

WORK-FAMILY CONFLICT AND CHILD WELL-BEING:
WHEN WORK-FAMILY CONFLICT REALLY HITS HOME

A Dissertation

Presented to

The Faculty of the Department

of Psychology

University of Houston

In Partial Fulfillment

Of the Requirements for the Degree of

Doctor of Philosophy

By

Jing Zhang

August, 2016

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ABSTRACT

Child well-being is one of the least frequently studied outcomes in research on the work-family interface. This paper extends previous research by examining the relationship between parental work-family conflict and child well-being and possible mechanisms that explain these relationships. I hypothesize that parental work-family conflict negatively influences parents' mindfulness, decrease children's perceptions of parental-child attachment, which in turn affects child well-being (e.g., problematic internet usage, aggression and health). Questionnaire-based data from families (one parent and one child) were collected from three schools in Nigeria. Results showed the total and direct effect between work-family conflict and child well-being was not significant. The indirect effect between work-family conflict and aggression through mindfulness was significant; the indirect effect between work-family conflict and problematic internet usage through attachment was significant and the indirect effect between work-family conflict and health through attachment was significant. Lastly, the sequential indirect effect between work-family conflict and child problematic internet usage through both mindfulness and attachment was significant.

Keywords: work-family conflict, mindfulness, parent-child attachment, child well-being

TABLE OF CONTENTS

Introduction.....	1
Work-family Conflict	2
The Direct Influence of Work-family Conflict on Child Well-being.....	3
The Indirect Influence of Work-family Conflict on Child Well-being	8
Mindfulness.....	8
Mindfulness as a Mediator.....	10
Parent-Child Attachment as a mediator.....	11
Method.....	12
Participants.....	12
Methods and Procedures.....	13
Measures	14
Work-family Conflict.	14
Mindfulness.....	14
Parent-child Attachment.	14
Child Health.	15
Child Aggression.....	15
Child Problematic and Risky Internet Use Screening Scale (PRIUSS).	15
Controls.....	16
Data Analysis	16
Results	16
Mindfulness and Attachment as Mediator between WFC and Child Aggression	17
Mindfulness and Attachment as Mediator between WFC and Child Health.....	18

Mindfulness and Attachment as Mediators between WFC and Child Problematic Internet Usage	19
Discussion.....	21
Theoretical Implications	22
Practical Implications	24
Limitations and Directions for Future Research	25
Conclusion	27
References.....	28
Appendix	49

LIST OF TABLES AND FIGURES

Table 1 Sample Description.....	41
Table 2 Means, Standard Deviations, and Correlations among Studied Variables	42
Table 3 Hierarchical Linear Regression Analysis Results for the Effects of Work Family Conflict on Child Well-being.....	43
Table 4 Summary of Hypotheses Found to be Supported.....	44
Figure 1 The Proposed Model.....	45
Figure 2 Model Shows the Indirect Effect of Parental Work-Family Conflict on Child Aggression through Mindfulness and Parent-Child Attachment	46
Figure 3 Model Shows the Indirect Effect of Parental Work-Family Conflict on Child Health through Mindfulness and Parent-Child Attachment.....	47
Figure 4 Model Shows the Indirect Effect of Parental Work-Family Conflict on Child Internet Usage through Mindfulness and Parent-Child Attachment.	48

Work-Family Conflict and Child Well-Being: When Work-family Conflict Really Hits Home

Introduction

Over the last two decades, the percentage of dual-earner families with children and single-parents has increased significantly (Cromartie, 2007). In addition, people are placing more emphasis on work-life balance and fathers are getting more involved with their children's upbringing (Biddulph, 2013). These changes in social structure have driven extensive research related to work and family issues. Subsequently, several meta-analysis studies and reviews have discussed relevant antecedents and outcomes of work-family conflict, or WFC (e.g., Allen, Herst, Bruck, & Sutton, 2000; Amstad, Meier, Fasel, Elfering, & Semmer, 2011; Kossek & Ozeki, 1998; Mesmer-Magnus & Viswesvaran, 2005). For example, studies have revealed that WFC relates to a wide variety of outcomes including people's well-being and health, and organizationally relevant outcomes such as job satisfaction, organizational commitment, and turnover intentions (Allen et al., 2000; Amstad et al., 2011).

Despite the significant number of studies related to WFC, there are significant gaps in the literature. In the current research, I addressed three of those gaps. First, there has been limited research on the influence of WFC on children (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Perry-Jenkins, Repetti, & Crouter, 2000). Given the health-related costs in regard to attending sick children and the fact that emotional or behavioral patterns emerge early in life remain relatively stable throughout childhood and adolescence (Bornstein, Hahn, & Haynes, 2010); research on the relationship between WFC and children is paramount.

Second, although there is evidence that parents' work characteristics can influence children (Barling, Dupre, & Hepburn, 1998; Barling & Mendelson, 1999; Stewart & Barling,

1996), relatively little attention has been paid to the psychological processes that explain the impact of WFC on children (Vieira, Matias, Ferreira, Lopez, & Matos, 2016). Moreover, because most of the relevant research has been conducted in the U.S., little is known about WFC and its influences in non-Western societies where work is structurally different from work the U.S. or other Western societies.

To address these gaps, I examine the direct impact of work-family conflict on child well-being and the indirect impact through mindfulness and attachment (see Figure 1). The present study contributes to the literature by answering the calls for further research on the influence of work-family issue on children (Eby et al., 2005; Perry-Jenkins et al., 2000) and directly address calls for more “research on work and family issues focusing on other explanatory mechanisms and moderators of cross-domain relations” (Ford, Heinen, & Langkamer, 2007, p. 57). Lastly, examining the crossover effects between employed parent and their child may increase our understanding of the complexities of multiple roles in different domains.

I first define WFC and identify various ways work and family role may be mutually incompatible. Next, I discuss child well-being and how child well-being can relate to parental WFC. I then set forth a rationale on how parental WFC influences child well-being.

Work-family Conflict

Derived from role stress theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964), WFC has been defined as “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (Greenhaus & Beutell, 1985, p. 77). Demands from both roles can initiate the conflict

(Greenhaus, Allen, & Spector, 2006). For example, if the employed spouse is expected to contribute to the family beyond that of work, extensive work demands can cause scarcity in resources (e.g., time) and increase strain. Research has shown that the sources of conflict consistently relate to consequences from the same domain more than across domains (Amstad et al., 2011).

Although it is well established that employee's WFC can cross over to influence partner's well-being (Bakker, Demerouti, & Dollard, 2008) little is known about how it influences other family members' well-being. The current study extends the literature by examining the crossover effects of parental WFC on child well-being.

Westman (2006) suggested several possible mechanisms to explain the crossover process between employees and their partners. Crossover can happen directly between two partners via empathy. Emotion can be contagious. Partners spend time together and they are influenced by each other's affective state. Secondly, partners may share some common stressors (e.g., economic stress). And lastly, crossover may occur indirectly via mediating mechanisms such as communication and support. Empirical studies have supported both direct and indirect processes (Kinnunen, Rantanen, & Mauno, 2013).

Similar to what is proposed by Westman (2006) I suggest that the influence of parental WFC on child well-being can be direct and indirect through parent mindfulness and parent-child attachment.

The Direct Influence of Work-family Conflict on Child Well-being

Child well-being is multi-dimensional, it includes physiological, psychological and behavioral factors (Bradshaw, Hoelscher, & Richardson, 2007; Hanafin, Brooks, Carroll, Fitzgerald, GaBhainn, & Sixsmith, 2007). For instance, in the analyses of child well-being in

the European Union, Bradshaw and colleagues (2007) proposed eight clusters (i.e., material situation, housing, health, subjective well-being, education, children's relation, civic participation, risk and safety) as indicators of child well-being.

In the meta-analysis discussing the influence of parental divorce on child well-being, the authors included these most frequently studied outcomes: (a) academic achievement (standardized achievement tests, grades, teachers' ratings, or intelligence); (b) conduct (misbehavior, aggression, or delinquency); (c) psychological adjustment (depression, anxiety, or happiness); (d) self-concept (self-esteem, perceived competence, or internal locus of control); (e) social adjustment (popularity, loneliness, or cooperativeness); (f) mother-child relations (affection, help, or quality of interaction); (g) father-child relations; and (h) other (Amato & Keith, 1991). In a more recent paper about social support and children well-being (Chu, Saucier, & Hafner, 2010), the authors adopted Amato and Keith's coding of outcome, deleted the last four categories and added another four categories: health (e.g., exercise frequency, eating habits, Body Mass Index (BMI), healthy habits such as diet and avoiding substance use); coping skills (e.g., with anger, burnout); career (e.g., career planning, career outcome expectation, self-efficacy in finding a good career path after graduation); and other (included different overall measurements, such as overall life satisfaction, overall adaptive/maladaptive behaviors, quality of life, self-concept combined with academic achievement, or some variables that did not belong to any category, such as capacity for reflection).

It is proposed that problematic internet usage behaviors may relate to health and risky behaviors (Liu, Desai, Krishnan-Sarin, Cavallo, & Potenza, 2011; Niemz, Griffiths, & Banyard, 2005). The authors called for more study focusing on high school students' problematic internet usage behaviors and other characteristics. For this reason, I included

conduct (e.g., problematic internet usage behaviors and aggression) and general health as indicators of child well-being in the current study.

Researchers found that parents' WFC relates to their frustration which, subsequently, relates to parenting behaviors and children's work centrality (Lim & Kim, 2014). Similarly, Vieira and colleagues (2016) found that parent work family balance perception is associated with their parent-child relationship, which in turn is linked to children's internalizing (emotional problems and peer problems) and externalizing behaviors (behavioral and hyperactivity problems). In the present study, I expand these authors' research by examining other possible mediators and different behaviors (i.e., aggression, problematic internet usage and health).

Malete (2007) posits that aggression and violence has increased among youth and children. In a study, Malete (2007) found that poor parent-child relations and low parental monitoring related to high scores on aggressive behaviors. In addition, Cummings and colleagues (2004) found that 8- to 16-year-old children exposure to destructive conflict tactics (e.g., physical distress, physical aggression toward an object, physical aggression toward a person, and withdrawal) are more likely to engage in aggressive behavior. Parents whose work role prevents them from fulfilling family duties may have less time to take care of and tutor the child, thus the child is more likely to engage in aggressive behaviors compared to peers whose parents don't.

Hypothesis 1a: Parental WFC relates to child aggression.

Being defined as "Internet use that is risky, excessive or impulsive in nature leading to adverse life consequences, specifically physical, emotional, social or functional impairment.(Moreno, Jelenchick, & Christakis, 2013, p.1885)", problematic internet usage

behaviors have become a new and growing global concern (Ak, Koruklu, & Yilmaz, 2013; Christakis, Moreno, Jelenchick, Myaing, & Zhou, 2011; Park, Kim, & Cho, 2008; Yen, J. Y., Yen, C. F., Chen, C. C., Chen, S. H., & Ko, 2007). Problematic internet usage relates to negative outcomes including depression, loneliness, subjective distress, social, vocational and/or social impairments (Caplan, 2002; Shapira, Goldsmith, Keck, Khosla, & McElroy, 2000). Given the substantial role that internet use plays in the lives of today's adolescents and young adults, understanding possible antecedents is of great importance.

According to the social context model, a number of variables, such as social and economic stress, child temperament, family history, can influence the development of adolescent problem behaviors (Ary, Duncan, Biglan, Metzler, Noell, & Smolkowski, 1999). Research has supported this idea and found that individual factors (e.g., presence of internet access at home, gender, and family income levels, Ak et al., 2013) and environmental factors such as perceived family satisfaction, parenting attitudes, family communication, family cohesion, family violence exposure, higher parent-adolescent conflict (Park et al., 2008; Yen et al., 2007) all relate to problematic internet usage.

Consistent with the later findings, I suggest that parents who struggle with meeting both work and family demands may have limited time and energy to monitor and guide children's internet usage behaviors, which in turn, result in more problematic and risky internet usage behaviors of their children. Thus, I propose that:

Hypothesis 1b: Parental WFC positively relates to child problematic internet usage.

Lastly, I examine the influence of parental WFC on child health. Health can be an all-inclusive term describes a state of physical, psychological, and social well-being (Üstün & Jakob, 2005). However, it is operationally challenging (Grzywacz & Smith, 2016).

Consequentially, I assess child health with generic questions such as “In general, how is your overall health?”

According to the conservation of resources theory (Hobfoll, 1989), parents who experience high WFC are less likely to have time, energy, and other resources left to devote to family, including the child. They may have limited time to cook, clean the house, and attend to children’s needs, thus children’s health may suffer from this neglect. In line with these arguments, research showed that parents’ hours of work and the quality of parents’ jobs influence children’s health development (Nicholson, Strazdins, Brown, & Bittman, 2012). Moreover, Strazdins, OBrien, Lucas, and Rodgers (2013) found that mothers’ or fathers’ WFC relates to young children’s emotional and behavioral symptoms, and the issue becomes worse if both parents experience WFC. Thus it is safe to propose that children whose parents experience high level of WFC are more likely to suffer from health issue.

Hypothesis 1c: Parental WFC negatively relates to child health.

Beyond the direct impacts of work experience on employees’ family lives, several studies have suggested that the effect of WFC may be indirect. For example, researchers have found that the following variables mediated the relationship between parental work condition/job characteristics and child outcomes: parental role overload and parent-adolescent conflict (Crouter, Bumpus, Maguire, & McHale, 1999), feelings of stress and accepting behaviors shown toward the adolescent (Galambos, Sears, Almeida, & Kolaric, 1995), job-related affect and parenting behaviors (Stewart & Barling, 1996). In the present study I suggest that parents’ subjective appraisals of their WFC can influence their mindfulness and the quality of their parent–child relationships, which may further relates to their children’s well-being.

The Indirect Influence of Work-family Conflict on Child Well-being

Mindfulness

Mindfulness has been defined in a number of different ways. For instance, Brown, Ryan, and Creswell (2007, p.212) define mindfulness as “A receptive attention to and awareness of present moment events and experience.” Dane (2010) defines it as “a state of consciousness in which attention is focused on present-moment phenomena occurring both externally and internally.” Hanh (1976, p. 11) defines it as “Keeping one’s consciousness alive to the present reality” and Nyanaponika (1972, p. 5) as “The clear and single-minded awareness of what actually happens to us and in us at the successive moments of perception.” Even though they use different words, the core meaning of mindfulness is very similar, which is paying attention to the current internal and external stimulus. As a psychological state, most people have the capacity of being mindful. Also, similar to other psychological concepts such as positive and negative affect, people may differ to the extent they become mindful (Dane, 2010). A sizable number of studies have focused on mindfulness-based treatment intervention and its effects on well-being and health. For instance, results show that mindfulness relates to decreased stress plus increased sleep quality, health, and well-being (Howell, Digdon, & Buro, 2010; Klatt, Buckworth, & Malarkey, 2008; Roberts & Danoff-Burg, 2010).

Mindfulness is different from other concepts such as self-regulation. It is proposed that mindfulness includes two components: 1) receptive attention to the current moment; 2) openness and acceptance of presence (Bishop et al., 2004). This form of attention has been considered as an innate human tendency (Brown & Ryan, 2003), but that there are individual differences in the extent to which humans possess mindfulness. Emotional self-regulation is

proposed as a mechanism or outcome of mindfulness practice (Brown & Ryan, 2003). Rather than generating a mental account about the self, mindfulness “offer[s] a bare display of what is taking place” (Shear & Jevning, 1999, p. 204).

Even though mindfulness has garnered attention in the literature across various disciplines including clinical and counseling psychology (e.g., Hofmann, Sawyer, Witt, & Oh, 2010), social and personality psychology (Brown & Ryan, 2003), neuroscience (e.g., Tang, Hölzel, & Posner, 2015), medicine (e.g., Ludwig & Kabat-Zinn, 2008), and education (e.g., Schonert-Reichl & Lawlor, 2010), it is only recently that industrial–organizational psychology/organizational behavior scholars began paying more attention to it and its influence in the workplace (Allen & Kiburtz, 2012; Dane, 2010; Dane & Brummel, 2013; Hülshager, Alberts, Feinholdt, & Lang, 2013). Some of that recent research includes Dane and Brummel (2013) who found that mindfulness can contribute to work-related outcomes such as performance and turnover intention. Moreover, Hulsheger and colleagues’ (2013) study revealed that mindfulness relates to low emotional exhaustion and high job satisfaction. In addition, Allen and Kiburtz (2012) found that mindfulness relates to greater work–family balance, better sleep quality, and greater vitality.

Building on and extending Allen and Kiburz’s (2012) work, I propose that WFC relates to mindfulness. When WFC is high, it indicates that there are not enough resources to handle both work and family roles. As a result, this state should reduce the chance of being alert and paying full attention to current situation. Empirical research has supported the idea by showing that parent who has a stressful work was found to be more likely to withdraw from interactions with the child when they returned home (Repetti & Wood, 1997). The

withdrawal (associated with the experience of WFC) makes the parents less sensitive and responsive with the child (Cox, Paley, Payne, & Burchinal, 1999).

Mindfulness as a Mediator

Research has shown that mindfulness relates to positive social relationships (Glomb, Duffy, Bono, & Yang, 2011). Mindful people are more likely to view things more objectively and nonjudgmental. They are more inclined to detach themselves from the environment which allows them to better control their emotions (Chiesa & Serretti, 2010; Sears & Kraus, 2009). In addition, mindfulness has been found to relate to empathy (Block-Lerner, Adair, Plumb, Rhatigan, & Orsillo, 2007). The empathic concern for others allows mindful people to see life from another's perspective and understand another's viewpoint and needs. Moreover, mindfulness can influence the way people respond to problems, allowing them to remain more flexible in how they deal with conflict (Bishop et al., 2004).

Being considerate and aware, mindfulness is the essential state of mind of a parent (Siegel, 2007). Mindful parents are in a better position for observing children's behavior, controlling their anger in interacting with their children, showing more love and empathy in helping with children's problems, and being a role model in relating to others and solving problems. Coatsworth and colleagues (2010) found that a mindfulness-enhanced parenting intervention enhanced parent-adolescent relationships more than the original intervention through changes in mindful parenting ("reflecting a higher level of awareness that parents have of their internal states and how they think and feel about their thoughts and feelings." p.204). Furthermore, studies have also revealed that the mindfulness of the caregiver related to a decrease in children's non-compliance behaviors (Singh et al., 2007; Singh et al., 2010).

Based on these findings, I propose that mindfulness can work as a mediating role between parental WFC and child well-being.

Hypothesis 2: WFC will have an indirect effect on child (a) aggression, (b) problematic internet usage and (c) health through mindfulness.

Parent-Child Attachment as a mediator

Attachment theory states that individuals have an innate desire to seek proximity with others in times of need or distress (Bowlby, 1982). People may develop different patterns of attachment based on their interaction with primary caregivers in early childhood: the persons who receive consistent support from their intimate others in their childhood develop a secure attachment style; those who receive inconsistent support develop an anxious attachment style; and those who consistently lack support develop an avoidant attachment style (Richards & Hackett, 2012). While the foundational attachment research focused on infants and their relationships with caregivers, later research has explored its implications for other relationships, such as romantic relationship, leadership, and relationship with coworkers (Hinojosa, McCauley, Randolph-Seng, & Gardner, 2014).

The hypothesis that the indirect effect between WFC and outcomes works through attachment is supported by empirical findings from the following two lines of research. Research documented that some distal factors, such as experienced positive emotional spillover between work and family (Belsky, 1996) and mother's employment (Harrison & Ungerer, 2002), may influence the relationship developed between the parent and the infant. Similarly, the experienced conflict between work and family role is likely to relate to the parent-child relationship as well. In addition, research has indicated that parent-child attachment relates to adolescent's internalization symptoms (e.g., depression, anxiety,

Brumariu & Kerns, 2010) and deviant behaviors (Allen, Moore, Kuperminc, & Bell, 1998; Allen, Porter, McFarland, McElhaney, & Marsh, 2007; Kostecky, 2004). Thus I propose:

Hypothesis 3: WFC will have an indirect effect on child (a) aggression, (b) problematic internet usage and (c) health through parent-child attachment.

Putting together, I hypothesize that when the parents experience conflict between work and family role, they are less likely to be fully present in the current moment which negatively affects their bond with their child, which in turn influence child well-being.

Hypothesis 4: WFC will have an indirect effect on child (a) aggression, (b) problematic internet usage and (c) health through both mindfulness and attachment.

Method

Participants

Participants consist of students from three schools in Nigeria and their parents. The inclusion criteria for the parents are: a) that their child is attending one of these schools; 2) the parent or his/her spouse works full-time or is self-employed; or if both of the parents are employed or self-employed.

2500 children filled out paper and pencil survey for the child. 487 parents filled out paper and pencil survey for the parent. 343 matches were found. As seen in Table 1, the majority of participants were female children (62.6%) and the majority of parent surveys were completed by mothers (63.9%). The children are on average 15.1 years old ($SD = 2.1$).

15 of the parents were in Agriculture industry, 1 was in Mining industry, 5 were in Construction, 11 were in Manufacturing industry, 9 were in Transportation, 33 were in Wholesale Trade, 58 were in Retail Trade, 6 were in Finance, Insurance, and Real Estate, 26 were in Business and Repair Service, 43 were in Personal Services, 2 were in Entertainment

and Recreational Services, 13 were in Public Administration, 9 were in Armed Services, and 20 were in other industries that were not listed here.

40 parents indicated they work part-time at the time when they took the survey, 159 parents worked full-time, 21 were unemployed, 2 parents were not able to work, 36 indicated they were students (among them, 8 of them didn't work, and 28 of them worked while attending school), 18 parents were homemaker, and 41 parent didn't specify his/her employment status.

The average monthly income of the parent (excludes the income from the spouse) is 117,722 Naira (591 US dollar), the standard deviation is 418,280 (2,101 US dollar). The median income is 37,000 Naira (186 US dollar). 65 parents indicated their highest education level was primary school, 278 parents had some secondary school education, 84 parents received some university education, 37 received post-graduate education, and 17 parents indicated their education level was not recorded in the list.

 Insert Table 1 about here

Methods and Procedures

Students were asked to fill out a paper and pencil survey during class and parents who meet the selection criteria were invited to the school to fill out a separate pencil and paper survey. For the parents with low literacy, research assistants helped them read each question and wrote down the choices. The parent and child data were matched using the name and the date of birth of the child.

Measures

Work-family Conflict. Parental WFC is measured with 4 items from Wayne, Musisca, and Fleeson (2004). A sample item is “Your job reduces the effort you can give to activities at home.” Parents were asked to indicate the extent that they agree or disagree with the statement by selecting from 1 “Strongly disagree” to 5, “Strongly Agree”. High scores indicate high levels of WFC. The Cronbach’s alpha is .82.

Mindfulness. Mindfulness was assessed with 15 items from MacKillop and Anderson’s (2007) measure. Parents were asked to consider their everyday experience and indicate the frequency of the occurrence of each statement by choosing from 1 to 5 (1= “Never”, 2 = “Rarely”, 3 = “Sometimes”, 4 = “Often”, 5 = “Very Often”). A sample item is “I find myself doing things without paying attention.” I reversed code the item so that high scores indicate greater mindfulness. The Cronbach’s alpha is .88.

Parent-child Attachment. 16 items from Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987) were used to assess child's perceptions of the current degree of trust (4 items), communication (7 items), and alienation (5 items) in their relationships with their parent. Attachment is conceptualized as the availability of communication and trust and the absence of alienation. A sample item of trust is “I feel my parents are successful as parents.” A sample item of communication is “My parents encourage me to talk about my difficulties.” A sample item of alienation is “Talking over my problems with my parents makes me feel ashamed or foolish.” Children were asked to indicate the extent that they agree or disagree with the statements by selecting from 1 “Strongly Disagree” to 5, “Strongly Agree”. High scores indicate secure attachment.

Two reversed-coded items were used to assess communication (i.e., “I have to rely on myself when I have a problem to solve” and “I feel it’s no use letting my feelings show.”). After reversed coded these items, the Cronbach’s alpha for the whole scale is .41 and the alpha for communication subscale is .43. The smallest inter-item correlation for these two items with other items in the scale is -.009 and -.028. Following Tavakol and Dennick’s (2011) advice, I discarded these two reversed-coded items. After deleting these two items, the Cronbach’s alpha for the whole scale is .60. The Cronbach’s alpha for trust, communication, and alienation are .60, .62, and .58 respectively.

Child Health. Child health was assessed with 3 items developed for this study. A sample item is “In general, how is your overall health?” Children were asked to indicate their condition by selecting from 1 to 5 (1 = “Poor”, 2 = “Fair”, 3 = “Good”, 4 = “Very Good”, 5 = “Excellent”). High scores indicate good health. The Cronbach’s alpha is .70.

Child Aggression. Child aggression was assessed with 11 items from Orpinas and Frankowski (2001). Sample items are “I teased students to make them angry” and “I fought back when someone hit me first”. Children were asked to indicate what they actually did during the last 7 days by choosing from 1 to 5 (1 = “0 Times”, 2 = “1 Time”, 3 = “2 Times”, 4 = “3 Times”, 5 = “4 Times”, 6 = “5 Times”, 7 = “6 or More Times”). High scores indicate high levels of aggression. The Cronbach’s alpha is .85.

Child Problematic and Risky Internet Use Screening Scale (PRIUSS). Child problematic and risky internet use behaviors were assessed with 17 items from Jelenchick et al (2014). Sample items are “Do you choose to socialize online instead of in-person?”, “Do you have problems with face to face communication due to your internet use?”, and “Do you fail to create real-life relationships because of the internet?” Children were asked to indicate

their internet behavior by choosing from 1 to 5 (1= “Never”, 2 = “Rarely”, 3 = “Sometimes”, 4 = “Often”, 5 = “Very Often”). High scores indicate high levels of problematic and risky internet usage behaviors. The Cronbach’s alpha is .81.

Controls. I controlled for the child gender, parent gender, and the number of children under age 18 in the home because of their potential relationships with the dependent variables (Allen, 2001; Greenhaus et al., 2006).

Data Analysis

I conducted multiple linear regressions with SPSS to examine the effect of WFC on child well-being (Hypothesis 1). I used the Process Macro (Model 6) developed by Hayes (2013) to examine the indirect effect of mindfulness and attachment in the relationships between parental WFC and child well-being (Hypotheses 2, 3 & 4).

Results

Table 2 presents means, standard deviations, and correlations among all variables. Parental experiences of WFC were negatively related to mindfulness ($r = -.34, p < .01$). Although the relationships between parental rated WFC and the indicators of child well-being were in the right direction, none of the relationships were significant: child aggression ($r = .08, p = .13$), health ($r = -.02, p = .69$), or problematic internet usage ($r = .09, p = .12$).

Insert Table 2 about here

I conducted multiple linear regressions with SPSS to examine the effect of WFC on child well-being (Hypothesis 1). As shown in Table 3, I entered control variables (i.e., child gender, parent gender, and number of children) in the first step and WFC in the second step.

After controlling for child gender, parent gender, and number of children, WFC didn't predict aggression, $\beta = .08$, $t(244) = 1.14$, $p = .26$, didn't predict internet usage behavior, $\beta = .02$, $t(245) = .53$, $p = .60$, and didn't predict health, $\beta = -.02$, $t(245) = -.35$, $p = .73$.

 Insert Table 3 about here

Mindfulness and Attachment as Mediator between WFC and Child Aggression

As seen in Figure 2, the total effect from WFC to aggression was not significant, $b = .06$, $p = .37$. Next, I examined the indirect effect of the WFC and child aggression relationship through mindfulness and attachment, both uniquely and sequentially. The total indirect effect was not significant, estimate = .050, 95% CI [-.001, .118]. With the mediators controlled for, the direct link between WFC and child aggression was not significant, $b = .01$, $p = .86$.

Next, I decomposed the indirect effect into three components. First, the indirect effect between WFC and aggression through mindfulness (independent of attachment) was significant, estimate = .053, 95% CI = [.005, .118]. In addition, WFC predicted mindfulness, $b = -.24$, $p < .01$, and mindfulness predicted aggression, $b = -.22$, $p = .07$. In summary, when excluding attachment from the analysis, WFC had an indirect effect on aggression through mindfulness.

The indirect effect between WFC and aggression through attachment (independent of mindfulness) was not significant, estimate = -.004, 95% CI = [-.029, .013]. Further, WFC did not predict attachment, $b = .77$, $p = .11$, and attachment did not predict aggression, $b = -$

.005, $p = .66$. In summary, when excluding mindfulness from the analysis, WFC did not have an indirect effect on aggression through attachment.

Finally, I examined whether WFC would have a sequential indirect effect with child aggression through mindfulness and attachment. WFC predicted decreased mindfulness, $b = -.24$, $p < .01$, mindfulness did not predict attachment, $b = .97$, $p = .19$, and attachment did not predict aggression, $b = -.005$, $p = .67$. The three-path indirect effect was not significant, indirect effect = .001, 95% CI [-.003, .012].

 Insert Figure 2 about here

Mindfulness and Attachment as Mediator between WFC and Child Health

As seen in Figure 3, the total effect from WFC to health was not significant, $b = -.01$, $p = .86$. Next, I examined the indirect effect of the WFC and child health relationship through mindfulness and attachment, both uniquely and sequentially. The total indirect effect was not significant, estimate = -.019, 95% CI [-.088, .044]. With the mediators controlled for, the direct link between WFC and health was not significant, $b = .01$, $p = .86$.

Next, I decomposed the indirect effect into three components. First, the indirect effect between WFC and health through mindfulness (independent of attachment) was not significant, estimate = -.042, 95% CI [-.103, .005]. WFC did predict mindfulness, $b = -.24$, $p < .01$, and mindfulness did predict health, $b = .18$, $p < .05$. In summary, when excluding attachment from the analysis, WFC did not have an indirect effect on health through mindfulness.

The indirect effect between WFC and health (independent of mindfulness) was significant, estimate = .031, 95% CI = [.005, .080]. WFC predicted attachment, $b = .80$, $p = .09$, and attachment uniquely predicted health, $b = .04$, $p < .01$. In summary, when excluding mindfulness from the analysis, WFC did have an indirect effect on health through attachment.

Finally, I examined whether WFC would have a sequential indirect effect with child health through mindfulness and attachment. WFC predicted decreased mindfulness, $b = -.24$, $p < .01$, mindfulness did not predict attachment, $b = 1.00$, $p = .18$, and attachment predicted health, $b = .04$, $p < .01$. The three-path indirect effect was not significant, indirect effect = -.009, 95% CI [-.027, .000].

 Insert Figure 3 about here

Mindfulness and Attachment as Mediators between WFC and Child Problematic Internet Usage

As seen in Figure 4, the total effect from WFC to problematic internet usage was not significant, $b = .03$, $p = .34$. Next, I examined the indirect effect through mindfulness and attachment, both uniquely and sequentially. Different from what was predicted, there was not significant mediation overall, estimate = .003, 95% CI [-.028, .035]. With the mediators controlled for, the direct link between WFC and problematic internet usage was not significant, $b = .03$, $p = .41$.

Next, I decomposed the indirect effect into three components. First, the indirect effect between WFC and problematic internet usage through mindfulness (independent of

attachment) was not significant, estimate = .010, 95% CI = [-.019, .040]. Although WFC did uniquely predict mindfulness, $b = -.24$, $p < .01$, mindfulness did not uniquely predict problematic internet usage, $b = -.04$, $p = .49$. In summary, when excluding attachment from the analysis, WFC did not have an indirect effect on problematic internet usage through mindfulness.

The indirect effect between WFC and problematic internet usage through attachment (independent of mindfulness) was significant, estimate = -.011, 95% CI = [-.028, -.001]. WFC predicted attachment, $b = .80$, $p = .09$, and attachment uniquely predict problematic internet usage, $b = -.01$, $p < .05$. In summary, when excluding mindfulness from the analysis, WFC had an indirect effect on problematic internet usage through attachment.

Finally, I examined whether WFC would have a sequential indirect effect with child problem internet usage through mindfulness and attachment. WFC predicted decreased mindfulness, $b = -.24$, $p < .01$, mindfulness did not predict attachment, $b = 1.00$, $p = .18$, and attachment predicted problematic internet usage, $b = -.01$, $p < .05$. The three-path indirect effect was significant, indirect effect = .003, 95% CI [.000, .011].

 Insert Figure 4 about here

In summary, as seen in Table 3, the effect between WFC and child well-being was not significant and, thus, Hypothesis 1 was not supported. However, the indirect effect between WFC and aggression through mindfulness was significant and, thus, Hypothesis 2a was supported. In addition, the indirect effect between WFC and health through attachment was significant and the indirect effect between WFC and problematic internet usage through

attachment was significant. As a result, Hypotheses 3b and 3c were supported. For the sequential indirect effects: the indirect effect between WFC and problematic internet usage through mindfulness and attachment was significant. As a result, Hypothesis 4b was supported. The rest of the hypotheses were not supported.

 Insert Table 4 about here

Discussion

The current study sought to investigate the influence of WFC on child well-being and explore the mediating mechanisms between these relationships. Consistent with predictions, mindfulness and attachment played important mediating roles for the negative relationship between parental WFC and child well-being. The results suggest that a substantial proportion of the relationship between WFC and decreased child well-being can be explained by the decreased mindfulness that parents with high WFC experience. Consequentially, decreases in the parent-child attachment are more likely to result.

When the indirect effect was further decomposed, I found that the total indirect effect appeared to be a function of three smaller indirect effects. More specifically, mindfulness in the absence of attachment was a mediator independently of the WFC and child aggression relationship. To a certain extent this finding was expected given the robust relationship between mindful parenting and decreases of aggression in children (Singh et al., 2007). In contrast, the indirect effect between WFC and aggression through attachment in the absence of mindfulness was not significant. This suggests that the increase in aggression associated with parental WFC was not simply due to insecure attachment.

The indirect effects between parental WFC and child health and the indirect relationship between WFC and internet usage behavior through mindfulness were not significant. However, the indirect effects between WFC and child health as well as between parental WFC and child internet usage behavior through attachment were significant. Research has found that parent-child attachment relates to child health (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990; Armstrong & Morris, 2000) and internet usage behaviors (Lei & Wu, 2007; Yang, Zhu, Chen, Song, & Wang, 2016). Results from the current study suggest that WFC had an indirect effect on child internet usage behavior and health through attachment.

The significant path from parental WFC to decreased mindfulness, decreased attachment, and increased child problematic internet usage behaviors provides additional explanatory variance related to the parental WFC and child well-being relationship. The sequential indirect effect suggests that children with parents who experience high WFC were more inclined to have issues with internet usage. This decrease in mindfulness was associated with detriments in secure parent-child attachment which are necessary for the child to properly explore the internet.

Theoretical Implications

The findings from the current study have implications for research related to the crossover effect of work-family conflict. This research is of particular value given that studies involving work-family conflict have predominately focused on partners (Bakker & Demerouti, 2012) while ignoring influences on the child. As Eby and colleagues (2005) noted, work-family research in Industrial and Organizational and Organizational Behavior journals has primarily examined the following criteria (1) work attitudes (e.g., job

satisfaction, organizational commitment, and loyalty), (2) work–family interaction (e.g., work interfering with family, family interfering with work, and WFC), and (3) health and wellness (e.g., general mental well-being, physical health, and general family wellness) with limited attention being paid to children in relation to parenting variables (e.g., child behaviors, well-being, and adjustment). In the present investigation, I move forward the work-family research by uncovering the effect of WFC on child well-being to examine the black box wherein WFC may influence child aggression, problematic internet usage, and health issues. These findings suggest that increased work-family conflict can influence child well-being through decreased parental mindfulness and parent-child attachment.

Also, this study contributes to work-family research by introducing parental mindfulness, which is commonly observed in parenting and family studies, to work-family research. Thus, by understanding the relationship between WFC and child well-being and the ways in which mindfulness contributes to this relationship, new insights into the occurrence of work-family conflict and health-related behaviors may be revealed.

Prior research has indicated that parents' work overload and work pressures increase adolescents' problem behaviors and diminish psychological well-being in part by increasing parent-adolescent conflict and reducing parental acceptance of the adolescent (Crouter et al., 1999; Galambos et al., 1995). By investigating mindfulness and attachment I have incorporated two mediating mechanisms that until now have received limited attention within the work-family literature. I have also extended evidence regarding the indirect influence of parents working condition on child outcomes (Crouter et al., 1999; Crouter & Bumpus, 2001; Galambos et al., 1995; McLoyd, Toyokawa, & Kaplan, 2008) and have answered calls to

explore the underlying mechanisms of the WFC and outcome relationships (Vieira et al., 2016).

Finally, the finding that WFC can reduce parent-child attachments directly applies to research in family and developmental psychology. For example, poor parent-child relationships have been linked to delinquent behaviors in children (Allen et al., 1998). According to the results of the current study, WFC may increase child problematic internet usage behaviors through poor parent-child attachment, which can be further related to academic, social, interpersonal, and health problems (Liu et al., 2011; Niemz et al., 2005). That is, when employees' WFC is high their children may be more likely to engage in behavior that society would consider deleterious.

Practical Implications

A number of suggestions for managers interested in reducing WFC emerge from our findings. These include strategies for redesigning job duties (Greenhaus et al., 2006) and implementing flexible scheduling (Allen, Johnson, Kiburz, & Shockley, 2013; Thomas & Ganster, 1995). For instance, some companies are already adopting policies that help workers balance work and family through supportive supervision (Greenhaus et al. 2006). Research has shown that employees who perceive their organization as family supportive experience lower levels of WFC than those who perceive their organization as less work-family supportive (Allen, 2001). Managers can also potentially draw on recent evidence suggesting that mindfulness interventions can increase mindfulness (Grossman, Niemann, Schmidt, & Walach, 2004; Malarkey, Jarjoura, & Klatt, 2013). Subsequently, organizations may consider mindfulness-based interventions as a way to promote work-family balance.

Moreover, managers should be aware of the role of organizational culture in creating conditions that result in high WFC. For example, organizations that promote work centrality cultures in which employees are expected to put work as a high priority over family should expect to see higher levels of WFC. Further, beyond conflict that can occur between work and family roles, managers should be vigilant of other factors influencing child well-being involving job insecurity, work stress, work overload, and long work hours. Researchers have shown that long work hours and job insecurity can influence WFC and, in turn, child well-being (Barling et al., 1998; Barling & Mendelson, 1999; Crouter et al., 1999; Galambos et al., 1995; McLoyd et al., 2008; Stewart & Barling, 1996).

However, high work demands are unavoidable in some situations, especially for occupations such as military personnel, health care professionals, and international businesspeople. In such situations, maintaining a sense of “conflict awareness” can be crucial for top management and front-line supervisors. By monitoring employees’ current levels of demands and conflicts, managers can remain aware of potential high-risk employees.

In sum, I suggest that managers can limit the influence of WFC in their organizations by taking the following specific actions: (1) introduce work-family balance and mindfulness-based intervention programs, (2) design jobs to limit WFC, (3) pay attention to the organizational culture in an attempt to engender norms that include family, and (4) monitor employee work-family conflict.

Limitations and Directions for Future Research

I would like to note that despite the significance of the results in the current study, I acknowledge certain limitations. I recognize that although I included ratings from both the parent and the child, this study mainly relies on self-report data. However, the current study

measured WFC which entails a variable that tends to be more subjective rather than objective. Researchers have pointed out that when the goal of research is to understand how people feel about their jobs, self-report methodology may be most useful (Spector, 1994).

Although from a theoretical standpoint parental WFC is a possible cause of child well-being issues, the cross-sectional design does not statistically allow for inferring causality. Longitudinal designs are better employed to examine causal influences among well-being outcomes. For example, although the data in the present study revealed that high parental WFC indirectly related to child well-being through mindfulness and attachment, it is also possible that parents whose children are less healthy or have more behavior issues are less likely to be mindful that subsequently affects their work. These possibilities have been suggested by research linking trait mindfulness to work-family balance (Allen & Kiburz, 2012).

Moreover, future research can use experience sampling methods (Csikszentmihalyi & Larson, 2014) to examine with-in person and day-to-day connections between WFC and child well-being. By tracking daily WFC events, this method may also provide insights into causal conclusions. Additionally, objective measures such as body mass indices (BMI) and school grades could be collected to assess well-being.

Another limitation of the present study is its sampling. Given that the current study was conducted in three schools with participants from a relatively medium to low socioeconomic status in Nigeria, I caution against generalizing these findings to other settings. To ascertain the generalizability of results obtained in the current study, future research should attempt to replicate this design with participants from a more diverse background.

Moreover, although I identified an indirect relationship between WFC, mindfulness, attachment, and child well-being, I did not exhaust all possible mediators. It would be worthwhile to understand better if other factors, for example fatigue and exhaustion, have an indirect effect between WFC and child well-being. To provide a clearer picture on the underlying mechanisms related to WFC and its influences on child well-being, more research in these areas is essential.

Despite these limitations, the present research has supported and extended prior research related to the influences that working parents can have on their children. It has shown that parental WFC can influence the parent-child relationship and other indicators of child well-being. Future research can be used to address the implications involving the growing number of working parents.

Conclusion

Whereas previous research has shown that parents' work conditions (e.g., work pressure, work overload, and work stress) may influence child well-being through parent-child conflict and parenting behavior, the current paper extends research to show parental WFC influences on child well-being and through specific mechanisms in which those influences can occur. The current paper integrates spillover and crossover research and shows parental WFC related to mindfulness, attachment, and child well-being. In sum, the data show that increased WFC undermines parental mindfulness which, in turn, influences the parent-child attachment resulting in increased negative child well-being.

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Table 1 Sample Description

Variable		Descriptive statistics
Child gender	Female	181 (62.6%)
	Male	108 (37.4%)
Parent gender	Female	191 (63.9%)
	Male	106 (35.3%)
Number of children	1-2	111 (32.8%)
	3-4	115 (33.9%)
	5 and above	54 (15.9%)
Parent education	Secondary School	190 (60.1%)
	University	52 (16.5%)
	Primary School	42 (13.3%)
	Post-graduate	21 (6.6%)
Parent monthly income	25% Percentile	10,000 Naira (50 US dollar)
	50% Percentile	37,000 Naira (186 US dollar)
	75% Percentile	76,250 Naira (383 US dollar)
Parent working industry (top 5)	Retail Trade	58 (23.1%)
	Personal Service	43 (17.1%)
	Wholesale Trade	33 (13.1)
	Business and Repair Service	26 (10.4)
	Agriculture	15 (6%)
Parent employment status (top 5)	Working full-time	159 (49.8%)
	Working part-time	40 (12.5%)
	A student who also works	28 (8.8%)
	Unemployed	21 (6.6%)
	A homemaker	18(5.6%)

Table 2 Means, Standard Deviations, and Correlations among Studied Variables

Variables	<i>Mean</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Gender_child	.37	.48	-								
2. Gender_parent	.37	.52	.12	-							
3. No. of child	2.68	2.34	.12 [*]	.11 [†]	-						
4. Parental WFC	2.43	1.11	.04	-.05	-.03	-					
5. Parental mindfulness	3.85	.70	-.08	.04	.03	-.34 ^{**}	-				
6. Child attachment	47.04	7.20	.01	-.05	-.02	.06	.05	-			
7. Child aggression	1.46	1.21	.03	-.08	.03	.08	-.16 ^{**}	-.00	-		
8. Child health	3.98	.93	-.02	-.02	.03	-.02	.15 ^{**}	.26 ^{**}	-.08	-	
9. Child PRIUSS	2.05	.64	.11 [†]	-.08	.09	.09	-.13 [*]	-.09 [†]	.26 ^{**}	-.10 [†]	-

Note. Ns = 289-342. WFC = work family conflict. For gender, 1 = male, 0 = female.

[†] $p < .10$. ^{*} $p < .05$. ^{**} $p < .01$.

Table 3 Hierarchical Linear Regression Analysis Results for the Effects of Work Family Conflict on Child Well-being

Variables	Aggression		PRIUSS		Health	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Gender_parent	-.12 [†]	-.12 [†]	-.08	-.08	-.04	-.04
Gender_child	.04	.04	.17**	.17**	-.06	-.06
No. of child	.03	.03	.05	.05	.14*	.14*
Parental WFC		.07		.03		-.02
R^2	.016	.021	.039*	.040*	.022	.022
ΔR^2	-	.005		.001*		0

Note. $N = 248-249$. WFC = work family conflict. For gender, 1 = male, 0 = female. Standardized regression coefficients are reported. [†] $p < .10$. * $p < .05$. ** $p < .01$.

Table 4 Summary of Hypotheses Found to be Supported

Hypotheses	a. Aggression	b. Health	c. Internet Usage
Hypothesis 1: Parental WFC relates to child outcome	×	×	×
Hypothesis 2: WFC has an indirect effect on child outcomes through mindfulness	√	×	×
Hypothesis 3: WFC has an indirect effect on child outcomes through attachment	×	√	√
Hypothesis 4: WFC has an indirect effect on child outcomes through both mindfulness and attachment	×	×	√

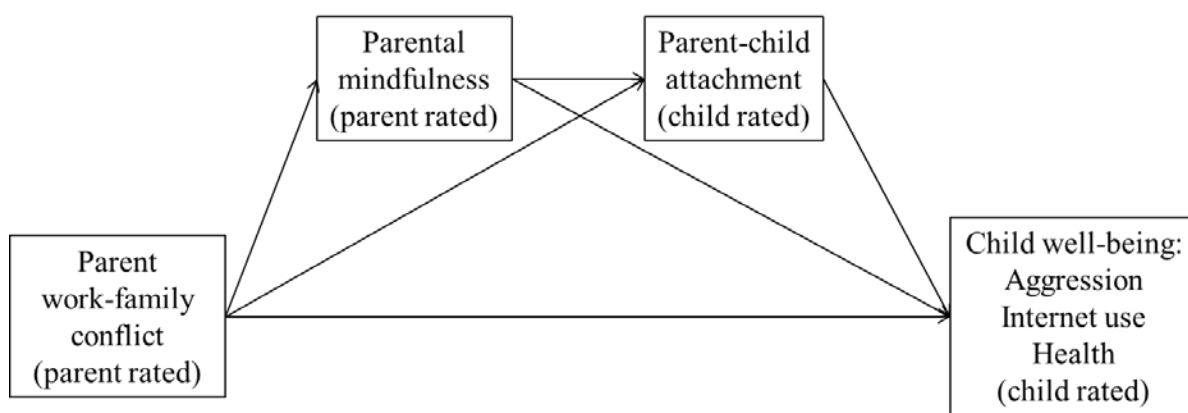


Figure 1 The Proposed Model

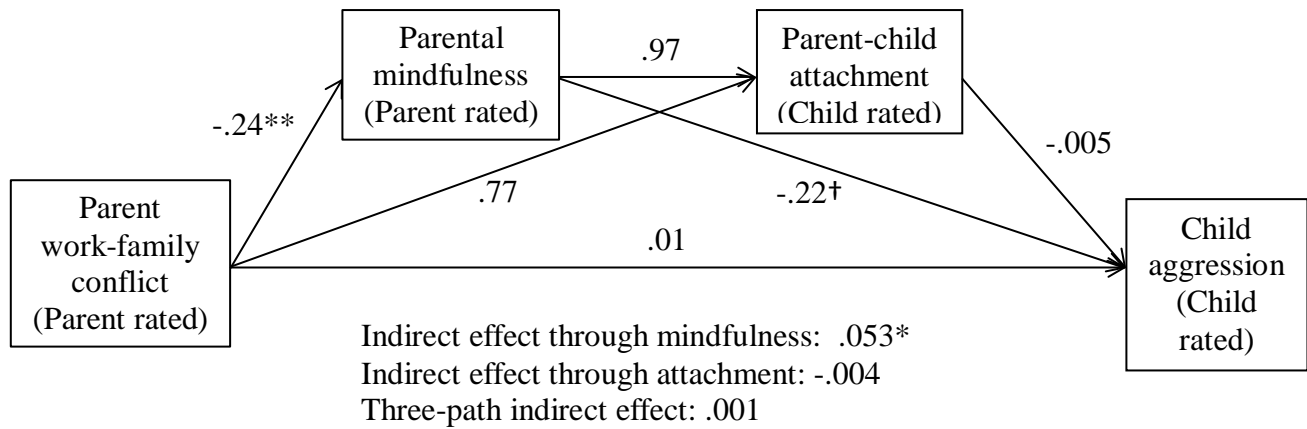


Figure 2 Model Shows the Indirect Effect of Parental Work-Family Conflict on Child Aggression through Mindfulness and Parent-Child Attachment
 Covariates included were child gender, parent gender, and number of child under age 18.
 Symbols indicate the significance of path coefficients ($^{\dagger}p < .10$. $^*p < .05$. $^{**}p < .01$)

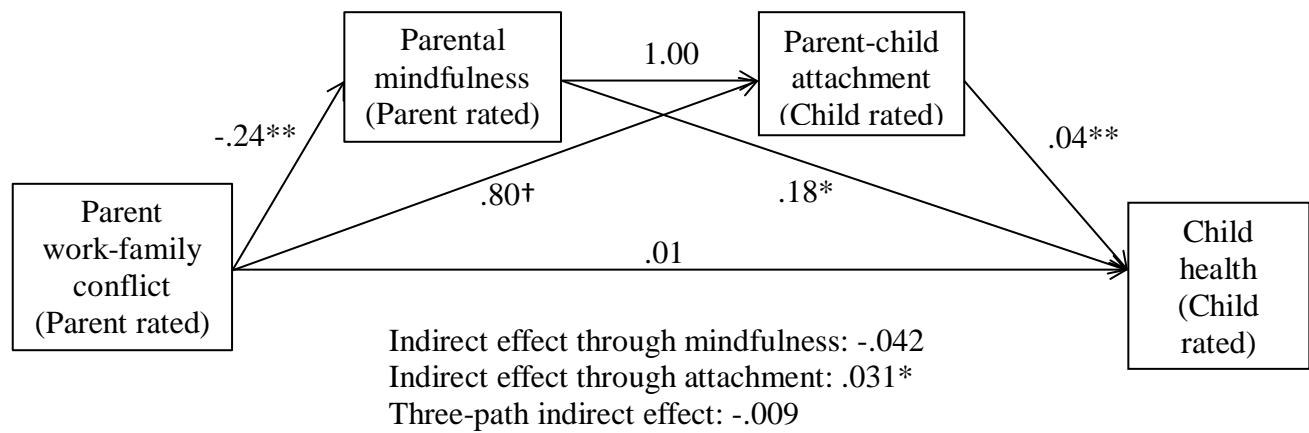


Figure 3 Model Shows the Indirect Effect of Parental Work-Family Conflict on Child Health through Mindfulness and Parent-Child Attachment

Covariates included were child gender, parent gender, and number of child under age 18. Symbols indicate the significance of path coefficients ($^{\dagger}p < .10$. $^*p < .05$. $^{**}p < .01$)

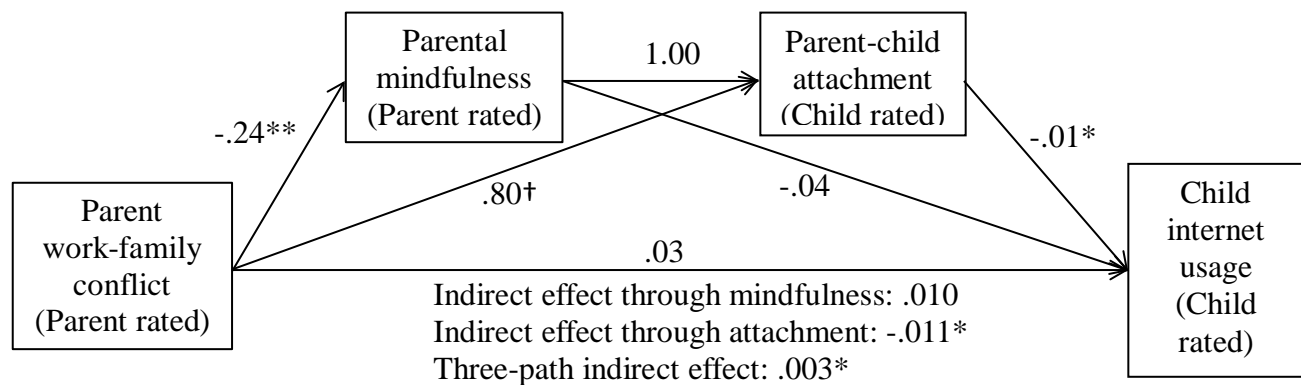


Figure 4 Model Shows the Indirect Effect of Parental Work-Family Conflict on Child Internet Usage through Mindfulness and Parent-Child Attachment. Covariates included were child gender, parent gender, and number of child under age 18. Symbols indicate the significance of path coefficients ($^{\dagger}p < .10$. $^{*}p < .05$. $^{**}p < .01$)

Appendix

Parent Survey

Work-family Conflict

Considering your work with your current employer, please circle the number that indicates how much you agree or disagree with the following statements using the choices below.

1 - Strongly disagree 2 - Disagree 3 - Neither 4 - Agree 5 - Strongly Agree

1. Your job reduces the effort you can give to activities at home
2. Stress at work makes you irritable at home
3. Your job makes you feel too tired to do the things that need attention at home
4. Job worries or problems distract you when you are at home

Mindfulness

Below is a collection of statements about your everyday experience. Please circle the number that indicates how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1 - Never 2 - Rarely 3 - Sometimes 4 - Often 5 - Very often

1. I could be experiencing some emotion and not be conscious of it until sometime later
2. I break or spill things because of carelessness, not paying attention, or thinking of something else
3. I find it difficult to stay focused on what's happening in the present
4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way
5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention
6. I forget a person's name almost as soon as I've been told it for the first time
7. It seems I am "running on automatic" without much awareness of what I'm doing
8. I rush through activities without being really attentive to them
9. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there
10. I do jobs or tasks automatically, without being aware of what I'm doing
11. I find myself listening to someone with one ear, doing something else at the same time
12. I drive places on "automatic pilot" and then wonder why I went there

- 13. I find myself preoccupied with the future or the past
- 14. I find myself doing things without paying attention
- 15. I snack without being aware that I'm eating

Child Survey

Inventory of Parent and Peer Attachment

Please circle the number that indicates how much you agree or disagree to the following statements using the choices below.

1 - Strongly disagree 2 - Disagree 3 - Neither 4 - Agree 5 - Strongly agree

1. I feel my parents are successful as parents (T)
2. I have to rely on myself when I have a problem to solve (C) (R)
3. I like to get my parents' point of view on things I'm concerned about (C)
4. I feel it's no use letting my feelings show (C) (R)
5. My parents sense when I'm upset about something (C)
6. Talking over my problems with my parents makes me feel ashamed or foolish (A)
7. I get upset easily at home (A)
8. When we discuss things, my parents consider my point of view (T)
9. My parents trust my judgment (T)
10. My parents encourage me to talk about my difficulties (C)
11. I don't know whom I can depend on these days (A)
12. When I am angry about something, my parents try to be understanding (T)
13. My parents don't understand what I'm going through these days (A)
14. I can count on my parents when I need to get something off my chest (C)
15. I feel that no one understands me (A)
16. If my parents know something is bothering me, they ask me about it (C)

Note: C= communication, A= alienation, T = trust. R = reversed-coded item.

Problematic and Risky Internet Use Screening Scale

Please circle the number that indicates how you have felt and conducted yourself regarding your Internet use over the past 6 months. Please do your best to interpret these questions as they apply to your own experiences and feelings. When considering your Internet use time, think about any time you spend online, whether you are using a computer or a mobile device. Do not include time you spend texting unless you are using text messages to interact with an online application such as Facebook or Twitter.

1 - Never 2 - Rarely 3 - Sometimes 4 - Often 5 - Very often

1. Do you choose to socialize online instead of in-person?
2. Do you have problems with face to face communication due to your internet use?
3. Do you fail to create real-life relationships because of the internet?
4. Do you skip out on social events to spend time online?
5. Do your real life relationships suffer due to your internet use?
6. Do you feel irritated when you're not able to use the internet?
7. Do you feel angry because you are away from the internet?
8. Do you feel anxious because you are away from the internet?
9. Do you feel helpless when the internet isn't available?
10. Do you experience feelings of withdrawal from not using the internet?
11. Do you put internet use in front of important, everyday activities?
12. Do you avoid other activities in order to stay online?
13. Do you neglect your responsibilities because of the internet?
14. Do you lose motivation to do other things that need to get done because of the internet?

15. Do you lose sleep due to nighttime internet use?
16. Does time on the internet negatively affect your school performance?
17. Do you feel you use the internet excessively?

Aggression

Please answer the following questions thinking of what you actually did during the last 7 days. For each question, mark with a circle how many times you did that behavior during the last 7 days.

During the last 7 days 0 times 1 time 2 times 3 times 4 times 5 times 6 or more times

1. I teased students to make them angry
2. I fought back when someone hit me first
3. I said things about other kids to make other students laugh
4. I encouraged other students to fight
5. I pushed or shoved other students
6. I slapped or kicked someone
7. I called other students bad names
8. I threatened to hurt or to hit someone
9. I got into a physical fight because I was angry
10. I got angry very easily with someone
11. I was angry most of the day

Health

Please circle the number that indicates your response the following questions about your health.

1 - Poor 2 - Fair 3 - Good 4 - Very good 5 – Excellent

1. In general, how is your overall health?
2. Compared to others your age, your overall health is...
3. Compared to one year ago, your overall health is...

