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The influence of job and parental strain on typically and atypically developing children: a vicious circle?

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This theoretical article tries to answer the question how job and parental strain influence the development of children. We propose a conceptual model with possible mediators and moderators of the relationship between job strain and child development. Research shows that parents experiencing strain are less involved with their children. Several propositions are developed regarding the consequences of reduced involvement for the child. It is proposed that children with stressed parents are more likely to become insecurely attached and have fewer modelling opportunities. These relationships should not be as severe for children with an Autism Spectrum Disorder, and more severe for children with an Attention Deficit Hyperactivity Disorder. However, it is also proposed that maladaptive child development leads to more parental strain. Implications for future research are discussed.

Keywords: attachment; job strain; parental involvement; spillover; work–family conflict

Este artículo teórico trata de contestar a la pregunta sobre cómo la tensión laboral y parental influye en el desarrollo de los hijos. Se propone un modelo conceptual con posibles mediadores y moderadores de la relación entre la tensión en el trabajo y el desarrollo infantil. La investigación muestra que los padres que experimentan tensión laboral están menos implicados con sus hijos. Se desarrollan varias propuestas respecto a las consecuencias asociadas a una menor implicación con los hijos. Se propone que los hijos con padres estresados tienen mayores probabilidades de desarrollar un apego inseguro y menores oportunidades de modelado. Estas relaciones no deberían ser tan evidentes para niños con trastornos del espectro autista, y sí más claras para aquellos con trastorno por déficit de atención con hiperactividad. Sin embargo, también se plantea que los problemas en el desarrollo infantil conducen a una mayor tensión de los padres. Se discuten las implicaciones para la futura investigación.

Palabras claves: apego; tensión laboral; implicación parental; spillover; conflicto trabajo-familia

What impact does parents' job strain have on their children? Previous research has only partly been able to answer this question. Research does show that job strain often leads to work–family conflict (e.g., Westman, Etzion, & Gortler, 2004; Wierda-Boer, Gerris, & Vermulst, 2009), but what are the consequences for family life? It

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appears that parental strain leads parents to be less involved with their children. This research will be discussed below. The answer to the question whether and how parental strain impacts children gains in importance, since the percentage of dual-earner parents is increasing rapidly (de Graaf & Keij, 2001). Consequently, children do not spend as much time with their parents as in earlier times. There has not been a lot of research attention for the influence it has on the child when their parents experience strain.

In this theoretical article, we will examine how parental job strain influences children, and vice versa, how children with an Autism Spectrum Disorder (ASD) or Attention-Deficit Hyperactivity Disorder (ADHD) may influence parental strain. We propose a conceptual model and offer several propositions regarding the impact of parental strain on the child and the impact of raising a child with an ASD or ADHD on parental strain. However, before outlining our approach, we will first discuss ecological system theory and introduce the concept of crossover.

Ecological system theory

According to Bronfenbrenner's (1977) ecological system theory, individuals should be considered within their environment. Accordingly, a developing child finds itself in the middle of four interacting systems; the microsystem, the mesosystem, the exosystem, and the macrosystem. The microsystem consists of the relationships between developing children and their immediate environment. For a young child the microsystem predominantly consists of the family. For example, the relationship of a child's parents may influence mother-child interactions. It appears that mothers who are happily married are more patient and more sensitive to their children than mothers who are unhappily married (Cox, Owen, Lewis, & Henderson, 1989).

Multiple microsystems, like school and family, can be related to each other. This is called the mesosystem. Children who have, for example, a close relationship with their parents, are more easily accepted by their peers, because they are more prosocially oriented (Clark & Ladd, 2000). The mesosystem may also have a negative impact on children. For example, when peers do not value academics, performance at school often declines (Steinberg, Dornbusch, & Brown, 1992). The exosystem consists of social structures of which the individual is not directly part of, but which do influence the individual. An example is the work environment of the parents; when parents are not satisfied with their jobs, the emotional tie with their children may be negatively influenced (Greenberger, O'Neil, & Nagel, 1994). An explanation is that parents' mood spills over from work to home, which leads them to show less warmth and responsiveness toward their children. The last system, the macrosystem, consists of the culture in which the other systems are embedded and it dictates how children should be treated. Values held by parents about raising their children are an example of the macrosystem. For instance, cultures that do not encourage physical punishment show fewer signs of abuse (Belsky, 1993).

Bronfenbrenner's (1977) model shows the complex environment in which people live and it shows that the development of the child cannot be fully considered without looking at the parents and their work environment. Research shows that working in itself does not necessarily have a negative influence on children (Parcel & Menaghan, 1994), but what about working parents who experience job strain? Many employees have to work hard, which may create job strain (Merlie & Paoli, 2000). If

job strain is still experienced at home, this is called work-to-family conflict or spillover (Westman, 2006). Spillover is a form of interrole conflict in which participation in one role is more difficult because of participation in the other role (Greenhaus & Beutell, 1985). What happens to the family when the work strain of one family member spills over to the home domain? Before turning to this question, the concept of crossover will be discussed.

Related to spillover is crossover. Crossover happens when the psychological well-being experienced by one person affects the level of well-being of another person, for example the intimate partner (Frone, 2003). Crossover happens especially between people who interact frequently, like colleagues, family or friends. While spillover is about intra-individual transmission, crossover is about inter-individual transmission (Bakker, Demerouti, & Burke, 2009). For the family to be influenced by the job strain of one family member, the family member first has to bring the job strain into family life. In other words, spillover is a necessary condition for crossover. Unfortunately, most research has focused on the crossover of strain between spouses and has virtually ignored the impact of parents' job strain, which spills over to family life, on their children.

Crossover between spouses

Crossover has been examined extensively, but most research has concentrated on negative crossover and one-directional crossover from the husband to the wife (e.g., Bolger, DeLongis, Kessler, & Wethington, 1989; Morrison & Clements, 1997; Rook, Dooley, & Catalano, 1991). However, recently more attention is given to bidirectional crossover; crossover from the husband to the wife and the other way around (e.g., Jones & Fletcher, 1993; Westman & Etzion, 1995; Westman & Vinokur, 1998). Research undoubtedly supports the notion that strain and related phenomena do cross over, but little is known about the mechanisms involved in this crossover process.

Westman (2001) developed a conceptual model with three possible mechanisms underlying the crossover process. The core assumption of the model is that strain from one person can influence the strain of another person in another domain. The first mechanism that is distinguished relates to the direct process; strain from one partner influences the strain of the other partner. An explanation comes from social learning theory (Bandura, 1977); partners relate to each other and can imagine how they would feel if they were in the same situation. Bakker and Demerouti (2009) were the first to examine the role of empathy based on Westman's model. They discovered that husbands who took the perspective of their wives were influenced more strongly by the engagement of their wives.

The second mechanism distinguished by Westman (2001) is the experience of common stressors. What seems to be a crossover mechanism is actually a spurious relationship caused by some third variable, for example, the death of a family member. The last mechanism refers to an indirect process between partners. Coping mechanisms, social support and social undermining have been studied extensively as mediators of the crossover process. For example, problem-focused coping mechanisms diminish the negative effect of strain, and impaired social support can make a person more vulnerable to experience strain. Crossover does not have to be the result of one of these mechanisms; the mechanisms can work simultaneously to produce

crossover. Apparently, research has focused on the questions if and how crossover takes place. However, spillover research has focused on spouses and has generally ignored the impact of strain spillover on the children within the family. Therefore, this article will focus on the forgotten part of the family.

Influence of parental job strain on child development

There has been limited research on the influence of parents who experience job strain on the development of their children. The research that has been conducted has focused on the involvement of these parents with their children. This research will be described and extended by proposing how parental involvement impacts the development of the child. Figure 1 presents a graphical representation of our model.

Work–family spillover

Before job strain can have an impact on children, it first has to spill over from the work to the family domain. According to role scarcity theory (Greenhaus & Beutell, 1985), fulfilling too many different roles (e.g., parent/employee) can have a negative effect on fulfilling them. For example, spending a lot of energy at work may lead to fewer resources available at home. Thus, spending so much energy at work that it leads to strain may negatively influence family life by leaving insufficient resources to cope with family demands. Most research has focused on the crossover of work-related experiences between spouses. These studies imply that spillover has taken place, but often this is not directly studied. However, there are some studies that have studied the spillover of work-related experiences directly.

Bolger et al. (1989) studied both spillover and crossover of stress among married couples. They found support for both work-to-home and home-to-work stress contagion. It appeared that the home-to-work stress contagion relationship was stronger for men than for women, but the work-to-home stress contagion relationship was just as strong for women as for men. Rook et al. (1991) studied the effect of husbands' job stressors on the emotional health of their spouses. It appeared that the wives of men experiencing undesirable job events were significantly more psychologically distressed than other women. These job events were as distressing as the undesirable job events that women experienced themselves. Although not studied, the researchers came up with an explanation for the results, the 'burden of care'

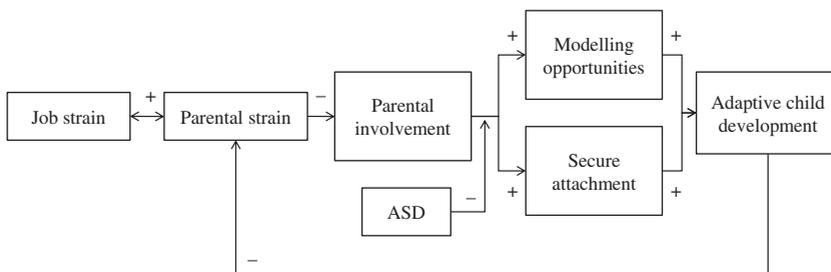


Figure 1. Hypothetical relationships between job strain and parental strain and the consequences for typically and atypically developing children.

explanation; women may worry about their stressed husbands and may want to take care of them. Edge (2008) studied job strain spillover in firefighter couples. It appeared that negative mood and job strain indeed spilled over from the work to the family domain. This was evident in more withdrawal by firefighters at home and less positive behavior toward their spouses. Finally, Stevanovic and Rupert (2009) examined the spillover of emotional exhaustion among professional psychologists. It appeared that spillover took place from the work to the family domain, making them less supportive toward their family and less satisfied with their lives.

Furthermore, quite a few studies have focused on the crossover of work-related feelings among couples (e.g., Demerouti, Bakker, & Schaufeli, 2005; Westman & Etzion, 1995). These studies show that work experiences (e.g., burnout, work engagement) can indeed influence partners. This indirectly shows that work-related negative feelings may create work–family conflict and affect partners. It has to be noted that not only negative experiences spill over between the work and family domain, but since our focus is on strain, studies on positive experiences will not be discussed in this article. The question that remains is if and how strain of the parents affects the children within the family.

Parental involvement

Figure 1 shows that parental strain has a negative relationship with parental involvement with the child, which is supported by the literature. For example, Repetti (1994) studied the effect of strain from fathers working as Air Traffic Controllers (ATC's) on the behavior toward their children. They were chosen because ATC is characterized as a stressful profession. Repetti hypothesized that fathers who experience high workload and negative social interactions would show more emotional withdrawal and less involvement toward their children. The results showed that high workload led to more discipline use and less involvement. Specifically, children of stressed fathers were punished more often and received less help with their homework. Fathers were also emotionally more withdrawn when they experienced a high workload and when they had had negative social interactions with colleagues. An explanation may be that because of the withdrawal, fathers try to bring their level of arousal back to normal when being at home.

Repetti and Wood (1997) repeated the study among working mothers. They predicted that job stressors, high workload and negative social interactions could lead to three kinds of reactions toward the children; behavioral withdrawal, emotional withdrawal and negative crossover of emotions. It appeared that an increase in stressors led to more behavioral and emotional withdrawal as indicated by the mother and by independent observers. When experiencing a high workload, the mothers spoke less, gave less attention to their children, and were less caring and loving. At first, the children showed a negative reaction, but in the long term their behavior became more positive. A possible explanation is that children try to stop their mother's withdrawal by showing desirable behavior.

In a more recent study, Flouri and Buchanan (2004) studied the relationship between parental involvement at the age of seven and academic performance of their children at the age of 20. It appeared that not only the involvement of mothers, but also the involvement of fathers played an important role in the academic performance of the children. Moreover, the role of mothers and fathers contributed

independently to the performance of sons and daughters. The parent's role consisted, for example, of reading aloud and showing interest in the education of the child. Although not studied, involvement of parents could indirectly contribute to their child's performance later in life. The above overview leads to our first proposition:

Proposition 1: Parental strain is a mediator of the relationship between job strain and parental involvement. The relationship between job strain and parental strain is positive and the relationship between parental strain and parental involvement is negative.

Parental involvement and child attachment

Parents who experience job strain are less involved with their children, but what are the consequences for their children? In her book, Sue Gerhardt (2004) summarizes how early relationships shape a baby's brain and how early relationships can influence future emotional well-being of the child. It shows how important parental involvement is for a child to develop normally. In the current article two possible consequences of reduced parental involvement are discussed. These consequences are insecure attachment and reduced modelling opportunities. We will first focus on attachment before turning to modelling opportunities.

The first few months of a child's life are defining for attachment to the mother. Bowlby (1969, 2004) defines attachment as a strong emotional tie we feel for special people in our life. There are various theories about the function of attachment (Shaffer, 1999), of which the three most important will be discussed below. These theories will show that parental involvement is very important for children to become securely attached. The first theory comes from psychoanalysis, which assumes that children become securely attached when the mother fulfills the needs of her child. When mothers fulfill the needs of their child, the child learns to trust others, which helps them establish close relationships in the future. The second theory, social learning theory, stresses the importance of reinforcement for secure attachment. According to social learning theory, children will become attached to individuals who react quickly to their needs and provide them with pleasant experiences. The last theory is the ethological theory and it assumes that all species are born with behavioral tendencies that contribute to survival. Attachment is an example of such a tendency because by that means children's needs are being fulfilled. It shows that all theories highlight the importance of foreseeing children in their needs and providing them with harmonious interactions.

Bowlby (2004) recognizes the importance of attachment for the development of a child. He states that children develop internal working models at a very young age. These models are cognitive representations of themselves and the world, which children use to interpret situations and to create expectations. According to Bowlby (1969), there are several factors that negatively influence attachment. Among them are physical and mental inaccessibility of the parent. As has been said before, parents experiencing job strain are behavioral and emotional withdrawn at home. By being less involved, job strain can cause insecure attachment of the child. According to the caregiving hypothesis (Ainsworth, 1979), parents of securely attached children have been sensitive and reactive since their child was born. A review of 66 studies (De Wolff & Van IJzendoorn, 1997) shows that parents of insecurely attached children are impatient and quickly irritated. They react inconsistently to their child, do not

react to their signals and show few positive emotions. This situation fits the description of people experiencing strain. On weekends strain may be somewhat reduced, because parents can use their time to recover from the strain caused by work demands (Zijlstra & Sonnentag, 2006), creating an inconsistent pattern for children of how their parents react to them. As a result, spillover of parents' job strain to family life negatively influences the child by increasing the likelihood of their children becoming insecurely attached. The chances of the parents reacting negatively to the child instead of reacting patiently when the child shows negative emotions are enhanced. It has to be said that the development of attachment consists of certain phases. The age of children passing through these phases ranges from zero months when entering the first phase to two years when entering the fourth and last phase (Bowlby, 1969). Therefore, the above propositions may be strongest for children from birth to two years. This all leads to the following proposition:

Proposition 2: Parental involvement is a mediator of the relationship between parental strain and secure attachment of the child. The relationship between parental strain and parental involvement is negative and the relationship between parental involvement and secure attachment is positive.

Parental involvement and modelling

Aside from insecure attachment, strain may also have a negative influence on modelling opportunities (see Figure 1). According to Bandura (1977), children learn a lot by observing others. Observational learning is obtaining knowledge and behavior without this behavior being directly reinforced. This kind of learning takes place by looking at others and by paying attention to the environment. Children whose parents are working have fewer social interactions with their parents because their parents are less involved with them. Therefore, these children have fewer opportunities to observe their parents.

Vicarious conditioning takes place when there is a constant association between a stimulus and an emotional response (Mischel, 1999). For example, when a mother shows her fear of spiders to her child, her child may also develop fear of spiders. This can work the same way for job strain that spills over to the family life. When a child constantly experiences a stressed parent coming back from work, the child may develop the same response to their job when they grow older. Research shows that a conditioned emotional reaction is possible by seeing others experience painful consequences (Bandura, 1971). When parents develop, for example, burnout as a result of chronic job stressors, the child may experience strain as well. In this situation crossover of strain takes place by means of continued observation.

According to social learning theory (Skinner, 1957), children learn their language by means of reinforcement and imitation. The social interaction perspective explains that children need to be supported and need to get feedback when they first begin to talk (Bukatko & Daehler, 1995). Therefore, observation is important for the language development of the child. Especially *motherese* is important; simple, repeating, high tone speech of the mother which includes asking questions (Bukatko & Daehler, 1995). It is also important that the mother provides the child with the opportunity to finish speaking. All of this helps children to understand how to communicate with other people. Parents who experience job strain will be less involved with their child

and therefore spend less time talking to their child, meaning the child learns to talk less well and less quickly. This leads to the following proposition:

Proposition 3: Parental involvement is a mediator of the relationship between parental strain and modelling opportunities. The relationship between parental strain and parental involvement is negative and the relationship between parental involvement and modelling opportunities is positive.

Adaptive child development

Parents who are less involved with children provide their children with less modelling opportunities and increase the chances of their child becoming insecurely attached. What does this mean for the development of these children? First, insecurely attached children develop negative models of themselves and others, while securely attached children develop positive models. Research shows that insecure attachment may also have consequences on the long term. For instance, children who are securely attached at the age of one are better problem solvers at the age of two (Frankel & Bates, 1990). Further, Jacobsen and Hofmann (1997) showed that children, who were securely attached at the age of seven, were more self-confident and had higher grades once they became students. Moreover, insecurely attached children have a higher probability of showing problem behaviors, including aggression and hostility (Lyons-Ruth, Eaterbrooks, & Cibelli, 1997). Finally, insecure attachment influences psychopathology. Vivona (2000) showed that insecurely attached children more often experience depression and anxiety.

Concerning modelling opportunities, Crain-Thoreson and Dale (1992) studied the influence of reading aloud on the language development of the child. It appeared that reading aloud at the age of two is a predictor of language development at the age of two and a half and four and a half. Roberts, Burchinal, and Durham (1999) studied the effect of family factors on individual differences in language development of children between 18 and 30 months. The results showed that children from stimulating and reactive families had a greater vocabulary, made longer sentences and knew more difficult words. Huttenlocher, Haight, Bryk, Seltzer, and Lyons (1991) conducted a study about the role of exposure to speech in the growth of the vocabulary of children. They found that the more time a mother spends talking with her child, the more the vocabulary of the child grows. Finally, Newland, Roggman, and Boyce (2001) studied the relationship between mother-child interactions with toys and the language development of the child. It appeared that the behavior of the mother during playing influenced the language development of the child. Especially reactions of the mother to initiative showed by the child and labeling and manipulating the toys by the mother at the age of 11 months were related to language capacity at the age of two. The above shows some of the consequences that a lack of parental involvement can eventually have on child development, which lead to the following propositions:

Proposition 4a: Modelling opportunities is a mediator of the relationship between parental involvement and adaptive child development. The relationship between parental involvement and modelling opportunities and the relationship between modelling opportunities and child adaptive behavior are both positive.

Proposition 4b: Secure attachment is a mediator of the relationship between parental involvement and adaptive child development. The relationship between parental involvement and secure attachment and the relationship between secure attachment and child adaptive behavior are both positive.

Atypically developing children

Are there conditions under which the impact of parental strain on children's development is stronger or weaker? Until now, this article has focused on the influence of parents on typically developing children, but how about the influence of parental strain on atypically developed children? In this article, two common child development disorders are proposed to be important to consider in the proposed model. These are ADHD and ASD.

Attention-Deficit Hyperactivity Disorder can be classified into two factors; inattention on the one side, and hyperactivity-impulsiveness on the other side (American Psychiatric Association [DSM-IV-TR], 2000). Based on this, children with ADHD can be divided into three types; mainly inattentive, mainly hyperactive-impulsive, or a combination of these two. Children with ADHD appear to be very sensitive to their parents' involvement. Carlson, Jacobvitz, and Sroufe (1995) examined the development of hyperactivity in children. It appeared that caregiving quality was a stronger predictor of hyperactivity than biological factors. Caregiving quality appeared to predict distractibility, which is a precursor of hyperactivity. Stiefel (1997) used a case discussion to show that parental attention in the first years of a child's life is important for child ADHD. It was shown that less parental attention caused by different kind of stressors led to negative parent-child interactions, which negatively affected the attachment relationship. Insecure attachment, in turn, appeared to contribute to child ADHD. Clarke, Ungerer, Chahoud, Johnson, and Stiefel (2002) were one of the first to test the relationship between child ADHD and attachment insecurity. The results showed that there is a positive relationship between child ADHD and insecure attachment. Rochford (2005) examined the relationship between child ADHD and attachment security of the child with the mother. It appeared that children with ADHD were twice as likely to become insecurely attached as children without ADHD. These studies show that parents have a profound impact on their child's ADHD. Since these children are sensitive to their parents' behavior, they may be even more influenced by their parents being not involved than typically developing children. The above leads to the following proposition:

Proposition 4c: Secure attachment is a mediator of the relationship between parental involvement and ADHD (maladaptive child development). The relationship between parental involvement and secure attachment is positive and the relationship between secure attachment and ADHD is negative.

Autism Spectrum Disorder is pervasive development disorder. ASD's are characterized by severe, pervasive impairment in several developmental areas (DSM-IV-TR, 2000). ASD can be divided into three symptoms. These symptoms are impaired social interaction, disturbed communication and restricted, repetitive behaviors and interests. Autistic children do not respond to others, do not want to be touched,

avoid eye contact and do not show any emotions. Children with autism can, however, become securely attached to their mothers (Wicks-Nelson & Israel, 2003).

At a later age, autistic children can behave socially inappropriate, be unresponsive to social cues, ignore others and be alone most of their time. Children with an ASD use few verbal and non-verbal ways of communicating, because they have difficulties with social and emotional reciprocity. They also find it difficult to jointly give attention to something, for example when someone points at something. Their problems with joint attention make it hard for them to join in social imitative play (Wicks-Nelson & Israel, 2003). Last, stereotype behavior expresses in constantly using the same gestures and in obsessive interests. The social restrictions of these children can be explained by the fact that they not have a theory of mind (TOM): understanding of mental states and the understanding that these states are related to actions (Wicks-Nelson & Israel, 2003). Autistic children cannot look into the mind of others and understand what they are thinking or feeling. Therefore, interaction is difficult, because they cannot predict what the other is going to do. The literature about crossover shows that empathy plays an important role in the crossover process (Bakker & Demerouti, 2009). Accordingly, children with autism should be less sensitive to the opportunities their parents provide that positively influence their development. This could be the same for children with other pervasive development disorders who also experience social problems, like children with Childhood Disintegrative Disorder or Rett's Disorder. The above leads to the following hypothesis:

Proposition 5: ASD is a moderator of the relationship between parental involvement and secure attachment of the child. The positive relationship between parental involvement and secure attachment will be less positive for children with an ASD.

Atypically developing children and parental strain

A child with an ASD or ADHD may be an additional source of strain for their parents. Hoffman et al. (2008) examined the relationship between severity of autism of children and strain and sleeping problems of their mothers. It appeared that severity of autism was indeed a predictor of maternal strain and accordingly the sleeping problems of the mother. Davis and Carter (2008) were one of the first to study the relationship between a child with an ASD and parental strain for both mothers and fathers. Their study showed that these parents experienced high levels of strain, even when their children were still very young. It also appeared that even though both parents experienced strain, mothers showed higher levels of strain than fathers.

Anastopoulos, Guevremont, Shelton, Terri, and DuPaul (1992) investigated the degree to which parental strain was related to the child's ADHD and to other family-environment factors. It appeared that severity of the ADHD and the aggressive behavior of the child were important predictors of parental strain. The study showed that child and parent characteristics were more important predictors of parental strain than family-environment factors. Cawley (2005) conducted an extensive study by assessing parental strain caused by raising a child with ADHD by means of semi-structured repeated interviews and essays. The results again showed that it causes a lot of strain for the family to raise a child with ADHD. It also appeared that parents

had difficulties in raising their child because of unsupportive families, marital conflicts and problems with professionals who could not give them a comprehensive diagnosis of their child. Strahm (2008) studied the perceived family quality among families with and without a child with ADHD. Although the sample was small, the results showed that families with a child diagnosed with ADHD had impaired family functioning and higher parenting strain.

The above results show that having a child diagnosed with an ASD or ADHD can be very stressful for parents. We have already seen that spillover can occur from the work domain to the family domain, so it may also be possible for spillover to occur from the family domain to the work domain. There has been some research on family-work spillover, although most studies have focused on work-family spillover. Dilworth (2004) was the first to study the family factors that may predispose parents to experience negative family-work spillover. This study identified negative predictors of family-work spillover for married parents. It appeared that especially mothers are vulnerable to experience family-work spillover. Among the predictors was time spent on household and child rearing practices. These are duties of a mother, besides working, which may eventually become too much and lead them to experience strain. Another predictor of negative spillover was family life satisfaction. Since family life satisfaction is a predictor of negative family-work spillover, raising a child with behavioral problems may lead to negative family-work spillover by reducing family life satisfaction. Keen and Reynolds (2005) studied the negative effects of family demands on job performance. They showed that the job performance of parents is affected by family demands. It also appeared that especially parents with demanding jobs experienced more negative family-work spillover. Stevens, Minnotte, Mannon, and Kiger (2007) extended the research of Dilworth by also examining positive antecedents of family-work spillover. It appeared that family cohesion was a positive predictor of family-work spillover for both men and women and relationship satisfaction was a positive predictor for men. Parents raising a child with an ASD or ADHD experience more marital conflicts, meaning they will experience more negative spillover than positive spillover. The results also showed that for women, having pre-school aged children was a negative predictor of family-work conflict. This all leads to the following proposition:

Proposition 6: Parental strain is a mediator of the relationship between raising a child with an ASD or ADHD and job strain. The relationship between ASD or ADHD and parental strain is positive and the relationship between parental strain and job strain is also positive.

Discussion and conclusion

This article proposes a new model regarding the impact of parents' job strain on their child's development. It proposes reciprocal relationships between job strain and parental strain. It also shows the consequences of impaired parental involvement for the child. Finally, it considers the role of raising a child with an ASD or ADHD in the whole process.

The question this article tried to answer was what impact does parents' job strain have on the development of their children? A conceptual model was proposed and several propositions were developed to answer this question. Research already

showed that parents experiencing strain are less involved with their children. This article focuses on the relationship between impaired parental involvement, insecure attachment and modelling opportunities for children. Research shows that insecure attachment and less modelling opportunities in itself also have negative consequences for the child later in life, like psychopathology and bad language development. Hence, parental strain negatively influences the child in the short and long term by means of reduced parental involvement. We also proposed that children with an ASD should be less influenced by their parents' strain while for a child with an ADHD, parental strain can contribute to their symptoms. Except for the influence that parents have on their children, we also formulated a proposition regarding the influence children have on their parents. Maladaptive child development has proven to be very stressful for parents. Consequently, it is proposed that parental strain can spill over to the work domain and cause job strain.

What does all of this mean for the working parent? It means that parents should pay attention when experiencing strain, whether it is job strain or parental strain. It is important for parents to be aware of the consequences of their strain, because it may negatively influence the development of their child. The proposed relationships indicate that when parents are less involved with their children, their children may experience relationship problems later in life because of their attachment problems. This is in accordance with Bronfenbrenner's theory, which states that what happens in the microsystem may impact the mesosystem. Besides, the proposed relationships indicate that the exosystem also influences an individual; because parents take their job strain at home, they are less involved with their children. Therefore, it is important for parents to realize that their involvement is very important for their child. The first step would be to make them conscious of the fact that they are less involved with their children when they experience strain. The best solution would be to reduce job strain. Such an approach would not only be beneficial for family life, but also for work life, since job strain is associated with negative organizational outcomes like reduced performance and sickness absence (e.g., Bakker, Demerouti, De Boer, & Schaufeli, 2003; Bakker, Demerouti, & Verbeke, 2004).

According to the Job Demands-Resources model (JD-R model; Bakker & Demerouti, 2007) people will experience strain when they do not have sufficient resources to cope with high demands. When provided with a sufficient amount of resources, strain will be reduced. Autonomy, performance feedback and control are three examples of resources that could help to cope with high demands. This will reduce strain experienced at work and consequently, the spillover of this strain to the home domain. Social support is another way to cope with strain and research shows that social support from colleagues, family and friends can reduce both job and parental strain (e.g., Bakker, Demerouti, & Euwema, 2005; Breevaart & Bakker, 2011; Bristol, 1984; Weiss, 2002; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

With this article, we tried to shed light on the influence of strain experienced by parents on both the family and the work domain. Future research should test the propositions in order to be able to say anything conclusive. If research supports the proposed conceptual model, it is important to make parents and employers aware of the consequences of job and parental strain. Besides being beneficial for parents and their children, this will also be beneficial to employers, because healthy and happy workers are more productive workers (e.g., Hakanen, Bakker, & Schaufeli, 2006;

Sonnentag, 2003). We decided to focus on modelling opportunities and attachment as factors that influence child development. Although these are important factors, future research should also focus on other factors like parenting style (Carr, 1999).

Future research could also focus on the protective factors like social support that prevent parents to experience strain or that prevent parents to become less involved with their children. Furthermore, the impact of family structure may also be important for future research. For instance, would the relationships be stronger for families with only one parent or could the presence of a grandmother reduce the effects of parental strain on child development? Arnold, Zeljo, Doctoroff, and Ortiz (2008) showed that parental involvement was positively associated with preliteracy skills and that being a single parent was associated with less involvement with their child. Harper and Ruicheva (2010) showed that especially grandmothers frequently replace the missing parents, which positively influences the well-being of their grandchild. Considering the complexity of the model as it is, we did not focus on these factors. We hope that our model will inspire future research on the links between parental strain and child development.

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