivation and emotions in order to achieve a goal (Bandura, 2000; Houle, Chiocchio, Favreau, & Villeneuve, 2009). Self-efficacy was not considered in the current study and may explain some of the remaining variance that is not accounted for, although this would require further investigation in future research.

The current study is cross-sectional therefore, causality cannot be inferred, and overall conclusions from the findings may be limited. Although low levels of mood and anxiety are related to greater perceived social support, it may be that enhanced mood leads to increased social interactions and greater perceived social support. Future research will benefit from using longitudinal designs to measure mood and anxiety in employed mothers over a period of time. This will help to establish the direction of these effects by determining the order of events, in this case, whether a period of good mood came before increased perceived social support.

The findings were limited to a sample of mothers who were in current employment (an eligibility criteria for the study) and may have excluded mothers off sick or

leaving employment due to difficulties with their mood and anxiety; only capturing those employed mothers experiencing relatively positive mood. It would be helpful for subsequent research to investigate whether these findings are replicated with a clinical sample of mothers experiencing clinically significant symptoms of depression and anxiety, to further understanding of this component of wellbeing in employed mothers. A longitudinal design will enable more understanding about potential changes in mothers' employment status over time due to mood and anxiety.

Internet-mediated research is a rich resource in providing access to a large sample of participants across many geographical locations. Although participants are more likely to report honestly with the anonymity that online research provides, this method is not without its limitations (Wright, 2005). It was not possible to independently assess the eligibility of participants taking part in the study, which may limit conclusions drawn from the study. To help collect reliable data, participants who took part in the study completed screening questions and were explicitly informed of the eligibility criteria.

The participants were recruited from social media and online parenting forums. Facebook is reportedly directly linked to receiving social support (Kim, 2014). Therefore, the sample used may be biased because they were recruited from social network sites, which may have overestimated the levels of perceived social support and thus levels of enhanced mood.

Conclusion

In conclusion, maternal employment, in particular, fewer maternal employment hours, do not appear to be detrimental to mothers with preschool children in relation to their mood and anxiety. Maternal employment hours, the number of preschool children and marital (cohabiting) status did not predict mood and anxiety, but they may be protective factors which enhance mood through providing opportunities for meaning and relationships. Perfectionism and perceived social support were significant predictors of mood and anxiety and are indicative of risk factors for lower mood and higher anxiety, which may be important to identify for prevention and early intervention in employed mothers. The findings appear to be unique in measuring the moderating effect of perfectionism, which was not a significant moderator of the relationship between perceived social support and mood and anxiety. Mothers

reported high levels of perceived social support, which may potentially limit stress related to moderate levels of perfectionism. The results should be interpreted with caution because of the study's limitations, and future research may consider recruiting employed mothers in a clinical population to identify whether findings of this study are replicated.

References

Afifi, T., Cox, B., & and Enns, M. (2006). Mental health profiles among married, never-married, and separated/divorced mothers in a nationally representative sample. *Social Psychiatry and Psychiatric Epidemiology, 41*(2), 122-129.

Ali, J., & Avison, W. R. (1997). Employment transitions and psychological distress: The contrasting experiences of single and married mothers. *Journal of Health and Social Behavior*, 38, 345-362.

Arber, S., & Cooper, H. (2000). Gender and inequalities in health across the life-course. In E. Annandale, & K. Hunt (Eds.), *Gender Inequalities in Health* (pp. 123–149). Buckingham: Open University Press.

Artazcoz, L., Borrell, C., Benach, J., Cortes, I., & Rohlfs, I. (2004). Women, family demands and health: the importance of employment status and socio-economic position. *Social Science and Medicine, 59*(2), 263–74.

Baker, M., & Milligan, K. (2010). Evidence from maternity leave expansions of the impact of maternal care on early child development. *Journal of Human Resources, 45*(1), 1–32.

Bandura, A. (2000). Self-efficacy: The foundation of agency. In W. J. Perrig & A. Grob (Eds.), *Control of human behavior, mental processes, and consciousness: Essays in honor of the 60th birthday of August Flammer* (pp. 17-33). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Barbato, A., & D'Avanzo, B. (2006). Marital Therapy for Depression. *Cochrane Database of Systematic Reviews, 2* (2006): CD004188.

Baruch, G. K., & Barnett, R. C. (1985). Role quality, multiple role involvement and psychological well-being in midlife women. *Journal of Personality and Social Psychology*, *51*(3), 578-585.

Bernal, R. (2008). The effect of maternal employment and child care on children's cognitive development. *International Economic Review*, 49, 1173-1209. DOI: 10.1111/j.1468-2354.2008.00510.x

Berry, J.D. & Jones, W.H. (1995). The Parental Stress Scale: initial psychometric evidence. *Journal of Social and Personal Relationships*, 12, 463-472.

Bowlby, J. (1969). *Attachment. Attachment and loss: Vol. 1. Loss*. New York: Basic Books.

Buehler, C., & O'Brien, M. (2011). Mothers' Part-Time Employment: Associations with Mother and Family Well-Being. *Journal of Family Psychology*, *25(*6), 895–906. DOI: 10.1037/a0025993

Butler, J., & Kern, M. L. (2016). The PERMA-Profiler: A Brief Multidimensional Measure of Flourishing. *International Journal of Wellbeing*, 6, 1-48.

Cairney, J., Boyle, M., Offord, D. R., & Racine, Y. (2003). Stress, social support and depression in single and married mothers. *Social Psychiatry and Psychiatric Epidemiology, 38*, 442–449.

Canty-Mitchell, J., & Zimet, G. D. (2000). Psychometric properties of the Multidimensional Scale of Perceived Social Support in urban adolescents. *American Journal of Community Psychology, 28*, 391-400.

Carruthers, C., & Hood, C. (2007). Building a life of meaning through therapeutic recreation: The leisure and well-being model, part I. *Therapeutic Recreation Journal, 41*(4), 276–297.

Chang, E. C. (2002). Examining the Link Between Perfectionism and Psychological Maladjustment: Social Problem Solving as a Buffer. *Cognitive Therapy and Research, 26*(5), 581–595. DOI: 10.1023/a:1020329625158

Chatterji, P., Markowitz, S., & Brooks-Gunn, J. (2013). Effects of early maternal employment on maternal health and well-being. *Journal of population economics, 26*(1), 285-301.

Chrouser, C. J., & Ryff, C. D. (2006). Multiple roles and well-being: Sociodemographic and psychological moderators. *Sex Roles, 55*, 801–815.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357. DOI: http://dx.doi.org/10.1037/0033-2909.98.2.310

Dagher, R. K., McGovern, P. M., Alexander, B. H., Dowd, B. E., Ukestad, L. K., & McCaffrey, D. J. (2009). *The Psychosocial Work Environment and Maternal Postpartum Depression. International Journal of Behavioral Medicine, 16*(4), 339–346. DOI: 10.1007/s12529-008-9014-4

Department for Communities and Local Government (2012). *Working with troubled families: a guide to the evidence and good practice*. London:

DCLG. Retrieved from https://www.gov.uk/government/publications/working-with-troubled-families-a-guide-to-evidence-and-good-practice

Dodge, R., Daly, A., Huyton, J., & Sanders, L. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing, 2*(3), 222-235. DOI: 10.5502/ijw.v2i3.4

Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2003). Self-critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology, 84*, 234-252.

Egan, S. J., Wade, T. D., Shafran, R., & Antony, M. M. (2014). *Cognitive-behavioral treatment of perfectionism*. New York, NY: Guilford Press.

Elgar, K., & Chester, A. (2007). The mental health implications of maternal employment: Working versus at-home mothering identities, *Australian e-Journal for the Advancement of Mental Health, 6*(1), 47-55. DOI: 10.5172/jamh.6.1.47

Fava, G. A. (2012). The clinical role of psychological well-being. *World psychiatry: official journal of the World Psychiatric Association (WPA), 11*(2), 102-103.

Field, T. (2017). Postpartum Anxiety Prevalence. Predictors and Effects on Child Development: A Review. *Journal of Psychiatry and Psychiatric Disorders, 1*(2), 86-102.

Floderus, B., Hagman, M., Aronsson, G., Marklund, S., & Wikman, A. (2009). Work status, work hours and health in women with and without children. *Occupational and environmental medicine*, *66*(10), 704-710. DOI: 10.1136/oem.2008.044883

Frederickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218-226. DOI: 10.1037/0003-066X.56.3.218

Frost, R. O., & Marten, P. A. (1990). Perfectionism and evaluative threat. *Cognitive Therapy and Research, 14,* 559-572.

Frost, R. O., Marten, P. A., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14* (5), 449–468. DOI: 10.1007/bf01172967

Geranmayepour, S., & Besharat, M. A. (2010). Perfectionism and mental health. *Procedia-Social and Behavioural Sciences,* 5, 643-647. DOI: 10.1016/j.sbspro.2010.07.158

Gjerdingen, D., McGovern, P., Attanasio, L., Johnson, P. J., & Kozhimannil, K. B. (2014). *Maternal Depressive Symptoms, Employment, and Social Support. The Journal of the American Board of Family Medicine, 27*(1), 87–96. DOI:10.3122/jabfm.2014.01.130126

Greco, A. (2006). *Perfectionism, Multiple Roles, and Postpartum Depression: Is Perfectionism a Factor in Multiple-Role Women Experiencing Postpartum Depression?* (Unpublished master's thesis). Pacific University, Oregon, United States of America. Retrieved from http://commons.pacificu.edu/spp/52

Grimshaw, D. & Rubery, J. (2015). *The motherhood pay gap: a review of the issues, theory and international evidence* (International Labour Office Geneva No. 1). Geneva: International Labour Office.

Harrison, L. J., & Ungerer, J. A. (2002). Maternal employment and infant-mother attachment security at 12 months postpartum. *Developmental Psychology, 38*(5), 758-773. http://dx.doi.org/10.1037/0012-1649.38.5.758

Henderson, A., Harmon, S., & Newman, H. (2015). The Price Mothers Pay, Even When They Are Not Buying It: Mental Health Consequences of Idealized Motherhood. *Sex Roles, 74*(11-12), 512–526. DOI: 10.1007/s11199-015-0534-5

Hendrix, C. C., Bailey, D.E., Steinhauser, K.E., Olsen, M. K., Stechuchak, K. M., Lowman, S. G., … Tulksy, J. A. (2016). Effects of enhanced caregiver training program on cancer caregiver's self-efficacy, preparedness, and psychological well-being. *Support Care Cance*r, *24*(1), 327-336. DOI: https://doi.org/10.1007/s00520-015-2797-3

Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60, 456–470. DOI: 10.1037/0022-3514.60.3.456

Hewitt, B., Turrell, G., & Giskes, K. (2010). Marital Loss, Mental Health and the Role of Perceived Social Support: Findings from Six Waves of an

Australian Population Panel Study. *Journal of Epidemiology & Community Health, 66*, 308-314. DOI: http://dx.doi.org/10.1136/jech.2009.104893

Hoffman, L. W. (1989). Effects of maternal employment in the two-parent family. *American Psychologist, 44*, 283-292.

Hollon, S. D., Muñoz, R. F., Barlow, D. H., Beardslee, W. R., Bell, C. C., Bernal, G., … Sommers, D. (2002). Psychosocial Intervention Development for the Prevention and Treatment of Depression: Promoting Innovation and Increasing Access. *Biological Psychiatry 52*(6), 610–630.

Houle, L., Chiocchio, F., Favreau, O. E., & Villeneuve, M. (2009) Role conflict and well-being among employed mothers: the mediating effects of self-efficacy. *Gender in Management: An International Journal, 24*(4), 270-285. DOI: https://doi.org/10.1108/17542410910961550

Howard, K., Martin, A., Berlin, L. J., & Brooks-Gunn, J. (2011). Early mother-child separation, parenting, and child well-being in Early Head Start families. *Attachment & human development*, *13*(1), 5-26.

Johnston, D. D., & Swanson, D. H. (2004). Moms hating moms: The internalization of mother war rhetoric. *Sex Roles*, 51, 497-509.

Joseph, S., & Wood, A. (2010). Assessment of positive functioning in clinical psychology: Theoretical and practical issues. *Clinical Psychology Review, 30,* 830–838. DOI: http://dx.doi.org/10.1016/j.cpr.2010.01.002

Kabeer, N., & Natali, L. (2013). *Gender Equality and Economic Growth: Is there a Win-Win?* (IDS Working Paper, Volume 2013, No. 417). London: Institute of Development Studies.

Kessler, R. C., & McCrae, J. A. (1982). The effects of wives ‘employment on the mental health of men and women. *American Sociological Review*, *47*(2), 216-227.

Khaw, D., & Kern, M. L. (2015). *A cross-cultural comparison of the PERMA model of well-being.* (Unpublished undergraduate thesis). University of Pennsylvania, Pennsylvania, United States of America. Retrieved from: http://www.peggykern.org/uploads/5/6/6/7/56678211/khaw___kern_2015_-_a_cross-cultural_comparison_of_the_perma_model_of_well-being.pdf

Kim, H. (2014). Enacted Social Support on Social Media and Subjective Well-being. *International Journal Of Communication, 8*, 21, 2202-2221. Retrieved from https://ijoc.org/index.php/ijoc/article/view/2243

Kott, P. S. (2007). Clarifying some Issues in the Regression Analysis of Survey Data. *Survey Research Methods*, *1*(1), 11-18.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine, 16*(9), 606-613.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer

Marks, S. (1977). Multiple Roles and Role Strain: Some Notes on Human Energy, Time and Commitment. *American Sociological Review, 42*(6), 921-936. Retrieved from http://www.jstor.org/stable/2094577

McGovern, P., Dagher, R. K., Rice, H. R., Gjerdingen, D., Dowd, B., Ukestad, L. K., & Lundberg, U. (2011). *A Longitudinal Analysis of Total Workload and Women's Health After Childbirth. Journal of Occupational and Environmental Medicine, 53*(5), 497–505. DOI:10.1097/jom.0b013e318217197b

Mitchelson, J. K., & Burns, L. R. (1998). Career Mothers and Perfectionism: Stress at Work and at Home. *Personality and Individual Differences,* 25, 477-485. DOI: http://dx.doi.org/10.1016/S0191-8869(98)00069-5

National Institute for Health and Care Excellence. (2014). *Antenatal and postnatal mental health: clinical management and service guidance, updated edition* (NICE Guideline No. 192). Retrieved from https://www.nice.org.uk/guidance/cg192/evidence/full-guideline-pdf-4840896925

Nicol, T., & Hardy, T. (2017).The impact of early maternal employment on infant wellbeing and attachment. *Journal of Health Visiting*, *5*(4), 178-183. DOI: https://doi.org/10.12968/johv.2017.5.4.178

Office for National Statistics. (2018). *Births in England and Wales, 2017.* London: Office for National Statistics.

Office for National Statistics. (2018). *Marriages in England and Wales: 2015. Number of marriages that took place in England and Wales analysed by age, sex, previous marital status and civil or religious ceremony*. London: Office for National Statistics. Retrieved from https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandm

arriages/marriagecohabitationandcivilpartnerships/bulletins/marriagesinenglandandwalesprovisional/2015

Office for National Statistics. (2017). *Families and Households: 2017. Trends in living arrangements including families (with and without dependent children), people living alone and people in shared accommodation, broken down by size and type of household.* London: Office for National Statistics. Retrieved from https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/bulletins/familiesandhouseholds/2017

Olá, L. S., Kotowska, I. E., & Richter, R. (2018). The new roles of men and women and implications for families and Societies. In. G. Dolbhammer & J. Gumà (Eds.), *A demographic perspective on gender, family and health in Europe* (pp. 41-64). Cham: Springer.

Osborne, C., Berger, L. M., & Magnuson, K. (2012). *Family Structure Transitions and Changes in Maternal Resources and Well-being. Demography, 49*(1), 23–47. DOI: 10.1007/s13524-011-0080-x

Parasuraman, S., & Greenhaus, J. H. (2002). Toward reducing some critical gaps in work-family research. *Human Resource Management Review, 12*(3), 299-312. DOI: http://dx.doi.org/10.1016/S1053-4822(02)00062-1

Perissinotto, C. M., Cenzer, I. S., & Covinsky, K. E. (2012). Loneliness in older persons. *JAMA Internal Medicine, 172*(14), 1078-1084.

Price, R. H., Choi, J. N., & Vinokur, A. D. (2002). Links in the chain of adversity following job loss: How financial strain and loss of personal control lead to depression, impaired functioning, and poor health. *Journal of Occupational Health Psychology, 7*(4), 302-312. DOI: http://dx.doi.org/10.1037/1076-8998.7.4.302

Qualtrics. (2018). Qualtrics software. Provo, Utah, USA: Qualtrics.

Roantree, B., & Vira, K. (2018). *The rise and rise of women's employment in the UK.* The Institute for Fiscal Studies.

Robinson, L. D., Magee, C. A., & Caputi, P. (2014). Social support, work hours and health: A comparative study of sole and partnered Australian mothers. *Women's Studies International Forum*, *42*, 19-27. DOI: https://doi.org/10.1016/j.wsif.2013.10.010

Rosan, C., Finnis, S., Biaggi, A., Pawlby, S., & Pariante, C. (2016). Perfectionism as a warning sign for postnatal mental health difficulties. *Journal of Health Visiting, 4*(8), 400-406. DOI: https://doi.org/10.12968/johv.2016.4.8.400

Rout, U. R., Cooper, C. L., & Kerslake, H. (1997). Working and non-working mothers: a comparative study. *Women in Management Review, 12*(7), 264-275. DOI: http://dx.doi.org/10.1108/09649429710181234

Roxburgh, S. (2004). 'There just aren't enough hours in the day': The mental health consequences of time pressure. *Journal of Health and Social Behavior, 45*, 115-131.

Ruhm, C. J. (2008). Maternal Employment and Adolescent Development. *Labour economics*, *15*(5), 958-983.

Ryan, R. M., & Huta, V. (2009).Wellness as healthy functioning or wellness as happiness: The importance of eudaimonic thinking (response to the Kashdanet al. and Waterman discussion). *The Journal of Positive Psychology, 4*, 202-204. DOI: 10.1080/1743976090284428

Ryff, C. D. (2008). Challenges and opportunities at the interface of aging, personality and well-being. In O.P., John, R.W., Robins & L.A. Pervin (Eds.), *Handbook of personality: theory and research* (pp. 399–418). New York: Guilford.

Ryff, C., & Singer, B. (2008). Know thyself and become what you are: A eudaimonic approach to psychological wellbeing. *Journal of Happiness Studies*, *9*, 13–39. DOI: http://dx.doi.org/10.1007/s10902-006-9019-0

Schwarzer, R., & Leppin, A. (1991). Social Support and Health: A Theoretical and Empirical Overview. *Journal of Social and Personal Relationships*, *8*(1), 99–127. DOI: https://doi.org/10.1177/0265407591081005

Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York, NY: Free Press.

Shahar, G., Blatt, S. J., Zuroff, D. C., Krupnick, J. L., & Sotsky, S. M. (2004). *Perfectionism Impedes Social Relations and Response to Brief Treatment for Depression. Journal of Social and Clinical Psychology, 23*(2), 140–154. DOI:10.1521/jscp.23.2.140.31017

Sharpe, S. (1984). *Double Identity: The Lives of Working Mothers*. Suffolk, UK: Penguin Books.

Sherry, B., Mackinnon, S. P., & Gautreau, C. M. (2016). Perfectionists Do Not Play Nicely With Others: Expanding the Social Disconnection Model. In F. M. Sirois, & D. S. Molnar (Eds.), *Perfectionism, Health, and Well-Being* (pp. 225-243). Cham, Switzerland: Springer International Publishing.

Soper, D. S. (2019). A-priori Sample Size Calculator for Multiple Regression [Software]. Retrieved from http://www.danielsoper.com/statcalc

Spitzer, R. L., Kroenke, K., & Williams, J. B. (1999). Patient Health Questionnaire Primary Care Study Group Validation and Utility of a Self-report Version of PRIME-MD - The PHQ Primary Care Study. *JAMA; 282*(18): 1737-1744.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine, 166*(10), 1092-1097.

Steinmayr, R., Crede, J., McElvany, N., & Wirthwein, L. (2016). Subjective Well-Being, Test Anxiety, Academic Achievement: Testing for Reciprocal Effects. *Frontiers in Psychology Developmental Psychology*, 6, 1-13. DOI: https://doi.org/10.3389/fpsyg.2015.01994

Stewart, D.E., Robertson, E., Dennis, C-L., Grace, S.L., & Wallington, T. (2003). *Postpartum depression: Literature review of risk factors and interventions.* Toronto: Toronto Public Health. Retrieved from https://www.who.int/mental_health/prevention/suicide/lit_review_postpartum_depression.pdf?ua=1

Stober, J. (1998). The Frost Multidimensional Perfectionism Scale: More perfect with four (instead of six) dimensions. *Personality and Individual Differences, 24*(4), 481-491.

Sullivan, A. & Calderwood, L. (2017). Surveys: longitudinal, cross-sectional and trend studies. In D. Wyse, N. Selwyn & E. Smith (Eds.), *The BERA/SAGE Handbook of educational research* (pp. 395-415). 55 City Road, London: SAGE Publications Ltd. DOI: 10.4135/9781473983953.n20

Sumra, M.K. & Schillaci, M.A. (2015). Stress and the Multiple-Role Woman: Taking a Closer Look at the“Superwoman”. *PLoS ONE, 10*(3), 1-24. DOI:10.1371/journal.pone.0120952

The Childcare Payments Act 2014. (2017). *Commencement No. 3 and Transitional Provisions, Regulations 2017.*

Thoits, P. A. (1983). Multiple identities and psychological wellbeing. *American Sociological Review*, *48*(2), 174-187. DOI: 10.2307/2095103

Thoits, P. A. (2011). Mechanisms Linking Social ties and Support to Physical and Mental Health. *Journal of Health and Social Behaviour, 52,* 145-161. DOI: https://doi.org/10.1177/0022146510395592

Thomas, J. W. (2017). To Weight, or Not to Weight: A Primer on Survey Data Weighting [Blog post]. Retrieved from https://www.decisionanalyst.com/blog/dataweighting/

Waldfogel, J., Han, W. J., & Brooks-Gunn, J. (2002). The effects of early maternal employment on child cognitive development**.** *Demography, 39*(2), 369-392. DOI: https://doi.org/10.1353/dem.2002.0021

Wright, K. B. (2005). Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services. *Journal of Computer-Mediated Communication*, *10*(3) 1-123. DOI: https://doi.org/10.1111/j.1083-6101.2005.tb00259.x

Zabalegui, A., Sanchez, S., Sanchez, P. D., & Juando, C. (2005). Nursing and Cancer Support Groups. *Journal of Advanced Nursing 51*(4), 369–381.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). *The Multidimensional Scale of Perceived Social Support. Journal of Personality Assessment*, 52, 30-41.

Zimet, G. D., Powell, S. S., Farley, G. K., Werkman, S., & Berkoff, K. A. (1990). Psychometric characteristics of the Multidimensional Scale of Perceived Social Support. Journal of *Personality Assessment, 55*, 610-17.

Appendix A: Format Guidelines for Journal Submission

Manuscript Submissions

Psychology of Women Quarterly accepts submission of original articles only through its online web system at http://mc.manuscriptcentral.com/pwq.

Please follow the instructions through the site. It will be helpful to have a separate title page and fully masked, electronic main document prepared in advance. The main document must include the Abstract and all Tables, Figures, and appended materials and must mask unpublished Author Citations throughout the manuscript.

If you have any questions or problems, please contact Mary Brabeck (Editor) or Anna Hillary (Assistant Editor) at PWQ@nyu.edu.

Manuscripts should be submitted as an electronic file in Microsoft Word. An accompanying letter should request review and include the following information: that the manuscript (a) is not currently under review elsewhere, (b) has not been previously published in whole or in part, and (c) conforms to APA standards on ethical treatment of participants.

Manuscript Review Policy

Standard masked peer review procedures are used for all submissions. APA policy prohibits an author from submitting the same manuscript for concurrent consideration by more than one journal. Prior or duplicate publication constitutes unethical behavior. Authors have an obligation to consult the Editor if there is any question about an article's suitability for PWQ or if there are questions concerning piecemeal publication (see pp. 13-15 of APA's Publication Manual, 6th edition). Student reviewers may provide independent reviews under the supervision of a Consulting or Associate Editor.

Manuscript Preparation and Style

Follow the general style guidelines set forth in the Publication Manual of the American Psychological Association (6th edition). The entire manuscript - including abstract, quotations, notes, references, figure captions, and tables - must be typed double-spaced. Manuscript pages must be numbered consecutively. The use of sexist or ethnically biased language is unacceptable. Except under unusual circumstances, authors are expected to make available upon request all previously unpublished questionnaires or scales used in an article. The Editor may find it necessary to return a manuscript for reworking or retyping that does not conform to requirements.

Title and Acknowledgements (page 1). To facilitate masked review, all indication of authorship must be limited to this page (other pages must show the short title plus page number at the top right). Include on the title page (a) full article title, (b) names and affiliations of all authors, (c) acknowledgments, and (d) mailing and email

addresses and telephone and fax numbers of the individual serving as the point of contact.

Abstract and Keywords (page 2). Abstract should not exceed 200 words. After the abstract, list appropriate keywords for the manuscript, preferably using terms from the Thesaurus of Psychological Terms.

Text (page 3). Use a five-character paragraph indent. Do not use desktop publishing features, such as right margin justification or underline. Only bold and italics may be used. Use a 12-point typeface.

References. References cited in text must appear in the reference list, and entries in the reference list must be cited in the text. Follow the examples in the 6th edition of the APA manual for specific guidelines.

Notes. Footnotes are not permitted in the text. If necessary, endnotes may be used. Number consecutively throughout text and list on a separate page preceding the following section.

Tables. Tables must appear as a unit following the reference section. Each table should be typed double-spaced on a separate sheet, be numbered consecutively, and include a caption. All tables must be cited in the text.

Figures. Figures and artwork should be submitted in the following digital file formats and with minimum resolution of 300 DPI (600 DPI for line art): TIFF, EPS, PDF, JPEG, or Microsoft Word. Prepare figures according to the guidelines provided in the 6th edition of the APA manual.

For questions regarding style, please follow the style guide.

Teaching Briefs

Psychology of Women Quarterly accepts submission of non-empirical contributions to the scholarship of teaching and learning in the psychology of women only through its online web system at http://mc.manuscriptcentral.com/pwq. Limited to about 10 pages, these essays should follow the general guidelines of APA's Publication Manual, except without an Abstract or title page and confining headings to a single level (Level 1). A 1-2 sentence bio will be requested during the submission process for each contributing author.

Please follow the instructions through the site. It will be helpful to have a separate title page and fully masked, electronic main document prepared in advance.

If you have any questions or problems, please contact Mary Brabeck (Editor) or Anna Hillary (Assistant Editor) at PWQ@nyu.edu.

Teaching essays should be submitted as an electronic file in Microsoft Word. An accompanying letter should request review and include the following information: that the manuscript (a) is not currently under review elsewhere, (b) has not been

previously published in whole or in part, and (c) conforms to the 6th edition of APA's Publication Manual.

Copyediting, Page Proofs, and Author Copies

The publisher reserves the right to copyedit manuscripts to conform to journal style. The lead author will receive page proofs for correction of typographical errors only. No rewriting of the accepted manuscript will be allowed in the proof stage. The lead author of each article will receive one free electronic copy (in PDF format) of her or his article after publication.

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Supplemental Information

The option of including online information supplemental to a paper is available to authors. Examples include the list of noncited articles included in a meta analysis and materials that might be useful to teachers implementing ideas presented in the teaching section. The 6th edition of the APA manual lists other suggestions for online supplements.

Appendix B: Email approvals for online advertising on Netmums & MumsNet

Clinical Psychology Research {421932}
Netmums Customer Services <help@netmums.com>
Fri 20/10/2017, 09:03JANJUA Kinza
Inbox

Reply ABOVE THIS LINE to add a note to this request

Request Update View the complete request history

Hello JANJUA
Thanks for getting in touch.
We do have a surveys request forum which would be the ideal place for you to post your request for information. You do need to register in order to post and then you'll find the forum here: Survey Requests
I'm afraid we don't have that information regarding the members who complete surveys etc. The posts all vary so much in their rqusts for information.
If you need any help do get back in touch.
Kind regards
Beth
The Netmums Helpdesk Team
www.netmums.com
Netmums Customer Services <help@netmums.com>
Thu 19/10/2017, 17:48

Reply ABOVE THIS LINE to add a note to this request

Thank you for contacting Netmums. Your request has been received and will be reviewed shortly by our Customer Services Team.

In the meantime if you are experiencing issues using the site please do take a look at our Member Support page to see if your question can be answered on there
If you do resolve your issue please do reply to this message and let us know you no longer need our support.
~ The Netmums Helpdesk Team

Advertising Research Study
MN Report Post <hs_report_post@mumsnet.com>
Thu 22/03, 11:14
Hi there,

Thanks for contacting us about this - and for thinking of Mumsnet with regard to your research, which sounds really interesting.

We're sure there are Mumsnetters out there who would consider filling in your survey so you are very welcome to start a thread asking for volunteers.

Please acknowledge Mumsnet in the sources and keep the posters' identity anonymous (ie please don't use identifying details or their real life or usernames).

Please put your request in our Surveys/Students/Nonprofits topic:
www.mumsnet.com/Talk/surveys_students_non_profits_and_start_ups

We don't allow research to be conducted anywhere else on our site, though as long as you didn't start a thread, you're free to quote our site as long as Mumsnet is credited. What this means is that if mums are already discussing something relevant to your needs on our site, you can quote from their threads, but not start one yourself with the purpose of eliciting responses.

We wish you the very best of luck with it.

Best wishes,

MNHQ

JANJUA Kinza
contactus@mumsnet.com
To help protect your privacy, some content in this message has been blocked. To re-enable the blocked features, click here.
To always show content from this sender, click here.
To Whom It May Concern,

I am a second year trainee on the Clinical Psychology Doctorate course at Staffordshire University. For my thesis I am interested in looking at the effect of early maternal employment on the wellbeing of mothers with preschool children. I will be creating an online survey that will be aimed at all mothers with preschool children asking them brief questions about their current wellbeing, perceived social support and performance standards. This survey is completed anonymously.
I understand that researchers may advertise under the non-members request topic section. I am emailing to clarify this and to seek permission for ethical approval from the University.
I look forward to hearing from you.
Kind Regards,

Kinza Janjua
Trainee Clinical Psychologist

Appendix C: Study Invitation to be posted online on NetMums Forum, MumsNet Forum and Social Media (Facebook and Twitter)

Dear Mums,

Can you help with a research project investigating the psychological wellbeing of employed mothers with preschool children?

I am looking for working mothers within the UK, aged 18 and over and who have at least one child of preschool age (0 to 4 years old). Mothers of preschool children should be in paid employment for at least 16 hours per week.

Being involved in the study is completely voluntary and your participation would be greatly appreciated. I am hoping it will help us to understand more about the mental health outcomes for mothers in employment with preschool children so that better support may be provided for these mothers in the future.

If you can spare just under 10 minutes of your time to complete the online survey, please click on the link below where you can find out more about the study. Please note that your participation will be anonymous and you will not be asked for your name or contact details:

_____

(Qualtrics Link)

The greater the number of working mothers willing to take part in the study the more powerful our findings will be. Therefore, I would be grateful if any of you are able to pass this on to as many working mothers of preschool children as possible should you wish to.

If you have any further questions, please contact me on
J025075g@student.staffs.ac.uk

Thank you,

Kinza Janjua
Trainee Clinical Psychologist

Appendix D: Participant Study Information to be displayed on the Qualtrics Survey

Participant Information Sheet (Version 2, 2nd October 2018)

Study Title: Psychological wellbeing of employed mothers with preschool children: a moderator analysis

Research Team: Kinza Janjua, Dr Helen Scott and Dr Jo Heyes.

You have been invited to take part in an online research study about the predictors of psychological wellbeing of employed mothers with preschool children in the UK. This study is being carried out as part of a Doctorate in Clinical Psychology qualification at Staffordshire University. The project will be led by Kinza Janjua a current trainee on the Clinical Psychology Doctorate. The information below will give further details about the study and what is involved. Please read this information carefully before you decide to participate.

If you have any further questions or would like any further information, please contact Kinza (whose details are in the section on Researcher Contact Details).

What is this research study about?
This study is about understanding the psychological wellbeing of employed mothers with preschool children (aged 0 to 4 years) and investigates their experience of depression and anxiety. The study will look at predictors of these mothers psychological wellbeing and will explore whether perfectionism, number of employment hours, number of children at home and perceived social support influences the relationship between marital status and psychological wellbeing. The study will also investigate what moderates psychological wellbeing of these mothers.

Why am I being asked to take part?
I am looking for mothers in paid employment for at least 16 hours per week, over the age of 18 years old with at least one child of pre-school age (aged 0 to 4 years).

Do I have to take part?
No, you are under no obligation to take part in this research and if you chose to do so this is entirely voluntary. Your participation in this study will remain anonymous and you have the right to withdraw without giving a reason until the 28th February 2018. You will need to keep a note of your assigned participant number code if you wish to withdraw before 28th February 2018 so that we can identify which data needs to be removed.

What will it involve?
If you decide to take part in this study, once you have read through the information sheet you will be asked on the next screen to give your consent to taking part in the study. Then you will start the study survey which will take just under 10 minutes to complete. You will be asked some demographic questions, for example, age and number of children) followed by four questionnaires on your current mood, anxiety,

perceived social support and perfectionism. At the end, you will be given details of organisations you may wish to contact if you need further support.

What will happen to the results of the study?
The overall combined results may be shared with supervisors in the research team for analysis support but all identifiable information will be taken out prior to this. Your responses to the questionnaires will remain completely confidential and no identifiable information will be published as part of the presentation of findings. We will not ask for your name or contact details and so your participation will be anonymous. Each participant will be given an individual number code.

Copies of the findings will be made available on request (by contacting the researcher via contact details listed under Researcher Contact Details). The full thesis is expected to be completed by July 2019 and the researcher will look to publish the findings in an academic journal.

For audit purposes the University may require the data to be made available to them, however, this will remain anonymised. In accordance with Staffordshire University's research requirements, the data will be stored securely for 10 years at the University and will be destroyed thereafter.

What are the benefits of taking part?
Some mothers may find it helpful reflecting on their current wellbeing. It is also hoped that this research will help to improve our understanding of the psychological outcomes for employed with preschool children. It may help to identify groups of mothers that may benefit from further support when their children are of preschool age.

What are the disadvantages of taking part?
The online study will take just under 10 minutes to complete. Taking part in this study and answering some personal questions, may cause emotional distress and anxiety in some individuals. If you do feel that taking part in this study is affecting your wellbeing then you have the right to take a break or withdraw from the study at any time. We have also provided contact details for charities and organisations that may provide further support.

What if there is a problem?
If you would like to talk more about the research or if you have any questions please contact Kinza Janjua on the contact details below. If you have any concerns, you may prefer to contact one of the research supervisors (see contact details below).

For further information and support about dealing with mental health distress please see below:

For general information on mental health difficulties you may visit the information and support section of the Mind website

https://www.mind.org.uk/information-support/

For specific support in relation to postnatal depression you may access the Mind postnatal depression website

https://www.mind.org.uk/information-support/types-of-mental-health-problems/postnatal-depression-and-perinatal-mental-health/?gclid=CjwKEAjwjunJBRDzl6iCpoKS4G0SJACJAx-VtfGemWiZBCcaweQtFLDQlc4SlGtk02elbZuh4yG48BoCgg_w_wcB#.WTrDOMa1s2w

Sane Charity website offer confidential mental health support services and they have a helpline called SANEline: Available on 0300 304 7000 from 4.30pm to 10.30pm every evening.

http://www.sane.org.uk/what_we_do/support/?gclid=CjwKCAjw7tfVBRB0EiwAiSYGM7ZxgH1K-7ePZjm7X2wpcdE3XN5PkgoWfhTFyQNJ_yKPr5DqIF1trBoCt88QAvD_BwE

You can contact the Samaritans on the UK helpline number, 116 123.

If you feel you need more urgent help then you may wish to contact your local GP, A&E, out of hours GP, call 111 out of hours or contact your local mental health crisis team if you have one. For anyone struggling with postnatal depression you can contact your local postnatal or parent-infant mental health service. If these services are not available in your area and you are concerned about your wellbeing or your child's wellbeing then please share this with your GP.

www.netmums.com and www.mumsnet.com forums are also support networks for parents that you may choose to use.

Who has reviewed and given approval for this study?
The Staffordshire University Ethics Department and permission has been given to advertise the study by Netmums, Mumsnet, Stoke Nursery and Staffordshire Moorlands Children's Centre.

Researcher Contact Details
Kinza Janjua
J025075g@student.staffs.ac.uk
Staffordshire University, Staffordshire Clinical Doctorate Training, Faculty of Sciences, Staffordshire University, Leek Road, Stoke-on-Trent, ST4 2DF
Supervised by Dr Helen Scott, H.Scott@staffs.ac.uk and Dr Jo Heyes, Joanna.Heyes@staffs.ac.uk

If you would like a copy of the findings when the research has completed please send an email to the researcher Kinza Janjua before December 2018.

Appendix E: Consent Form to be displayed on Qualtrics

CONSENT FORM (Version 2, 3rd October 2018)

Participant Identification Number for this study:

Title of Project: Psychological wellbeing of employed mothers with preschool children: A moderator analysis

Name of Researcher: Kinza Janjua

Supervisors: Dr Helen Scott & Dr Jo Heyes

Please select the boxes below to confirm whether you agree with the statements below:

1. I confirm that I have read the information sheet dated ____, version_____for the above study and have had the opportunity to ask questions and have them answered satisfactorily.

   ☐

2. I understand that my participation is voluntary and that I am free to withdraw without giving any reason until 28th February 2018. After 28th February 2018, I am aware that I will be unable to withdraw my data from the study.

   ☐

3. I understand that the anonymised data I provide may be used for analysis and subsequent publication, and I provide my consent that this may occur.

   ☐

4. I understand and give permission for the researcher to share my anonymised data with supervisors for support during data analysis.

   ☐

5. I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers.

   ☐

6. I agree to take part in the above study

   ☐

2. Enter date you agreed to take part in the study below

Appendix F: Demographic questions and four standardised measures to be displayed on Qualtrics

Screening Questions
The following questions will assess if you are eligible to take part in the study.

1. Are you currently living in the United Kingdom? Select the appropriate response

☐ ☐ Yes ☐ No

2. Do you have at least one child of preschool age (aged 0 to 4 years)?

☐ Yes ☐ No

3. Are you currently in paid work for at least 16 hours per week?

Yes ☐ No ☐

Demographic Questions
The following questions are to gather information about your background. Some of the questions will require you to input information and others may require you to select a category that applies to you.

1. How old are you? Input age below in years
☐

2. What best describes your ethnicity? Select the appropriate response

☐ White British
☐ White Irish
☐ Irish/Gypsy Traveller
☐ White Other
☐ White and Black Caribbean
☐ White and Asian
☐ White and Black African
☐ Other Mixed
☐ British African
☐ British Caribbean
☐ Other Black
☐ British Indian
☐ British Pakistani
☐ British Bangladeshi

☐ British Chinese
☐ Other Asian
☐ British Arab
☐ Other
☐ Prefer not to say

3. What is your current marital status? Select the appropriate response
   ☐ Married OR Cohabiting (living with partner/spouse)
   ☐ Single OR not living with partner/spouse

4. How many hours a week do you spend in paid employment? Enter the number of hours below
   ☐

5. How many children do you have of preschool age (0 to 4 years)? Enter the number of children below
   ☐

6. How many children under the age of 18 do you have main caring responsibility for? Enter the number below

   ☐

Appendix G: Measures

Frost Multidimensional Perfectionism Scale (Frost & Marten, 1990)

Instructions:

Please answer the following questions in relation to how much they apply to you. Do not spend too much time on any one question.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	My parents set very high standards for me.	1	2	3	4	5
2	Organization is very important to me.	1	2	3	4	5
3	As a child, I was punished for doing things less than perfectly.	1	2	3	4	5
4	If I do not set the highest standards for myself, I am likely to end up a second-rate person.	1	2	3	4	5
5	My parents never tried to understand my mistakes.	1	2	3	4	5
6	It is important to me that I be thoroughly competent in what I do.	1	2	3	4	5
7	I am a neat person.	1	2	3	4	5
8	I try to be an organized person.	1	2	3	4	5
9	If I fail at work/school, I am a failure as a person.	1	2	3	4	5
10	I should be upset if I make a mistake.	1	2	3	4	5
11	My parents wanted me to be the best at everything.	1	2	3	4	5
12	I set higher goals than most people.	1	2	3	4	5
13	If someone does a task at work/school better than I do, then I feel as if I failed the whole task.	1	2	3	4	5
14	If I fail partly, it is as bad as being a complete failure.	1	2	3	4	5
15	Only outstanding performance is good enough in my family.	1	2	3	4	5
16	I am very good at focusing my efforts on attaining a goal.	1	2	3	4	5
17	Even when I do something very carefully, I often feel that it is not quite right.	1	2	3	4	5

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
18	I hate being less than the best at things.	1	2	3	4	5
19	I have extremely high goals.	1	2	3	4	5
20	My parents expect excellence from me.	1	2	3	4	5
21	People will probably think less of me if I make a mistake.	1	2	3	4	5
22	I never feel that I can meet my parents' expectations.	1	2	3	4	5
23	If I do not do as well as other people, it means I am an inferior being.	1	2	3	4	5
24	Other people seem to accept lower standards from themselves than I do.	1	2	3	4	5
25	If I do not do well all the time, people will not respect me.	1	2	3	4	5
26	My parents have always had higher expectations for my future than I have.	1	2	3	4	5
27	I try to be a neat person.	1	2	3	4	5
28	I usually have doubts about the simple everyday things that I do.	1	2	3	4	5
29	Neatness is very important to me.	1	2	3	4	5
30	I expect higher performance in my daily tasks than most people.	1	2	3	4	5
31	I am an organized person.	1	2	3	4	5
32	I tend to get behind in my work because I repeat things over and over.	1	2	3	4	5
33	It takes me a long time to do something "right".	1	2	3	4	5
34	The fewer mistakes I make, the more people will like me.	1	2	3	4	5
35	I never feel that I can meet my parents' standards.	1	2	3	4	5

Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**
Circle the "2" if you **Strongly Disagree**
Circle the "3" if you **Mildly Disagree**
Circle the "4" if you are **Neutral**
Circle the "5" if you **Mildly Agree**
Circle the "6" if you **Strongly Agree**
Circle the "7" if you **Very Strongly Agree**

1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7	SO
2.	There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7	SO
3.	My family really tries to help me.	1	2	3	4	5	6	7	Fam
4.	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7	Fam
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7	SO
6.	My friends really try to help me.	1	2	3	4	5	6	7	Fri
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7	Fri
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7	Fam
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7	Fri
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7	SO
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7	Fam
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7	Fri

Generalised Anxiety Disorder Questionnaire (Spitzer, Kroenke, Williams & Löwe, 2006)

GAD-7

Over the last 2 weeks, how often have you been bothered by the following problems? *(Use "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3

Patient Health Questionnaire (Spitzer, Kroenke, Williams & Löwe, 2006)

PHQ-9

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(Use "✔" to indicate your answer)*	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things.....	0	1	2	3
2. Feeling down, depressed, or hopeless.....	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much.....	0	1	2	3
4. Feeling tired or having little energy.....	0	1	2	3
5. Poor appetite or overeating.....	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down.....	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television.....	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving .around a lot more than usual.....	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way.....	0	1	2	3

Appendix H: Debrief for Qualtrics

Thank you for completing the study!

If you require any further support, please see details of organisations below which were listed earlier in the Patient Information Sheet:

If you would like to talk more about the research or if you have any questions, please contact Kinza Janjua on the contact details below. If you have any concerns, you may prefer to contact one of the research supervisors (see contact details below).

For further information and support about dealing with mental health distress please see below:

For general information on mental health difficulties you may visit the information and support section of the Mind website
https://www.mind.org.uk/information-support/

For specific support in relation to postnatal depression you may access the Mind postnatal depression website
https://www.mind.org.uk/information-support/types-of-mental-health-problems/postnatal-depression-and-perinatal-mental-health/?gclid=CjwKEAjwjunJBRDzl6iCpoKS4G0SJACJAx-VtfGemWiZBCcaweQtFLDQlc4SlGtk02elbZuh4yG48BoCgg_w_wcB#.WTrDOMa1s2w

You may visit the Sane Charity website who offer confidential mental health support services and they have a helpline called SANEline: Available on 0300 304 7000 from 4.30pm to 10.30pm every evening.
http://www.sane.org.uk/what_we_do/support/?gclid=CjwKCAjw7tfVBRB0EiwAiSYGM7ZxgH1K-7ePZjm7X2wpcdE3XN5PkgoWfhTFyQNJ_yKPr5DqIF1trBoCt88QAvD_BwE

You can contact the Samaritans on the UK helpline number, 116 123.

If you feel you need more urgent help then you may wish to contact your local GP, A&E, out of hours GP, call 111 out of hours or contact your local mental health crisis team if you have one. For anyone struggling with postnatal depression you can contact your local postnatal or parent-infant mental health service. If these services are not available in your area and you are concerned about your wellbeing or your child's wellbeing then please share this with your GP.

Netmums and Mumsnet are also support networks for parents that you may choose to use.

Researcher Contact Details
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J025075g@student.staffs.ac.uk

Staffordshire University, Staffordshire Clinical Doctorate Training, Faculty of Sciences, Staffordshire University, Leek Road, Stoke-on-Trent, ST4 2DF
Supervised by Dr Helen Scott, H.Scott@staffs.ac.uk and Dr Jo Heyes, Joanna.Heyes@staffs.ac.uk

Appendix I: Ethical Approval Form

Life Sciences and Education

ETHICAL APPROVAL FEEDBACK

Researcher name:	Kinza Janjua
Title of Study:	Is maternal employment a predictor of mood and anxiety in mothers with pre-school children?
Status of approval:	Approved

Thank you for addressing the committee's comments. Your research proposal has now been approved by the Ethics Panel and you may commence the implementation phase of your study. You should note that any divergence from the approved procedures and research method will invalidate any insurance and liability cover from the University. You should, therefore, notify the Panel of any significant divergence from this approved proposal.

You should arrange to meet with your supervisor for support during the process of completing your study and writing your dissertation.

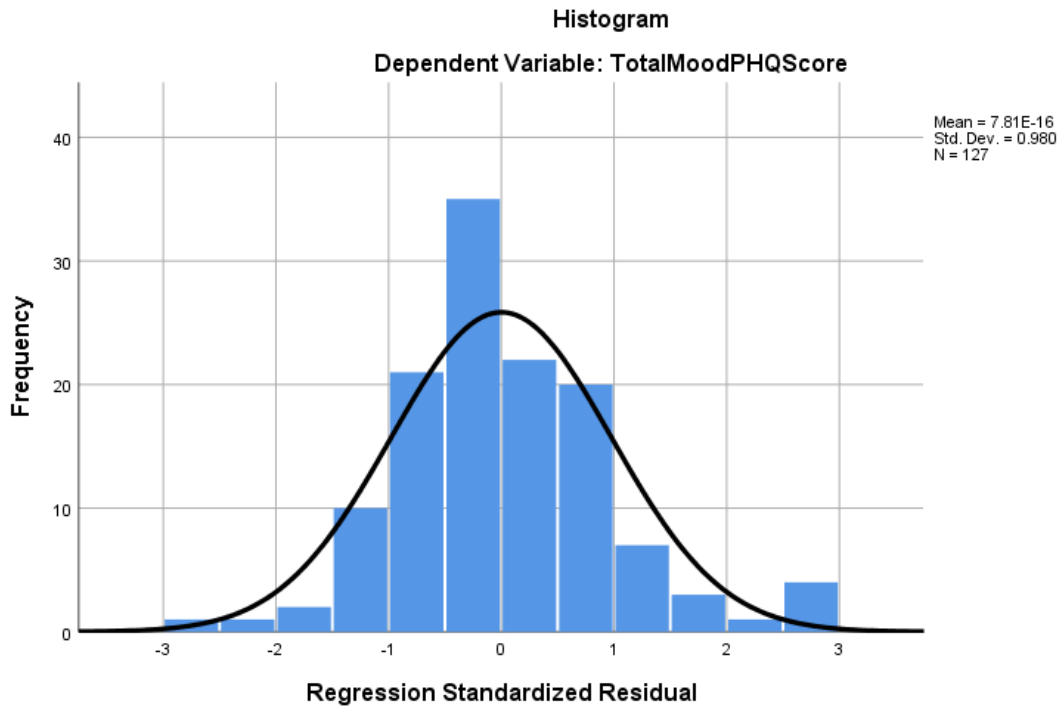
When your study is complete, please send the ethics committee an end of study report. A template can be found on the ethics BlackBoard site.

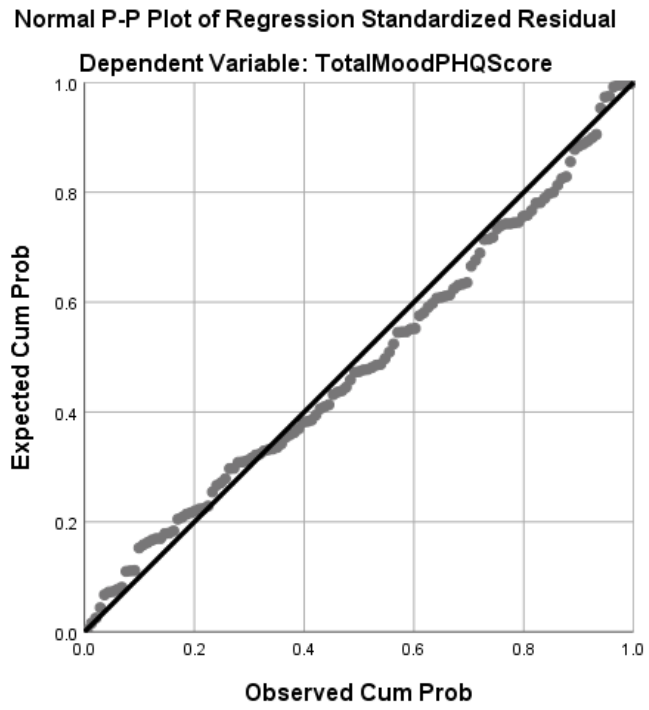
Signed: Dr Roozbeh Naemi **Date: 24.10.2018**

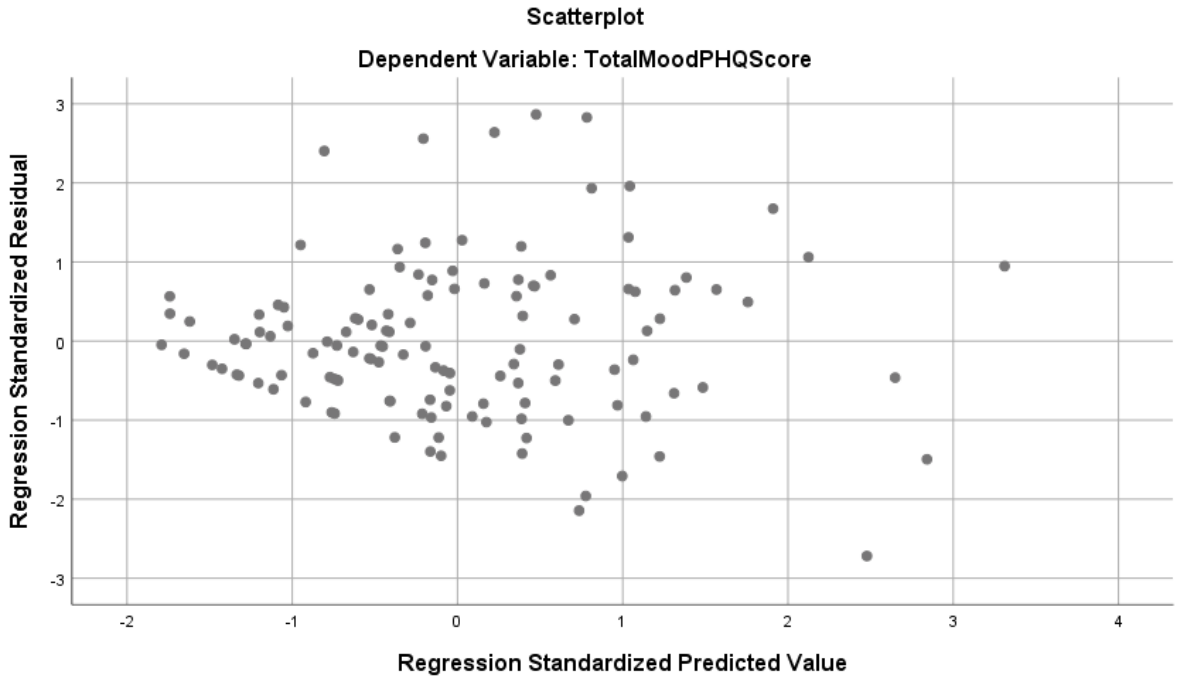
Ethics Coordinator
School of Life Sciences and Education

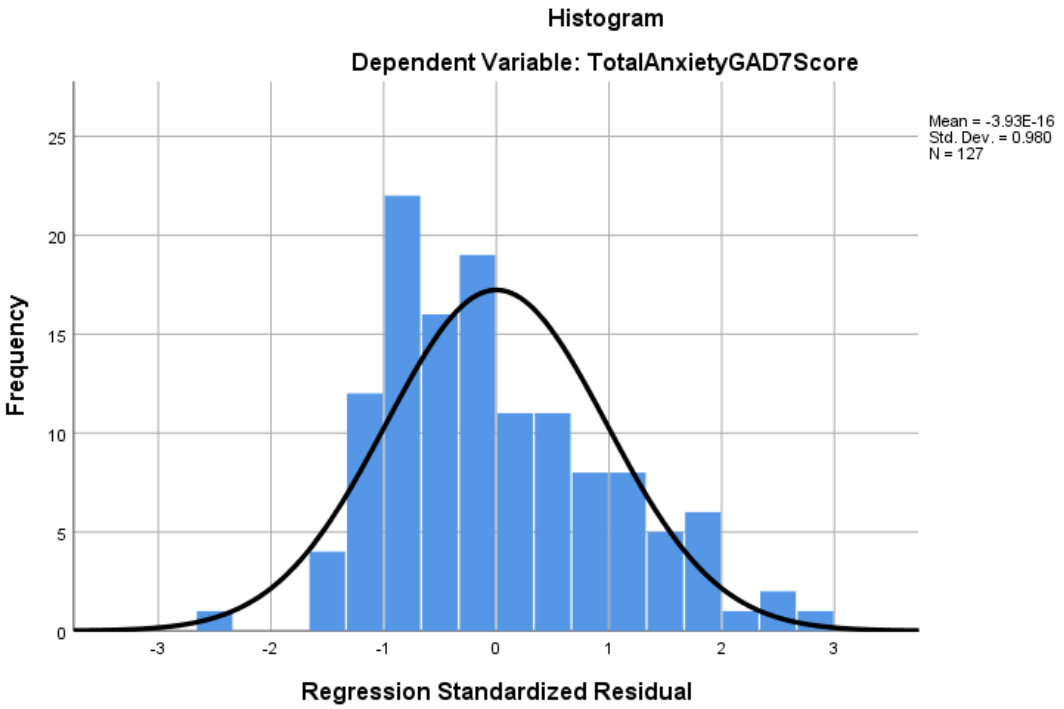
Appendix J: Normality Checks

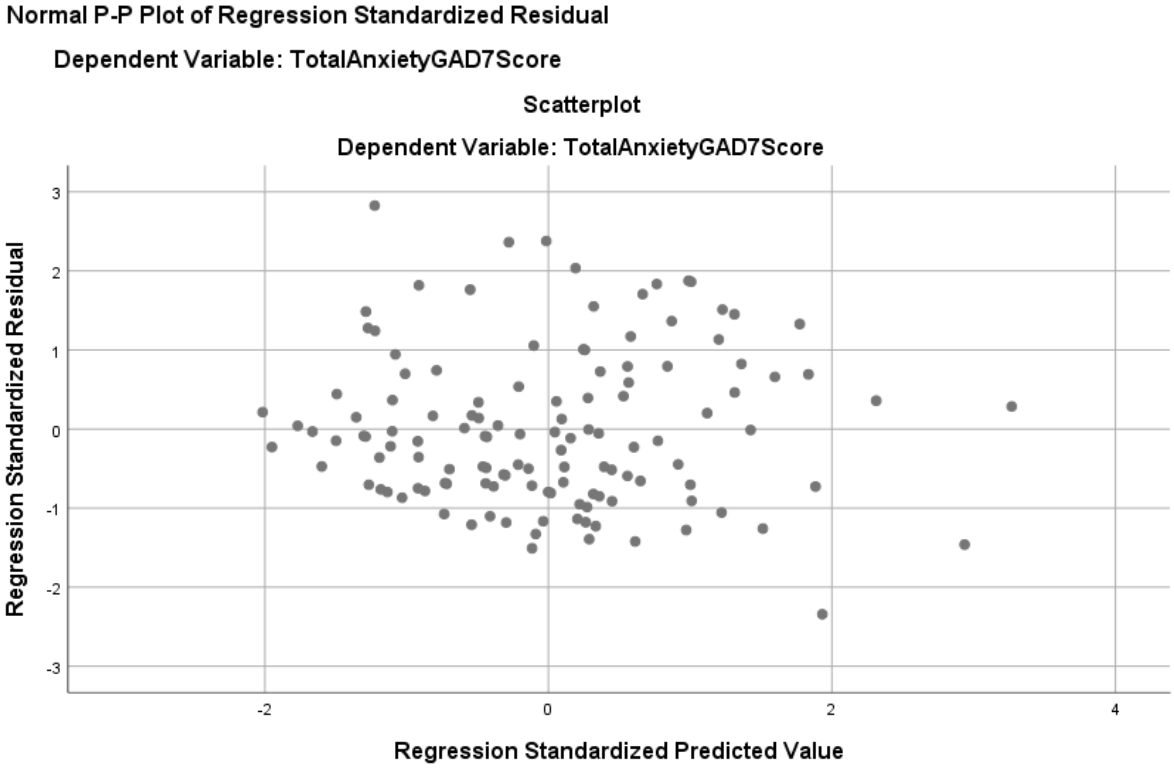
		TotalMoodPHQScore	TotalAnxietyGAD7Score
N	Valid	127	127
	Missing	0	0
Skewness		.942	.676
Std. Error of Skewness		.215	.215
Kurtosis		.227	-.637
Std. Error of Kurtosis		.427	.427




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: TotalMoodPHQScore
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: TotalMoodPHQScore
Regression Standardized Residual
Regression Standardized Predicted Value
3
2
1
0
-1
-2
-3
-2
-1
0
1
2
3
4


Histogram
Dependent Variable: TotalAnxietyGAD7Score
Mean = -3.93E-16
Std. Dev. = 0.980
N = 127
Frequency
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: TotalAnxietyGAD7Score
Scatterplot
Dependent Variable: TotalAnxietyGAD7Score
Regression Standardized Residual
Regression Standardized Predicted Value

Appendix K: Moderator Analysis (SPSS Output)

Moderator Analysis (Multiple Hierarchical Regression) to investigate the moderator effect of perfectionism on the relationship between perceived social support and mood

Model Summary (PHQ9)

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.637[a]	.406	.397	.77666433	.406	42.442	2	124	.000
2	.641[b]	.411	.397	.77648527	.005	1.057	1	123	.306

a. Predictors: (Constant), Zscore(TotalPerfectionismScore), Zscore(TotalPerceivedSupportScore)

b. Predictors: (Constant), Zscore(TotalPerfectionismScore), Zscore(TotalPerceivedSupportScore), ZinteractionPerfSupport

Moderator Analysis (Multiple Hierarchical Regression) to investigate the moderator effect of perfectionism on the relationship between perceived social support and anxiety

Model Summary (GAD7)

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.562[a]	.316	.305	.83344972	.316	28.695	2	124	.000
2	.569[b]	.324	.308	.83197594	.008	1.440	1	123	.232

a. Predictors: (Constant), Zscore(TotalPerceivedSupportScore), Zscore(TotalPerfectionismScore)

b. Predictors: (Constant), Zscore(TotalPerceivedSupportScore), Zscore(TotalPerfectionismScore), ZinteractionPerfSupport

Executive Summary:

Predictors of Mood and Anxiety in Employed Mothers with Preschool Children

Total Word Count: 2994

(Excluding references)

Predictors of Mood and Anxiety in Employed Mothers with Preschool Children

Executive Summary

This research aimed to understand what helps working mothers with preschool children (0 to 4 years old) keep well by looking at factors that predict mood and anxiety. The research method, findings and clinical implications are summarised below.

Background to the research

The number of working mothers with preschool children is ever increasing. Between 1997 and 2017, the number of working mothers in England with the youngest child aged three to four years old increased by 133,000 (65.1%, Office for National Statistic, 2017). In 1997, the Labour Government came into power and emphasised choices for women in work. They introduced Sue Start Children's Centres for affordable childcare to help disadvantaged families and mothers to return to work.

The increase in the number of working mothers with preschool children can also be explained by 30 hours of free childcare introduced for working families in the United Kingdom (UK, The Childcare Payments Act, 2017), poor economy and job losses leading to families relying more on mothers to work, and women choosing to have fewer children and later in life because of their careers (Roantree & Vira, 2018).

Mothers may choose to work for a number of reasons such as being able to have an outlet for their ambition, because of feeling under pressure to return to work in case their pay is affected and to keep up with male colleagues who will earn more than them. In society, the idea of being a "superwoman" and balancing lots of roles is valued, which can increase pressure on mothers to "do it all".

The numbers of single working mothers with preschool children have also increased, from 42% in 1983 to 70% in 2017 (ONS, 2017) possibly due to changes in the UK benefits system whereby single mothers now have to look for work when their child starts school. Also, more mothers are choosing to live with their partners instead of getting married.

In the past, fathers traditionally worked while mothers mainly raised the children. Researchers interested in attachment were concerned that with more mothers

working, children would spend greater time apart from their mothers which would prevent them forming a close attachment (Baker & Milligan, 2010; Harrison & Ungerer, 2002). There has been lots of research about the impact on children of working mothers, but less is known about the effects of working on mothers, especially on their psychological wellbeing.

Psychological wellbeing (or wellbeing) can be defined in many ways. One definition is described as personal feelings of happiness, measured by more positive feelings and fewer negative feelings like sadness, and feeling satisfied with life (Carruthers & Hood, 2007). Wellbeing, in past studies on students and caregivers, has been measured by mood and anxiety because they can become worse when someone is experiencing poor wellbeing (Fava, 2012). Research on wellbeing in mothers has been criticised for focusing on mood at the cost of other factors such as anxiety.

It is important to understand mood and anxiety in working mothers, which is an aspect of wellbeing because it can affect both mothers and their families. For example, studies have found that depression may influence mothers' parenting qualities like nurturing and positive discipline, and children are less likely to be sensitive and appropriate during interactions with others, and more anxious (Letourneau, Tramonte, & Willms, 2013).

The evidence is mixed about whether working mothers experience better or worse wellbeing and there are two main arguments. The role enhancement theory suggests that having lots of roles like being a mother, employee and partner is better for wellbeing because it keeps mothers mentally active, increases their support networks and improves their mood and self-esteem (Arber & Cooper, 2000). Research has found that working mothers who feel supported by people closest to them and feel that they receive support when it's needed (perceived social support) report better mood. The stress-buffering theory suggests that support from other people gives them advice and coping strategies to deal with stressful life events (Gjerdingen, McGovern, Attanasio, Johnson, & Kozhimannil, 2014). Social support is thought to be a buffer against stress and anxiety, which helps people to maintain good mood and wellbeing.

The role strain theory, argues that having lots of roles increases demands on mothers, using up their time, energy and attention, making it harder to meet family

and work commitments and increases stress, leading to reduced mood and poorer wellbeing. This is experienced especially by mothers who have more than one preschool child, less support around them, and work longer hours (Hoffman, 1989). Robinson et al. (2014) found that working mothers who are single (or not living with their partner) have poorer health and wellbeing compared to working mothers who are married or living with a partner. Single working mothers are reported to experience higher demands like looking after the home and children, increasing stress and reducing mood and wellbeing (Afifi, Cox, & Enns, 2006; Robinson, Magee, & Caputi, 2014). Robinson et al. (2014) highlighted that more research is needed to understand factors that increase chances of single mothers experiencing poorer mental health and wellbeing.

Research shows that perfectionism predicts low mood in women by reducing self-esteem, self-confidence, making it more difficult to accept personal limitations and increasing unrealistic thinking (Rosan, Finnis, Biaggi, Pawlby, & Pariante, 2016). One definition of perfectionism is having high standards, being highly critical if these standards are not met and worrying about meeting others expectations (Greco, 2006). Perfectionism can also affect relationships with other people, which is explained in Figure 1.

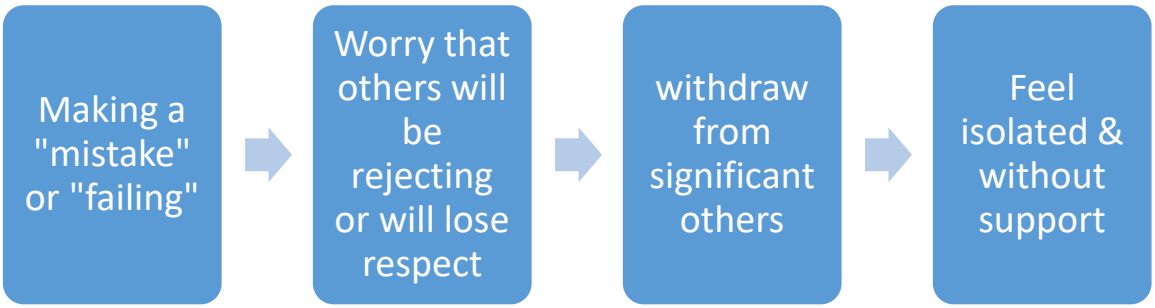


Figure 1. Summarising the links between an aspect of perfectionism and psychological wellbeing.

Study aims

Past research suggests that the following factors may be linked to mood and anxiety:

- longer working hours per week
- having more than one preschool child
- less perceived social support
- being single and not living with a partner
- greater perfectionism

Therefore, this study aimed to add to existing knowledge by investigating if longer working hours per week, having more than one preschool child, less perceived social support, being single/not living with a partner and greater perfectionism are also predictors of low mood and high anxiety in a sample of working mothers with preschool children, because this group is ever growing (ONS, 2017).

The study also investigated whether perfectionism predicts mood and anxiety, because of findings that working mothers trying to maintain their career and looking after their family feel more distressed when they have higher perfectionism (Mitchelson & Burns, 1998). The study looked to increase understanding of perfectionism by looking at its role as a moderator (a factor affecting the strength of relationships between predictors and mood and anxiety). The study investigated whether perfectionism was a moderator between perceived social support and mood and anxiety because of mixed findings that perfectionism may reduce perceived social support. It also looked at whether perfectionism moderated the relationship between mothers with a single (not living with a partner) status and mood and anxiety because there is a limited understanding about the factors that increase the chances of single mothers experiencing lower mood and higher anxiety.

It was hoped that the study would help to understand more about the needs of working mothers with preschool children and to help develop ways to improve mood and reduce anxiety.

The study design

Mothers working at least 16 hours a week in paid work, with at least one preschool child, living in the UK and with a good understanding of English were recruited through social media (Facebook and Twitter) and online parent forums (Net Mums

and Mums Net). Online advertisements with brief details about the study were posted with a link for those interested in finding out more about the research and potentially participating in it.

The research used a cross-sectional design, meaning that the data was collected at one point in time. The Research Ethics Committee at Staffordshire University gave approval for the study to be carried out and the parent forums gave permission to advertise on their sites.

How was the data collected?

Participants were given an information sheet about the study. Those that wanted to take part completed a consent form and then they completed four questionnaires, taking about ten minutes to complete. The study was anonymous and did not ask participants to give any identifiable information about themselves, like names and addresses. Participants were asked to give their age, ethnicity, marital status (married/living with a partner or single/not living with a partner), number of working hours per week, number of preschool children and number of children under the age of 18. Information on the number of other children under the age of 18 (excluding preschool children) was collected to describe the characteristics of participants.

Details about the questionnaires are noted below:

1. ***Patient Health Questionnaire (PHQ-9, Spitzer, Kroenke, & Williams, 1999)*** is a nine-item questionnaire measuring low mood and asks participants to rate how often they felt low over the last two weeks.

2. ***Generalised Anxiety Disorder Questionnaire (GAD-7, Spitzer, Kroenke, Williams, & Löwe, 2006)*** is a seven-item questionnaire measuring anxiety and asks participants to rate how often they felt anxious over the last two weeks.

3. ***Multidimensional Scale of Perceived Social Support (MSPSS, Zimet, Dahlem, Zimet, & Farley, 1988***) is a twelve-item questionnaire measuring how much support participants feel they get from their family, friends and partner.

4. ***Frost Multidimensional Perfectionism Scale (FMPS, Frost, Marten, Lahart, & Rosenblate, 1990)*** is a thirty-five item questionnaire measuring perfectionism. Participants rate high personal standards, whether they become very critical of themselves for not achieving standards and if they often worry about making mistakes and meeting others' expectations.

Who took part?

A hundred and twenty-seven working mothers with at least one preschool child and living in the UK took part in the study. The average age of the mothers in this study was 33 years, and the ages ranged from 29 to 49 years. The average working hours per week was 29 hours and ranged from 16 to 48 hours per week. The average scores for mood and anxiety indicated that most participants reported mild levels of low mood and anxiety. The average scores for perceived social support were high and moderate for levels of perfectionism. Details about the participants' marital status, ethnicity and number of children are given below.

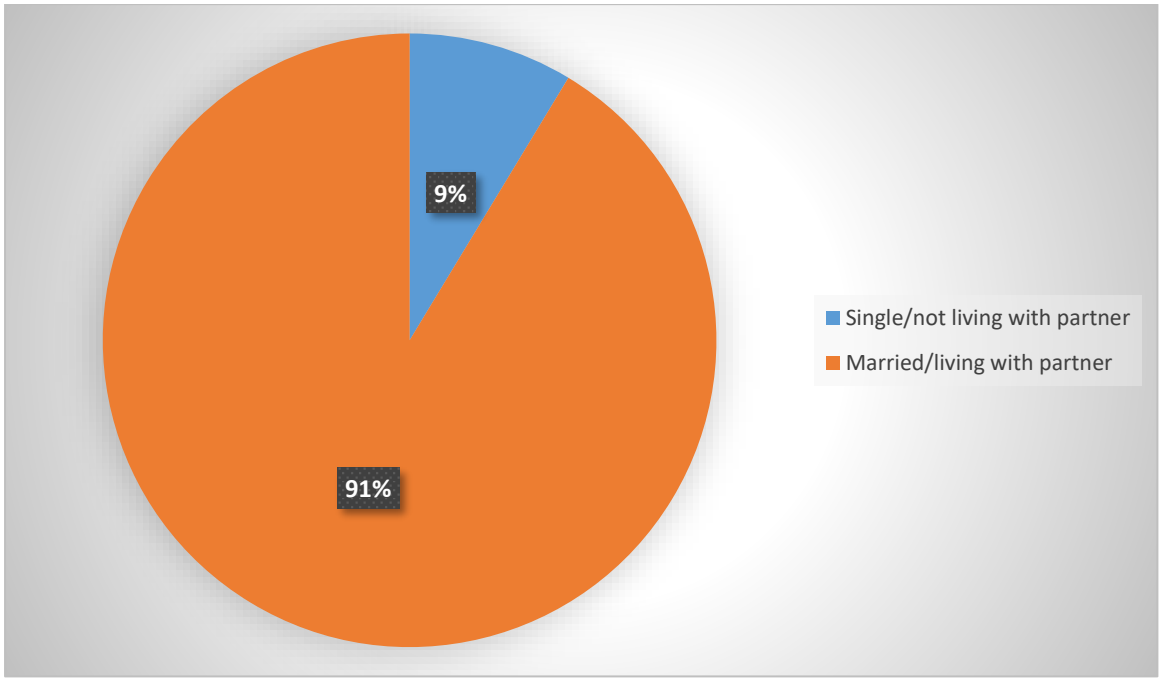


Figure 2. A pie chart to show the percentage of single and partnered participants.

Table 1. Information on the ethnicity of participants.

Ethnicity	Number of participants	Percentage
White British	103	81%
White Irish	3	2%
White & Asian	1	1%
Other Mixed	2	2%
British Caribbean	4	3%
British Indian	1	1%
British Pakistani	9	7%
British Bangladeshi	3	2%
Prefer not to say	1	1%
Total	127	100.0%

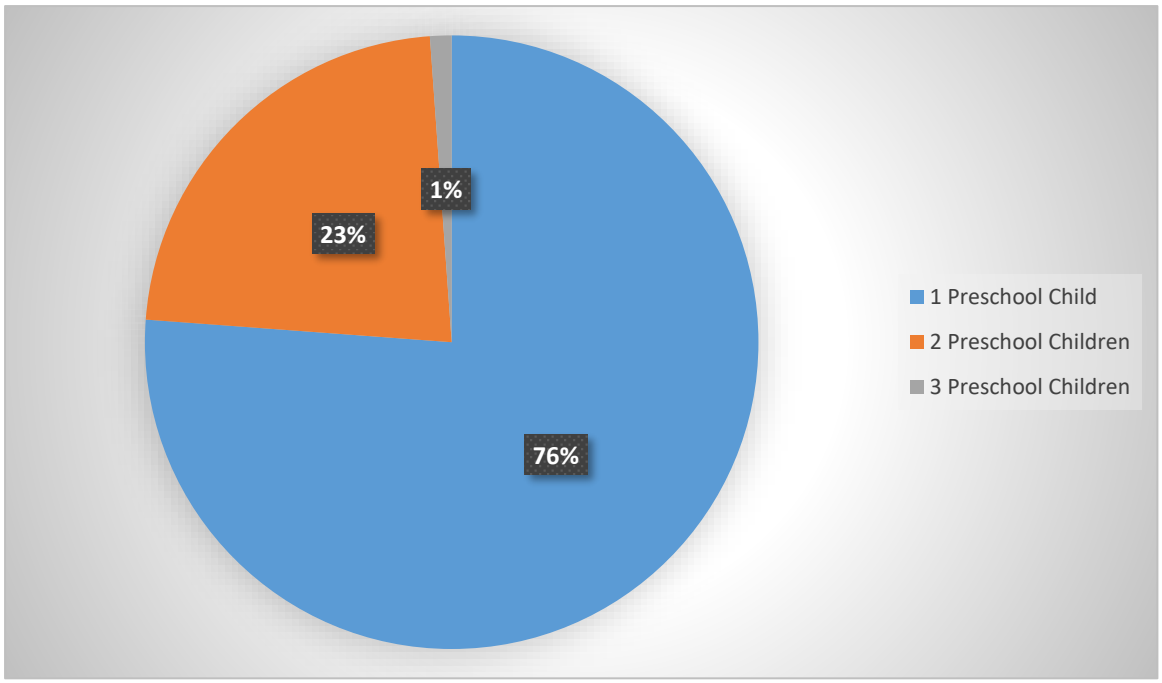


Figure 3. A pie chart to show the percentages of participants who had one, two or three preschool children.

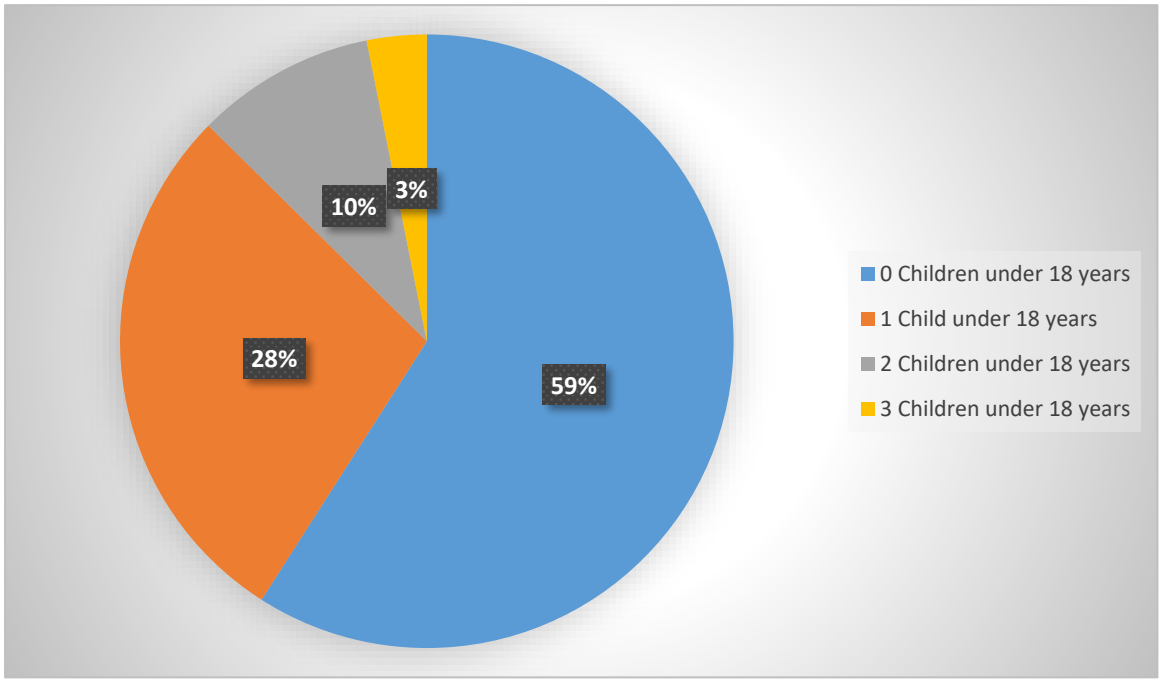


Figure 4. A pie chart to show the percentages of participants who had zero, one, two or three other children under 18 years (not including preschool children).

Main Findings

Working hours per week, having more than one preschool child and marital status (single/not living with a partner or married/living with a partner) did not predict mood and anxiety in this sample of working mothers.

Perceived social support and perfectionism predicted mood and anxiety scores, meaning that the result was unlikely to be found by chance. Mothers reporting a lack of feeling supported by others (low perceived social support) and higher perfectionism had lower mood and higher anxiety. The analysis gives a value, R Square (R^2), measuring how well mood and anxiety scores can be predicted by perceived social support and perfectionism. The findings showed that perceived social support and perfectionism were responsible for explaining 42% of mood and 34% of anxiety scores. Therefore, 58% of mood and 66% of anxiety were not predicted by perfectionism and perceived social support, suggesting that other factors may be important that were not looked at in this study.

In order to improve the reliability of the findings, the regression analysis was re-run with only those that predicted mood and anxiety, perceived social support and perfectionism. The results explained 41% (R^2) of mood and 32% (R^2) of anxiety scores.

Marital status (single/not living with a partner or married/living with a partner) was not a predictor of either mood or anxiety, and so a moderator analysis was not carried out to see if perfectionism influences the relationship between marital status and mood and anxiety. Perceived social support was a predictor of mood and anxiety, so a moderator analysis was carried out. The findings were that perfectionism does not influence the relationship between and perceived social support with mood and anxiety in this study.

Conclusion

The results did not support past findings that mothers working longer hours have lower mood perhaps because the study did not compare working mothers with non-working mothers as in previous studies, and the average working hours for mothers were less than what is classified as full-time hours (Floderus, Hagman, Aronsson, Marklund, & Wikman, 2009). The results did support findings that mothers working

fewer hours have better mood and this can be explained because they experience the benefits of employment (e.g. improving their social network etc…) while having more time and energy to manage demands in the home and at work (Buehler & O'Brien, 2011).

Low perceived social support predicted lower mood and higher anxiety. This finding supports past research suggesting that perceived social support is a buffer to life stresses because it helps mothers to get advice and strategies to overcome stress, increasing their feelings of control and improving their mood and wellbeing (Schwarzer & Leppin, 1991).

Perfectionism predicted lower mood and higher anxiety which appears to be a new finding within research on working mothers with preschool children. This finding may be explained by past evidence that pressure to be perfect and guilt for not meeting parenting expectations, decreases mothers' belief in their own ability to succeed (self-efficacy), leading to poorer mood and wellbeing (Henderson, Harmon, & Newman, 2015).

The average perfectionism score in the study was moderate, indicating mothers experienced less perfectionism than was expected. The researchers questioned whether mothers reporting lower levels of perfectionism meant that perfectionism did not moderate the relationship between perceived social support with mood and anxiety. Another explanation may be that most mothers reported high levels of perceived social support which supports the argument that perceived social support acts as a buffer against stress due to perfectionism, helping to maintain mood (Dunkley, Zuroff, & Blankstein, 2003).

Overall, the findings show that working mothers with preschool children reported better mood and anxiety than expected, with average scores of mild or minimal low mood and anxiety. The results imply that working is more likely to be better than worse for mothers' mood and anxiety. Working, being a preschool mother and being married or living with a partner may also be better for mood and according to the role enhancement theory, this is because these roles give mothers greater social interactions, and keeps them mentally active.

Limitations

Some of the limitations of this study are detailed below.

- Psychological wellbeing can be defined in lots of different ways, and the study only looked at one aspect of wellbeing by focusing on mood and anxiety. The study did not directly measure psychological wellbeing
- Data was collected at one time-point, and so we do not have enough information to conclude that high perfectionism and low perceived social support causes lower mood and higher anxiety
- Using online questionnaires can help people to answer honestly, but it means that it is difficult to check that those who completed questionnaires were actually working mothers with preschool children
- The study only looked at mothers who were working, missing those mothers who are off-sick or who have left work because of low mood and anxiety. The results may overestimate the wellbeing of mothers
- There were significantly more mothers who were married/living with their partners and evidence suggests that mothers' feel more supported when they are living with a partner. The results are more likely to overestimate the amount of social support and positive mood in mothers
- The study only explains 41% and 32% of mood and anxiety scores
- The sample may be biased as mothers were recruited from social media and parenting support networks which may overestimate the level of social support and positive mood

Recommendations:

- High perfectionism and low perceived social support may be risk factors for lower mood and higher anxiety. Clinicians may wish to consider these factors when assessing working mothers
- Psychological interventions may be used to target perfectionism, and low perceived social support because improving these factors may help to improve mood and anxiety
    - Family-therapy and support groups for mothers with preschool children may help to strengthen relationships, increase social networks and increase feelings of being supported

    - Cognitive Behavioural Therapy may help to help overcome perfectionism by teaching individuals skills in challenging and adjusting high personal standards
- Future research may benefit from:
    - Recruiting a sample of working mothers who experience clinical symptoms of low mood and anxiety to see whether similar results are found
    - Repeating the study and collecting data over a longer time-period to better understand the effect that perceived social support and perfectionism has on mood and anxiety
    - Looking at other factors that explain mood and anxiety. For example, some research suggests that self-efficacy predicts mood and wellbeing in working mothers (Houle, Chiocchio, Favreau, & Villeneuve, 2009)
    - Measuring psychological wellbeing directly, using measures specifically designed for parents and measuring perfectionism using other definitions. For example, socially-prescribed perfectionism (the belief that others expect high standards from you) is reported to predict stress and may be relevant to working mothers who have different roles in their home and work-life.

Distributing the findings

Participants who took part in the study were informed at the time that they could contact the researcher for a copy of this report. This research will also be submitted to a peer-reviewed journal for publication.

References

Afifi, T., Cox, B., & and Enns, M. (2006). Mental health profiles among married, never-married, and separated/divorced mothers in a nationally representative sample. *Social Psychiatry and Psychiatric Epidemiology, 41*(2), 122-129.

Arber, S., & Cooper, H. (2000). Gender and inequalities in health across the life-course. In E. Annandale, & K. Hunt (Eds.), *Gender Inequalities in Health* (pp. 123–149). Buckingham: Open University Press.

Baker, M., & Milligan, K. (2010). Evidence from maternity leave expansions of the impact of maternal care on early child development. *Journal of Human Resources, 45*(1), 1–32.

Buehler, C., & O'Brien, M. (2011). Mothers' Part-Time Employment: Associations with Mother and Family Well-Being. *Journal of Family Psychology*, *25(*6), 895–906. DOI: 10.1037/a0025993

Carruthers, C., & Hood, C. (2007). Building a life of meaning through therapeutic recreation: The leisure and well-being model, part I. *Therapeutic Recreation Journal, 41*(4), 276–297.

Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2003). Self-critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology, 84*, 234-252.

Fava, G. A. (2012). The clinical role of psychological well-being. *World psychiatry: official journal of the World Psychiatric Association (WPA), 11*(2), 102-103.

Floderus, B., Hagman, M., Aronsson, G., Marklund, S., & Wikman, A. (2009). Work status, work hours and health in women with and without children. *Occupational and environmental medicine*, *66*(10), 704-710. DOI: 10.1136/oem.2008.044883

Frost, R. O., Marten, P. A., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14* (5), 449–468. DOI: 10.1007/bf01172967

Gjerdingen, D., McGovern, P., Attanasio, L., Johnson, P. J., & Kozhimannil, K. B. (2014). *Maternal Depressive Symptoms, Employment, and Social*

Support. The Journal of the American Board of Family Medicine, 27(1), 87–96.

Greco, A. (2006). *Perfectionism, Multiple Roles, and Postpartum Depression: Is Perfectionism a Factor in Multiple-Role Women Experiencing Postpartum Depression?* (Unpublished master's thesis). Pacific University, Oregon, United States of America. Retrieved from: http://commons.pacificu.edu/spp/52

Harrison, L. J., & Ungerer, J. A. (2002). Maternal employment and infant-mother attachment security at 12 months postpartum. *Developmental Psychology, 38*(5), 758-773. http://dx.doi.org/10.1037/0012-1649.38.5.758

Henderson, A., Harmon, S., & Newman, H. (2015). The Price Mothers Pay, Even When They Are Not Buying It: Mental Health Consequences of Idealized Motherhood. *Sex Roles, 74*(11-12), 512–526. DOI: 10.1007/s11199-015-0534-5

Hoffman, L. W. (1989). Effects of maternal employment in the two-parent family. *American Psychologist, 44*, 283-292.

Houle, L., Chiocchio, F., Favreau, O. E., & Villeneuve, M. (2009) Role conflict and well-being among employed mothers: the mediating effects of self-efficacy. *Gender in Management: An International Journal, 24*(4), 270-285. DOI: https://doi.org/10.1108/17542410910961550

Letourneau, N. L., Tramonte, L., & Willms, J. D. (2013). Maternal Depression, Family Functioning and Children's Longitudinal Development. *Journal of Pediatric Nursing, 28*(3), 223–234. DOI:10.1016/j.pedn.2012.07.014

Mitchelson, J. K., & Burns, L. R. (1998). Career Mothers and Perfectionism: Stress at Work and at Home. *Personality and Individual Differences,* 25, 477-485. DOI: http://dx.doi.org/10.1016/S0191-8869(98)00069-5

Office for National Statistics. (2017). *Families and Households: 2017. Trends in living arrangements including families (with and without dependent children), people living alone and people in shared accommodation, broken down by size and type of household.* London: Office for National Statistics. Retrieved from https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/bulletins/familiesandhouseholds/2017

Osborne, C., Berger, L. M., & Magnuson, K. (2012). *Family Structure Transitions and Changes in Maternal Resources and Well-being. Demography, 49*(1), 23–47. DOI: 10.1007/s13524-011-0080-x

Roantree, B., & Vira, K. (2018). *The rise and rise of women's employment in the UK.* The Institute for Fiscal Studies.

Robinson, L. D., Magee, C. A., & Caputi, P. (2014). Social support, work hours and health: A comparative study of sole and partnered Australian mothers. *Women's Studies International Forum*, *42*, 19-27. DOI: https://doi.org/10.1016/j.wsif.2013.10.010

Rosan, C., Finnis, S., Biaggi, A., Pawlby, S., & Pariante, C. (2016). Perfectionism as a warning sign for postnatal mental health difficulties. *Journal of Health Visiting, 4*(8), 400-406. DOI: https://doi.org/10.12968/johv.2016.4.8.400

Schwarzer, R., & Leppin, A. (1991). Social Support and Health: A Theoretical and Empirical Overview. *Journal of Social and Personal Relationships*, *8*(1), 99–127. DOI: https://doi.org/10.1177/0265407591081005

Spitzer, R. L., Kroenke, K., & Williams, J. B. (1999). Patient Health Questionnaire Primary Care Study Group Validation and Utility of a Self-report Version of PRIME-MD - The PHQ Primary Care Study. *Journal of the American Medical Association, 282*(18): 1737-1744.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine, 166*(10), 1092-1097.

The Childcare Payments Act 2014. (2017). *Commencement No. 3 and Transitional Provisions, Regulations 2017.*

Thoits, P. A. (2011). Mechanisms Linking Social ties and Support to Physical and Mental Health. *Journal of Health and Social Behaviour, 52,* 145-161. DOI: https://doi.org/10.1177/0022146510395592

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). *The Multidimensional Scale of Perceived Social Support. Journal of Personality Assessment*, 52, 30-41.