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School Bells Are Ringing, But Can Parents Attend? Work–family Strain of Employees with Children with Disabilities

Abstract

Purpose – The purpose of this study is to investigate the relationships between (a) employed parents’ work–family conflict, (b) their children with disabilities’ support needs, (c) their children’s age, and (d) those parents’ levels of school engagement.

Design/methodology/approach – Data were collected from 193 U.S. parents of children with disabilities who completed a survey regarding work and family strain as well as school engagement. Descriptive statistical and correlational analyses are used, followed by hierarchical moderated regression analysis.

Findings – Results indicate that higher levels of work–family conflict have a negative impact on parents’ school engagement. Similarly, children with disabilities’ increased needs for parental support have a negative impact on school engagement. Moreover, the age of children with disabilities holds a moderating role in the relationship between support needs and school engagement.

Originality – These innovative findings contribute to theoretical underpinnings in work and family strain research as well as conservation of resources theory, given the lack of previous empirical work specific to children with disabilities and their employed parents.

Practical implications – Human resource managers can acquire information regarding employed parents of children with disabilities’ increased support needs and formalize flexible policies leading to supportive workplace cultures that support parents’ unique needs. School

personnel can instigate a range of options that facilitate parents' school engagement, such as maximizing use of technology via virtual meetings and activities.

Keywords: Work–family conflict, strain, school engagement, age, employed parents, children with disabilities.

Article classification: Empirical research

Introduction

Six million students with disabilities in the United States (U.S.) receive special education services (U.S. Department of Education, 2018) through the Individuals with Disabilities Education Act, translating to several millions of Individualized Education Program (IEP) meetings held each year seeking parents' participation. Parents' school engagement also includes involvement in other school activities (e.g., attend special events) and provision of support at home (e.g., assist with homework). Additionally, school engagement consists of parents' communication with their child's teachers and other school personnel. Such engagement contributes to positive outcomes for children. Specifically, parents' school engagement is correlated with children's increases in academic achievement and school attendance (Hirano *et al.*, 2016), leading to school personnel valuing parental engagement (Elbaum *et al.*, 2016). Other consequential ramifications include improved interactions between the adults, leading to partnerships between school personnel and parents (Oswald *et al.*, 2018; Rice, 2017). National data indicate most parents' school involvement consists of attending meetings and school events, with almost half volunteering in alternative ways (e.g., field trips) (McQuiggan and Megra, 2017). When schools capitalize on parents' engagement, children benefit in multiple ways, such as parents reinforcing skills taught at school (Gross *et al.*, 2018; Rodriguez *et al.*, 2014).

With almost 91% of school-aged children's parents employed (Bureau of Labor Statistics, 2019), parental capacity for school involvement can be impacted by work obligations. Because some parents of children with disabilities experience family strain due to increased caregiving tasks (McConnell and Savage, 2015), employees who are parents of children with disabilities can face more work challenges (Brennan *et al.*, 2016). For example, parents rely on flexible work hours to attend meetings and other school events (Frye and Breagh, 2004). However, inflexible work schedules and intense job responsibilities (e.g., demanding tasks; long hours) impede parents' school engagement. This impediment can result in work-family conflict (WFC), which refers to the inter-role conflict deriving from increased work obligations' impact on family life (Dubis and Bernadowski, 2015).

Work-related stressors are further accentuated for employed parents whose children have increased disability-related support needs. Pancsofar *et al.* (2019) describe students with autism and deaf-blindness as having complex disabilities leading to higher support needs: "a set of developmental challenges that require highly specialized and unique supports" (p. 153). Importantly, it is not the child's disability label that corresponds to increased support needs; rather, needs are determined by children's individual characteristics and severity of impairment varies widely within any disability type. For example, children with severe intellectual disabilities who need assistance in feeding and movement have higher support needs (Shurr and Hollingshead, 2017) than children with milder intellectual disabilities. Students with autism and emotional and behavioral disorders can have challenging behaviors, associated with higher levels of support, requiring crisis intervention and intensive services (Gnanasekaran *et al.*, 2016; Rosenzweig *et al.*, 2008).

Brown (2014) found that high levels of child difficulties (e.g., children with intellectual disabilities who have frequent temper outbursts) were predictive of WFC, highlighting not only the role of work (e.g., longer work hours; less supportive supervisors) but also that of family strain. Although students with more severe disabilities (e.g., profound intellectual disabilities with multiple physical limitations) need higher levels of parental involvement and support both at home and at school (Hebel and Persitz, 2014), in many cases, due to the increased strain of children's disability, parents tend to be less engaged at school (Larocque *et al.*, 2011).

Ultimately, many parents who could benefit the most from school engagement have the least reservoirs of energy to do so, due to increased strain.

Children's ages differentially interact with work–family balance (Brown and Clark, 2017) and disability support needs (Rupp and Ressler, 2009), altering the types and availability of resources that parents can potentially devote to their children's schooling. Due to children's needs shifting as they age (Brennan *et al.*, 2016; Kirk, 2008), work strain may not affect parental school engagement the same way for younger and older ages. Depending on children's developmental stages, employed parents have reported different perceptions regarding their levels of work strain (Brennan *et al.*, 2016; Kirk, 2008), and therefore availability of resources for school engagement. Similarly, as changing age may lead to shifts in caregiving needs, employed parents have been reported to experience differences in their levels of family strain due to children's support needs (Malsch *et al.*, 2008). Subsequently, parents may encounter a scarcity or sufficiency of resources (e.g., financial; social; therapeutic) available to invest in their children's schooling. Thus, the age of children with disabilities is a factor that bears further examination regarding the relationship of work–family strain and parental school engagement.

Hobfoll (1989) describes conservation of resources theory as conceptualizing strain directly related to people's availability of internal and external supports. When such supports, or resources, are sufficient, less strain is experienced. People utilize resources they have acquired and maintained to access them when needed. Conversely, Hobfoll's theory contextualizes strain aligned with people who have depleted their resources. Drawing on conservation of resources theory, in this research, we acknowledge that parents' reservoir of internal and external resources (e.g., energy, time, finances, childcare) for being responsive to their children's needs while maintaining employment is limited. Given limited resources and corresponding reserves, parents are obliged to prioritize how and where they allot their energy and time. Therefore, increased strain at work and at home may diminish parents' capacity to engage in the schooling activities of their children.

Aim of the Study

Parents' school engagement can be thwarted or promoted by employment factors, such as inflexible or flexible work schedules (Lin *et al.*, 2014), and limited or available childcare options (Reiman *et al.*, 2020; Setty *et al.*, 2019). When thwarted, WFC is prevalent, and it can be mitigated by resources provided by supportive work environments (Brannan *et al.*, 2018; Stefanidis and Strogilos, 2021). Additionally, families' high care demands reduce their available resources, leading to increased family strain (Li *et al.*, 2015; Stefanidis *et al.*, 2020). Parents as caregivers who devote considerable resources to meet day-to-day needs of children with disabilities experience more stress, with fewer reserves to expend elsewhere. In addition, ages of children with disabilities impose different levels of strain, and they require distinct levels of parents' resource investments. Consequently, there is a need for a systematic examination of

these factors to discern the influence of WFC, children's support needs, and children's age on parents' school engagement.

To this end, the current study seeks to investigate the relationships between (a) employed parents' work–family conflict, (b) their children with disabilities' support needs, (c) their children's age, and (d) those parents' levels of school engagement. The theoretical framework of our research is presented in Figure 1. Specifically, our four research questions are:

1. Do levels of work–family conflict of employees who are parents of children with disabilities have an impact on these parents' school engagement?
2. Do children with disabilities' support needs have an impact on these parents' school engagement?
3. Does children with disabilities' age moderate the relationship between work–family conflict and parents' school engagement?
4. Does children with disabilities' age moderate the relationship between children's support needs and parents' school engagement?

[Insert Figure 1 about here]

Parental School Engagement

Parental school engagement includes parents' direct or indirect actions that support a child's school experiences at home or at school, such as helping with homework, volunteering in the classroom, attending school events, and participating in parent–teacher conferences (Gross *et al.*, 2018; Young *et al.*, 2013). Parents of children with disabilities vary in their school engagement levels across grades. For example, some parents' engagement with homework increases in high school (Lipscomb *et al.*, 2018), or involvement grows when children make post–school decisions (Brown *et al.*, 2019; Doren *et al.*, 2012). Parents of younger children with disabilities are engaged with school personnel for activities such as planning their child's educational program

(Brown and Sumner, 2019). Hanson and Pugliese (2020) find parent engagement for school activities or fundraising participation is greater when children are in elementary grades, whereas parents of older children attend more regularly–scheduled parent–teacher conferences.

Parent involvement is predictive of children’s success (Hirano *et al.*, 2016), and can be influenced by how school personnel seek to engage parents (Rodriguez *et al.*, 2014). This may include providing more parent outreach activities, which lead to parents’ perceptions that schools desire their participation, subsequently increasing their school engagement (Frew *et al.*, 2012). Similarly, when school personnel proactively elicit input and are responsive to parental requests, parents’ school engagement improves (Elbaum *et al.*, 2016). It is, thus, prudent to identify and, if possible, mitigate barriers to parents’ school engagement. Barriers may include limited options for childcare and work overload, which exacerbate WFC and parental strain (Warfield, 2005). Exemplars of such strain are also manifested in employers’ inflexible work hours that preclude attendance of day-time school meetings and activities, or in parents’ resorting to unpaid leave to attend school activities (Lin *et al.*, 2014; Perrin, 2007; Warfield, 2005). In addition, children with disabilities’ disability support needs or age–specific needs may increase parental responsibilities and, therefore, strain (McConnell and Savage, 2015). In line with conservation of resources theory (Hobfoll, 1989), strain depletes parents’ energy resources, thus impeding school engagement.

Work–family Conflict

Work–family conflict has been described by Montazer and Young (2017) as “a form of inter–role conflict through which events in one's work life interfere with those in one's family life” (p. 263). Work–related experiences of employees may interfere with family obligations and create conflict between the two environments (Kossek *et al.*, 2011). When choosing between two high–

priority tasks, one for work and one for family, most parents defer to work tasks, thus relegating family tasks to secondary roles (Powell and Greenhaus, 2006). Unsurprisingly, job roles and work time demands are highly related to WFC (Michel *et al.*, 2010). When WFC is decreased, employees have more time available for their parenting responsibilities (Baral, 2020; Lee *et al.*, 2017). Consequently, organizational work–family support research states that providing employees with support, such as flexible schedules and paid leave, can impact work–life balance (Kossek *et al.*, 2011; Michel *et al.*, 2010). In comparison to employees with typically developing children, employed parents of children with disabilities experience higher levels of strain and fewer work–family gains (Dillon–Wallace *et al.*, 2016).

Although WFC impacts several family–life aspects of employees who have children with disabilities, limited research focuses on the influence that parents’ work strain might have on their school engagement (e.g., supervise homework; volunteer at school; attend school events). Dillon–Wallace *et al.* (2016) state that mothers of children with special health care needs require jobs that allow them more time to devote to their child’s schooling, such as attending school meetings. To this end, Lin *et al.* (2014) indicate that the greatest challenge for parents’ school engagement is their work schedule. Similarly, fathers of children with complex disabilities acknowledge work obligations prohibit school involvement, highlighting increased levels of work strain (Pancsofar *et al.*, 2019). Although multiple studies describe how parents of children with disabilities experience WFC in terms of attending to their children’s needs (e.g., Brown, 2014), none have specifically examined how WFC impacts parental school engagement. However, based on the above argumentation, we expect that:

Hypothesis 1: Work–family conflict of employees who are parents of children with disabilities will have a negative impact on parents’ school engagement.

Children's Support Needs

The severity of a child's disability implies increased support needs and, thus, is identified as a factor of parental strain that could have negative implications for work–life balance (e.g., Wright *et al.*, 2016). Increased support needs are commonly associated with the nature and number of care tasks that parents undertake (Lambe, 2012). This means that typically, children considered high–functioning (e.g., mild learning disabilities) need less intensive care than those with more intensive and sustained needs, frequently on a daily basis. More specifically, intensive care may range from self–help skills (e.g., toileting, feeding) to more specialized tasks, such as tube feeding or administration of medication, to de–escalating challenging behaviors. As a result, children's increased support needs may have a spiralling effect, increasing strain in parents' family and work lives (Brannan *et al.*, 2018), especially for mothers (Crettenden *et al.*, 2014; Morris, 2014).

Although researchers note employees who are parents of children with disabilities experience difficulties in their employment, the impact of children's disability support needs on school engagement has received little attention (e.g., Warfield, 2005), with more research focusing on parents not currently employed (e.g., Oswald *et al.*, 2018). Pancsofar *et al.* (2019) report that employed fathers of children with more complex disabilities desire more direct school involvement, noting incompatible school schedules as one deterrent. Indeed, Frew *et al.* (2012) have found that employed parents' engagement is higher in schools that provide a range of parent outreach activities. As such, school engagement appears to be a malleable factor, which can be also impacted by how schools seek to engage employed parents. These researchers also note the relative scarcity of studies about school involvement for employed parents of children

with disabilities. Moreover, Hebel and Persitz (2014) note the necessity of involvement for parents of children with increased support needs.

Importantly, rather than dealing with crises during the school day (Rosenzweig *et al.*, 2002), which leads to strain, parents appreciate positive school engagement experiences (Malsch *et al.*, 2008). Strain can leave parents depleted of energy to concentrate on work and time to engage in satisfying school activities (Brennan *et al.*, 2008). To this end, Brannan *et al.* (2018) describe some parents' strain as a result of "providing nearly constant support and supervision" to their children (p. 30). Indeed, Oswald *et al.* (2018) indicate that children with disabilities whose health is poor require substantially more parental engagement in healthcare activities, a fact that results in less time and energy available for parental involvement in education-related activities. Contingent on the severity of the disability and the corresponding increased caregiving needs, parents' reservoir of resources may be inadequate. Absent expendable energy for school engagement, parents experience strain that can usurp school engagement. Consequently, the examination of the negative influence of increased support needs on school engagement is warranted.

Hypothesis 2: Children with disabilities' increased support needs will have a negative impact on their parents' school engagement.

The Moderating Role of Child's Age

Although parents' WFC and school engagement may vary depending on children's age, this relationship has not been previously empirically established. Erickson *et al.* (2010) found that WFC was greater for employees with school-age and pre-school children rather than for employees with secondary school-age children. Similarly, Brown and Sumner (2019) note that parents of younger children with disabilities found it crucial to meet with school personnel for

initial educational planning. Indeed, some parents reported lower levels of WFC when their child entered school because it provided them respite. Developmental stages (i.e., birth, preschool, school-age, transition to adulthood) have also been indicated to influence family care burdens due to children's needs shifting over time (Kirk, 2008; Wei *et al.*, 2019). For employed parents, Brennan *et al.* (2016) noted that parents of preschool children with disabilities found it difficult to access special services and childcare, whereas once children grew older and began school, all services occurred at the school, and childcare shifted to after-school hours. School engagement for parents of adolescents with disabilities consisted mostly of attending parent-teacher meetings, whereas volunteering at school was not common (Lipscomb *et al.*, 2018), subsequently signifying less conflict between engagement in work- and school-related activities.

Additionally, older children with more severe disabilities and increased support needs were less likely to transition successfully beyond high school (Doren *et al.*, 2012; Lipscomb *et al.*, 2018), contributing to parental strain as children aged. Thus, children's support needs and age may combine to determine children's needs, which then impacts parental school engagement. As parents expend energy on increased responsibilities for their child during out-of-school hours (Li *et al.*, 2015), they have decreased available energy to invest in their children's schooling, including school events. Li *et al.* (2015) state parents conserve their energy so they can allocate time for their child's needs. In line with this, Oswald *et al.* (2018) found that parents displayed significantly higher levels of involvement if their children's health was better, whereas levels of involvement were significantly lower if their children's health was worse due to disability. At the same time, compared to parents of kindergarten children, parents of older children presented significantly lower parental involvement levels, a fact that the authors attribute to the lower dependence levels of older-aged children on their parents. In short,

researchers find variance for parental school engagement aligned with children's age (Hanson and Pugliese, 2020).

With the duality of strain deriving from WFC and children's increased support needs, parents may be required to prioritize necessary care for their children, which also depends on their children's age, thus relegating school engagement as a non-urgent obligation, a fact that also reflects their efforts to conserve their limited time and energy resources (Hobfoll, 1989). Therefore, because children's ages may differentially be related to the two sources of strain that derive from WFC and children's disability support needs, the mitigating role of age as a moderating variable in the 'WFC / school engagement' and 'support needs / school engagement' relationships is assessed. Hence, the following hypotheses are offered:

Hypothesis 3: Children's age will moderate the relationship between work-family conflict and parents' school engagement.

Hypothesis 4: Children's age will moderate the relationship between children's support needs and parents' school engagement.

Method

Participants and Procedure

To investigate the experiences of employees who are parents of children with disabilities, we designed a survey research in the form of a self-administered questionnaire to be completed by parents. The questionnaire, which was a combination of researcher-created questions and existing measures, was compiled based on evidence from the existing literature regarding WFC, children with disabilities' support needs, child's age, and school engagement. Data were collected from parents of children with disabilities who were full-time or part-time employees within diverse industries in the U.S. The compiled survey instrument measured employees' job

and family attitudes, as well as work–family demographic information. Institutional review board approval was obtained from the first author's academic institution. Parents received a written introduction and explanation of the study, and after providing consent, they were invited to complete an electronic version of the questionnaire.

Parents were approached through special education and inclusive education institutions. Specifically, employees who were parents of children of disabilities were recruited from public and private schools in the five boroughs of New York City. All participating parents were required to have a child identified as having disabilities and receiving special education services. The adopted sampling approach was considered a strength of this research, as it avoided approaching employees within their workplace, where providing responses regarding the disability of children could have been considered a sensitive topic. Nine hundred employed parents of children with disabilities were invited by the special education and inclusive education institutions to participate in the survey. The schools used their mailing lists to invite parents to answer the online survey on Qualtrics. The participants completed the self–administered questionnaire without interacting with the members of our research team. In total, 193 usable responses (i.e., fully completed questionnaires) were collected, establishing a response rate of 21.44%. All responses were anonymous and void of any identifying factors.

Participants were male (23%) and female (77%) parents employed in private–sector (60.60%) and public–sector (39.40%) organizations in the U.S. Participants' industries of employment included telecommunications, real estate, insurance, healthcare, finance, and education. Respondents' average age was 35.04 years ($SD = 8.45$). Their average work experience was 14.23 years ($SD = 7.43$). Regarding education, 5.70% of the participants had completed high–school, 10.40% had a two–year higher education degree, 5.10% had a three–

year degree, 37.30% held a four-year higher education degree, 36.30% held a Master's degree, whereas 5.2% held a Doctorate degree. Most participants (75.10%) shared parenthood with a partner, 15.50% were single, and 9.30% were divorced. Fifty-six percent of the respondents were Caucasian, 15.50% were Latinos, 4.70% were Asian/ Pacific Islanders, and 3.10% were African-American, whereas 20.70% indicated that they had a different ethnicity. In terms of native language, 87.00% of the participants stated that the language they spoke at home was English, 8.30% indicated that they spoke Spanish, and 4.70% stated that they spoke another language.

Measures

The measures of this study are part of a questionnaire that included eight subsections and parents needed about 15 minutes to complete it. One of the scales included in the survey measured parental school engagement, and another one measured levels of WFC. Demographic information of the respondents was also collected.

Parental School Engagement

On a five-point Likert scale, where 1= never and 5= very often, parents were invited to state their degree of agreement toward three items from Walker *et al.*'s (2005) scale that measures parental school engagement. The included items were: "I communicate with my child about the school day," "I communicate with my child's teacher," and "I supervise my child's homework."

WFC

We adapted four items from Netemeyer *et al.*'s (1996) scale to measure WFC. On a five-point Likert scale, where 1= strongly disagree and 5= strongly agree, participants indicated their degree of agreement with the provided statements. The included items were: "The demands of my work interfere with my home and parental life," "The amount of time my job takes up makes

it difficult to fulfill parental responsibilities,” “Things I want to do at home do not get done because of the demands my job puts on me,” and “My job produces strain that makes it difficult to fulfill parental duties.”

Demographic Characteristics

Furthermore, parents identified their child’s type of disability (e.g., autism, learning disability) as well as the level of their children’s functioning. We employed a binary variable, where 0 represented children’s classification as low functioning (i.e., high support needs), and 1 represented parents’ classification of their children as high functioning (i.e., low support needs). In addition, parents reported a number of other demographic variables, including their gender, education, years of work experience, shared parenthood (0=no, 1=yes), number of children, children’s age, hierarchical rank in their employment (1=the lowest rank, 10=the highest rank), and workload (average work hours per week). Based on the analyses of existing studies, six of these variables were treated as control variables (see Table 1). Caregivers’ as well as their children’s characteristics have been typically controlled for when examining variations on employed parents’ strain and work–life integration (e.g., Stefanidis *et al.*, 2020; Brannan *et al.*, 2018).

Reliability and Validity of the Survey

We adopted several precautionary measures during the design, data collection, and analysis stages of our research (Podsakoff *et al.*, 2003). We, first, assessed the validity of the research instrument conducting a pilot study among 20 employed parents. Participants’ comments were addressed to secure the validity, clarity, and relevance of the included scales. We, also, reversed several anchor scales in the questionnaire, to control for the development of response patterns. Furthermore, we acknowledged the potential of common method bias and,

thus, employed several precautionary strategies. For example, we adopted a procedural remedy, by including in the questionnaire parents' attitudes constructs related to their work and family lives, as well as their children's school-lives, thus giving the participants the impression that the measurement of the predictor variables was not related to the measurement of the criterion variable (Podsakoff *et al.*, 2003). Also, we employed the Harman single-factor test (Podsakoff and Organ, 1986), without observing any unusual variations in the collected responses. To further confirm measurement validity and reliability, we performed CFA in Mplus (Muthén and Muthén, 2017), including the two latent variables school engagement and WFC. The measurement model displayed an acceptable fit ($\chi^2_{13, N=193} = 21.97, p = 0.056$; CFI = 0.988; TLI = 0.980; RMSEA = 0.06; 90% CI = 0.00, 0.10) (Hu and Bentler, 1999). The Cronbach's Alpha reliability coefficient of the school engagement scale was 0.65, whereas the Cronbach's Alpha reliability coefficient of the WFC scale was 0.93. In addition, the McDonald's Omega reliability coefficients (Hayes, 2020) of the school engagement and the WFC scales were 0.65 and 0.93, respectively. Furthermore, the fact that our research outcomes were in line with evidence deriving from the extant literature further strengthened our confidence in the validity of the collected data.

Analysis of the Data

We first examined our data performing descriptive statistical analysis. We also conducted correlations analysis to initially explore the relationships among the dependent (i.e., school engagement), independent (i.e., WFC, child's support needs, child's age), and control variables (gender, age, education, hierarchical rank, workload, shared parenthood, number of children) (Table 1). To answer our four research questions, we performed hierarchical moderated regression analysis (Cohen *et al.*, 2013). We reviewed carefully the correlation coefficients

between the independent variables included in the regression analysis (Hair *et al.*, 1998), and we considered potential multicollinearity presence, calculating the diagnostics of variance inflation factor (VIF) and tolerance. The tolerance values were higher than 0.47, and the variance inflation factor values were lower than 2.12. SPSS 27 as well as Process and Omega macros (Hayes, 2017; Hayes, 2020) were used to assess our hypotheses and run tests. We plotted our interactions using Dawson's templates (Dawson, 2014).

Results

The means and standard deviations of the measured variables are presented in Table 1.

The results of the moderated regression analysis results are presented in Table 2.

[Insert Tables 1 and 2 about here]

The first regression model was significant ($F = 2.47, p = 0.025$). Hierarchical rank ($\beta = 0.22, p = 0.002$) was positively related to employed parents' levels of school engagement and explained 4.0% of the dependent variable's total variance.

The second model of hierarchical regression analysis was also statistically significant ($F = 4.38, p = 0.000$), with hierarchical rank ($\beta = 0.20, p = 0.005$) and child's support needs ($\beta = 0.26, p = 0.000$) explaining 12.0% of the total variance.

The third model was statistically significant ($F = 3.93, p = 0.000$), with hierarchical rank ($\beta = 0.20, p = 0.004$), work-family conflict ($\beta = -0.14, p = 0.049$), and child's support needs ($\beta = 0.25, p = 0.000$) explaining 12.0% of the total variance.

The fourth regression model, which included the interaction variables (work-family conflict * child's age, child's support needs * child's age), was significant ($F = 4.11, p = 0.000$), explaining 15.0% of parental school engagement's total variance. Hierarchical rank ($\beta = 0.20, p = 0.004$) and child's support needs ($\beta = 0.24, p = 0.001$) were positively associated with parental school engagement levels, whereas work-family conflict ($\beta = -0.15, p = 0.028$) and the

interaction variable ‘child’s support needs * child’s age’ ($\beta = -0.21, p = 0.026$) were negatively related to school engagement.

Employed parents who rank high in the hierarchy of their organizations and those whose children have lower disability support needs tend to be more engaged in the schooling of their children. Also, parents who experience higher levels of WFC present lower levels of school engagement. Furthermore, when parents have younger children, the negative impact that increased support needs have on parental school engagement is considerably stronger. Analogously, the impact that WFC has on school engagement levels is stronger for parents who have children of older ages, yet this relationship was not statistically significant at the 0.05 level ($p = 0.098$). The plots of the interactions are presented in Figures 2 and 3.

[Insert Figures 2 and 3 about here]

Discussion

Although WFC has been examined in relation to parents of typically-developing children, empirical investigations specific to parents of children with disabilities’ WFC have not occurred. Additionally, how WFC impacts parents’ school engagement as well as the role of children’s ages have not been previously explored. Related to the first research question, for parents in the current study, WFC negatively impacted their school engagement. Similarly, other parents of children with disabilities have noted that work barriers, such as inflexible work hours, impede their family life and participation in school events (Dubis and Bernadowski, 2015; McConnell *et al.*, 2016). In fact, parents’ work schedules are the major obstacle prohibiting school engagement (Lin *et al.*, 2014) and work overload increases parental strain (Warfield, 2005), precluding school engagement. When children have increased support needs or otherwise require immediate attention, parents benefit only if employers are flexible, whereas they feel increased work strain with inflexible employers (Malsch *et al.*, 2008). Similar to responses from

parents in the current research which indicate that school engagement is hampered by work obligations, other parents of children with disabilities have stated that employment can compromise their capacity to provide care, as balancing family needs with work is difficult (Scott, 2018). Although increased school engagement enhances children's academic success (Hirano *et al.*, 2016), parents experience problems negotiating the work maze to maximize such engagement (Holmes *et al.*, 2018; Perrin, 2007).

Furthermore, in the current study, per the second research question, the child's high support needs negatively impacted parents' school engagement. High support needs have been predictive of family's financial burden, respite needs, work impact, and quality of life (Bhojti *et al.*, 2016; Brennan *et al.*, 2016; Dovgan and Maxurek, 2018). Due to time and energy investments in the child's day-to-day care (Rupp and Ressler, 2009), whether medical, physical, or otherwise, parents of children with high disability support needs report insufficient energy to expend on school engagement (Oswald *et al.*, 2018) as well as struggle to access and engage in schools' services (Shurr and Hollingshead, 2017). Consequently, families dealing with their child's intense needs can find school engagement, such as attending school events, participating in meetings, or helping out at school, prohibitive (Brown and Clark, 2017). For children with "significant functional limitations" (p. 107), parents report that higher work levels, such as 50 or more hours per week, impact their work-family balance, and thus their fulfilment of parental responsibilities (Morris, 2014). Conversely, parents of children with lower disability support needs find engagement in their children's school, including attending meetings and school events, more tenable (Rice, 2017).

With regard to research question 3, in this study we observed a non-statistically significant moderation effect of age regarding the relationship between WFC and school

engagement. The negative impact that WFC has on levels of school engagement appears to be weaker for younger ages of children. However, this relationship was found not to be statistically significant ($p = 0.098$), a result that may be considered along with findings reported by prior studies (e.g., Brennan *et al.*, 2016; Brown and Sumner, 2019). Indeed, past research's interpretations regarding how children's ages interact with WFC and school engagement are rather inconclusive. For example, parents of younger children have reported higher levels of WFC, such as number of hours at work, which impacts negatively their engagement in caregiving responsibilities (Bhopti *et al.*, 2016; Brown and Sumner, 2019). At the same time, parents of children with disabilities of all ages have reported difficulty accessing school services, emphasizing their time and employment burdens (Vohra *et al.*, 2014).

Related to our fourth research question, we found children's age negatively moderates the relationship between support needs and school engagement. Increasing child's age weakens the negative impact that increased support needs have on levels of school engagement. Parents have previously indicated decreased school involvement as their child aged, perhaps due to their child's increased independence, which also varies based on the severity of disability (Young *et al.*, 2018). As children age and progress across the school years, the extent to which parents engage in school diversifies. In previous research, parents of very young children that had high support needs rated their quality of life lower, finding themselves dependent on school supports (Bhopti *et al.*, 2016) to compensate for the fact that they are left with fewer resources to invest in their children's schooling. In response to this, they, consequently, reserve their scarce resources (Hobfoll, 1989) and engage less in their children's learning activities both at home and at school.

Relatedly, Brannan *et al.* (2018) found that employed caregivers experience family strain that adversely impacts employment, subsequently affecting parents' capacity to acquire and

retain sufficient internal and external resources, thereby creating a cycle that parents alone cannot break. Subsumed in this cycle are parents' preferences to expend these resources for their children in productive ways, such as school engagement that promotes positive benefits for their children. Ensuring these resources are sufficiently available and accessed at work, in school, and in the community can result in enhanced work–family balance, especially for parents whose children have higher support needs and are at younger ages.

Given the lack of previous empirical work, the current study's examination of parents' WFC, children's support needs, and children's age expands research on school engagement. Past studies have focused on school engagement with parents of typically-developing children (Hanson and Pugliese, 2020; Holmes *et al.*, 2018; LaRocque *et al.*, 2011; Lin *et al.*, 2014; McQuiggan and Megra, 2017; Oswald *et al.*, 2018). However, the novelty of the current study stems from the fact that it assesses levels of work– (WFC) and family–related (child's support needs and age) strain focusing on a population of employees who grapple with distinctive issues that impact their levels of school engagement.

Implications for Theory, Practice, and Policy

This research's concurrent consideration of work and family strain regarding school engagement sets the grounds for a more cross–disciplinary conceptualization that refines theory by making it more specific, focusing on a relatively overlooked population, that of employed parents of children with disabilities. Drawing on a conservation of resources perspective (Hobfoll, 1989), this research corroborates antecedents of parental school engagement, in the presence of strain duality derived from WFC and children's disability support needs, empirically confirming relationships that have only theoretically been described in the extant literature. In addition, the moderating role of children's age in this research points to the inclusion of

children's demographic characteristics when education, psychology, and management scholars investigate phenomena that cross the work, family, and school contexts surrounding employed parents' lives. Furthermore, a novel outcome of this research is the explanatory value of children's disability support needs, which, while commonly considered in education studies, has been rather neglected in work–family strain studies.

School Personnel

From a practical standpoint, when WFC impacts parents' school engagement, school personnel may erroneously perceive parents do not desire school engagement (Malsch *et al.*, 2008). However, most parents do desire to be engaged in their children's schooling; yet, feasibility and flexibility factors should be taken into consideration, allowing parents to work with employers and around employment (Day, 2013).

School engagement can also be influenced by the extent to which school personnel go beyond perfunctory written or electronic-mail notices to involve parents, especially for employed parents with less-flexible work schedules. At the same time, school psychologists, teachers, and other specialists could schedule regular check–in times to inform parents about their child's progress. Flanagan (2011) notes these check–in times are particularly good for school psychologists to connect with families, to address concerns and provide feedback or information on interventions. School psychologists are well situated for being a direct source of support (Davies, 2020) by facilitating collaborative partnerships between families and school personnel (Kasky–Hernandez and Cates, 2015; Talapatra *et al.*, 2019). Additionally, using audio messages or teleconsultation (Ihorn and Arora, 2018), whether real–time or otherwise, can provide parents choices with accessible and efficient formats that align well with varied work schedules.

Parents are more likely to be engaged if they receive specific teachers' invitations, thus rendering personalized and direct communication more effective (Elbaum *et al.*, 2016). In addition to traditional communication methods such as phone messages or paper notes, technology (e.g., virtual meetings, parental access to school learning management systems) can provide multiple formats that may promote and facilitate school engagement (Ball and Skyzypek, 2019; Selwyn *et al.*, 2011). Online platforms that could provide guidance to parents regarding supervision of their children's homework would also serve in this direction, benefiting especially parents of younger children and those who need more guidance.

Human Resource Managers

Only 14% of civilian workers in the U.S. have employment that includes paid family leave (Brainerd, 2017); a smaller percentage of parents of children with disabilities have such leave. Employers without paid leave policies, typically focused on new parents, should ensure parents of children with disabilities are aware of benefits and how to access them, particularly those who forego salary for time off to participate in school commitments (Setty *et al.*, 2019). Although parents have noted paid family leave and flexible work schedules increase school involvement and job satisfaction (Gnanasekaran *et al.*, 2018), even in companies that offer flexible work arrangements, few parents use these benefits, with employers frequently positing that parents may not be aware of or know how to successfully access the system (Perrin, 2007). Despite parents' concerns that disclosure of family issues may cross the boundary between professional and personal lives (Rosenzweig *et al.*, 2011), human resource managers should acknowledge that supportive workplace cultures can balance parents' unique needs, collect information regarding employed parents of children with disabilities' increased support needs and, consequently, formalize flexible policies targeted toward these employees (Brennan *et al.*,

2008). For instance, lack of paid leaves can be a conundrum which may negatively impact work opportunities and, in turn, limit career advancement of these parents (Crettenden *et al.*, 2014). Responsive employers should provide opportunities that facilitate access to paid leave to enable parents to actively engage in their children with disabilities' schooling.

Because school meetings occur during the day when parents work, supervisors desiring to alleviate WFC can incorporate workplace supports, such as parents' use of sick leave or short-notice schedule changes, to facilitate school engagement (Brown and Sumner, 2019; Sellmaier, 2019). Additional factors that could promote work-family balance and school engagement can be malleable use of leave time, childcare options, and flexible work arrangements (Anand *et al.*, 2015; Perrin, 2007; Setty *et al.*, 2019). Finally, coaching or other psychological support at work may serve to reduce work- and family-related strain. For example, employees can benefit from personal empowerment within accommodating work-family cultures (Braunstein-Bercovitz, 2013), coaching sessions that may decrease stress (Ebner *et al.*, 2018), and mindfulness training that can effectively mitigate negative aspects of stress (Smith *et al.*, 2020).

Both corporate and school provisions can be crucial for parents of children with increased support needs, which we found having a negative impact on parental school engagement. Furthermore, in line with our finding that family strain due to disability support needs tends to present diminishing importance as children with disabilities grow older, employer accommodations and school supports should be more readily available for employed parents of children at younger ages.

Limitations and Directions for Future Research

We acknowledge the self-report nature of the collected data. Future research could, thus, include secondary data (e.g., National Survey of Children's Health) to verify our research results.

To this direction, we reflect that qualitative research methods could also be used to elucidate in depth other factors that have not been captured by this study, and which could more globally approach the multiple facets of parental school engagement. In addition, the participants of this research were primarily parents employed in professional settings. Future research could also include parents who are employed in skilled trades to further corroborate the robustness of this study's findings. Moreover, although we did not observe variations in parental school engagement based on ethnicity and language, we recommend future studies to consider diversity as a factor possibly influencing school engagement.

Given that, in the current study, the age of children with disabilities did not significantly moderate the relationship between WFC and parents' school engagement (e.g., Brown and Sumner, 2019; Bhojti *et al.*, 2016), age as a moderator bears further examination. We suggest future researchers collect data from diverse domestic and international samples to disentangle the relationship among children's ages, WFC, and parent school engagement. Because children's needs shift as they age, it is also prudent for future researchers to scrutinize WFC and parents' school engagement at different developmental stages (Brennan *et al.*, 2016).

Furthermore, this research examined the interaction of only three factors of work and family strain, that is WFC, support needs, and age. Our novel finding that age moderates the relationship between disability support needs and school engagement among U.S. employed parents needs to be further corroborated in future research, which could simultaneously assess age's interaction with additional antecedents of school engagement, such as specific job accommodations and school supports. Moreover, consistent with conservation of resources theory (Hobfoll, 1998), future research that includes measures of resources that parents can access would allow discerning whether and to what extent accommodations and supports may

contribute to desired work–family balance. Finally, in our research, we only collected data at the individual level without having access to nesting information, such as characteristics of the children’s school or the schools’ locations. Thus, beyond the evaluation of this study’s individual–level predictors, future researchers could employ multi–level modelling to consider whether diverse school and organizational variables (e.g., schools’ location / size, companies’ industry / size) may more robustly explain employed parents’ school engagement levels.

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Table 1*Descriptive Statistics and Correlations Matrix of the Examined Variables*

	Mean	Std. Deviation	1	2	3	4	5	6	7	8	9	10
1. School engagement	3.91	.82	1.00									
2. Work–family conflict	2.78	1.04	-.16*	1.00								
3. Child’s support needs ^a	.66	.47	.29**	-.11	1.00							
4. Child’s age	9.97	5.91	-.04	-.13	-.06	1.00						
5. Gender ^b	.77	.42	.10	-.03	.08	-.09	1.00					
6. Education	17.50	1.97	.09	.08	.01	-.11	-.04	1.00				
7. Hierarchical rank ^c	5.34	1.98	.22**	-.03	.07	.12	-.08	.06	1.00			
8. Workload ^d	38.51	12.60	.10	-.04	.07	.15*	-.01	.09	.20**	1.00		
9. Shared parenthood ^e	.75	.43	-.03	-.04	-.16*	.14	-.11	-.02	.12	.05	1.00	
10. Number of children	1.98	.87	-.01	-.07	.11	.15*	-.12	-.20**	.06	.08	.02	1.00

Notes: n=193

**. Correlation is significant at the 0.01 level.

*. Correlation is significant at the 0.05 level.

^a 0=high support needs, 1=low support needs^b 0=male, 1=female^c 1=the lowest rank, 10=the highest rank^d average work hours per week^e 0=no, 1=yes

Table 2*Moderated Hierarchical Regression on Parents' School Engagement*

VARIABLE	FIRST MODEL		SECOND MODEL		THIRD MODEL		FOURTH MODEL	
	β	T	β	t	B	t	β	t
1. Gender ^a	.12	1.60	.09	1.25	.08	1.20	.08	1.22
2. Education	.08	1.05	.08	1.13	.07	1.06	.08	1.19
3. Hierarchical rank ^b	.22	3.07*	.20	2.85**	.20	2.90**	.20	2.94**
4. Workload ^c	.05	.65	.03	.44	.04	.52	.05	.72
5. Shared parenthood ^d	-.05	-.66	-.01	-.15	-.01	-.08	-.00	.02
6. Number of children	.00	.03	-.04	-.53	-.03	-.45	-.04	-.53
7. Work–family conflict			-.13	-1.91 ^ψ	-.14	-1.98*	-.15	-2.21*
8. Child's support needs ^e			.26	3.67***	.25	3.60***	.24	3.51***
9. Child's age					-.05	-.68	.09	.93
10. Work–family conflict * Child's age							-.12	-1.66 ^ψ
11. Child's support needs * Child's age							-.21	-2.24*
R ²	.07		.16		.16		.20	
Adj. R ²	.04		.12		.12		.15	
ΔR^2	–		.09		.00		.04	
F–statistic	2.47*		4.38***		3.93***		4.11***	

Notes: n=193; standardized regression coefficients are reported.

^ψ p≤.10 * p≤.05 ** p≤.01 *** p≤.001

^a 0=male, 1=female

^b 1=the lowest rank, 10=the highest rank

^c average work hours per week

^d 0=no, 1=yes

^e 0=high support needs, 1=low support needs

Figure 1

Theoretical Framework

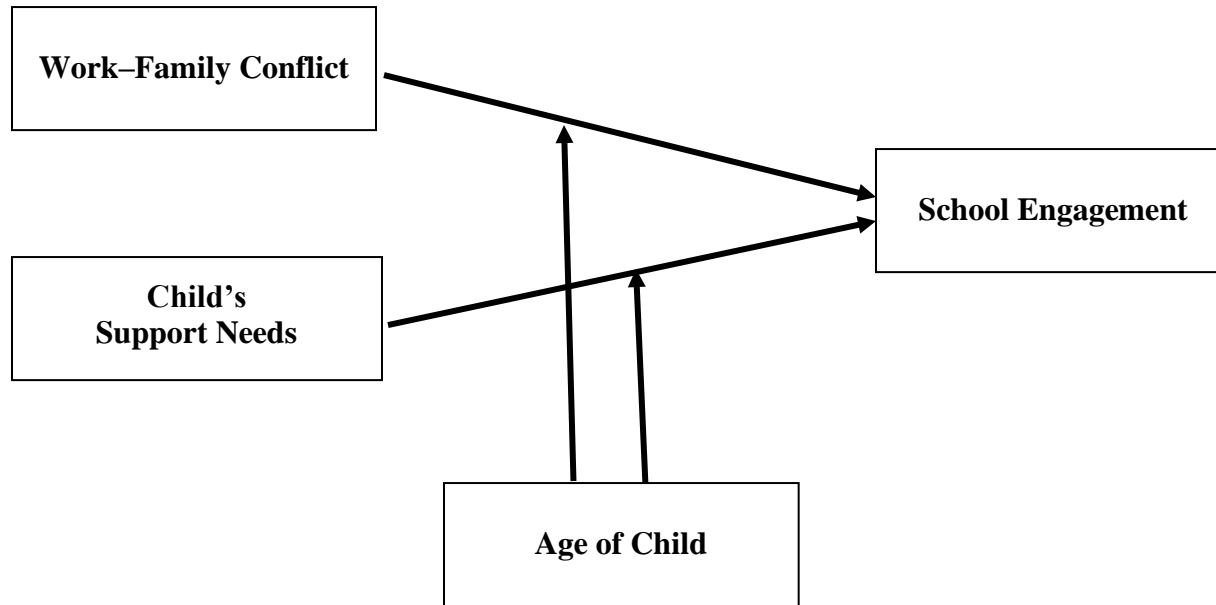


Figure 2

Interaction of Work-family Conflict and Child's Age in Predicting Levels of Parent's School Engagement

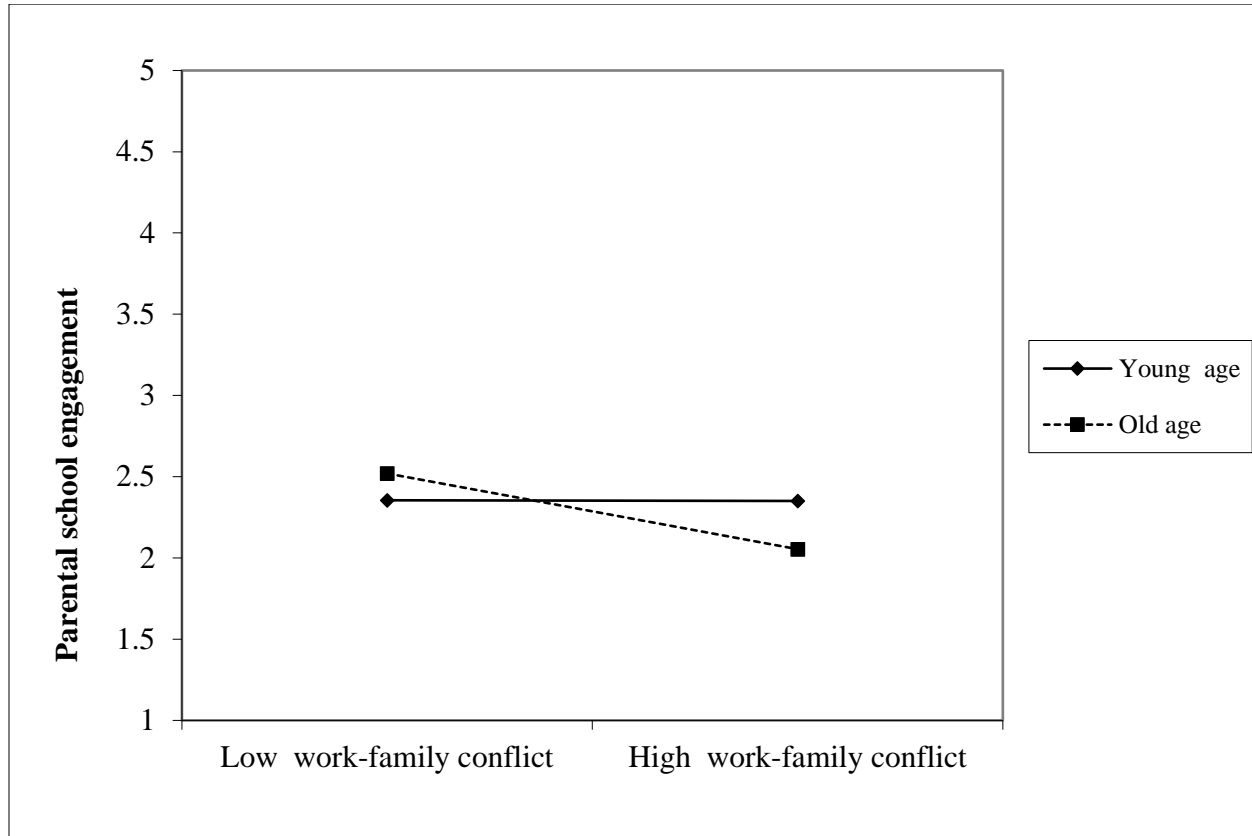


Figure 3

Interaction of Child's Support Needs and Child's Age in Predicting Levels of Parent's School Engagement

