

Work-Family Conflict and  
Children's Externalizing and Internalizing Problems:  
The Mediating Role of Parenting

by

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## **STATEMENT OF AUTHORSHIP**

This thesis contains no material which has been accepted for any award or any other degree or diploma in any university or other institution. It is affirmed by the candidate that, to the best of her knowledge, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

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## ABSTRACT

The current research as the first scientific study examines whether work-family conflict is related to externalizing and internalizing problems of preschool children through maternal responsiveness and negative control. In literature, work-family conflict is defined as a form of inter-role conflict that arises due to incompatibility of role expectations in work and family domains. The sample was composed of 98 Turkish employed mothers with children from the ages of 3-6 years. Responsiveness and negative control were assessed not only by mothers' self-report but also by observational methods. This is an important methodological strength of the study. Data from mothers' self-report and observations were separately analyzed by path analyses. The findings of this study add to the previous literature by showing, first, that WFC of parents appears to be a detrimental experience for children. Second, despite high WFC, mothers' responsive parenting behavior may prevent children from developing externalizing problems. Third, mothers who experience WFC were perceived as exhibiting high negative control over children's behavior. Fourth, maternal responsiveness and control cannot explain the association between WFC and internalizing problems. These results partially support the hypotheses of the current study that WFC is associated with externalizing and internalizing problems of preschool children by its relation to parenting behaviors.

**Keywords:** Work-family conflict, parenting, externalizing, internalizing, socioemotional development, preschool.

## ÖZET

Bu çalışma, çalışan annelerinin yaşadığı iş-aile çatışmasının (İAÇ) çocuklarının içselleştirme ve dışsallaştırma davranışları ile ilgili olup olmadığını öğrenmeyi amaçlamıştır. Bu ilişkide aracı rolü üstlenen önemli bir değişken olarak “annenin ebeveynlik davranışları” önerilmiştir. Böylece, “İş-aile çatışması annenin çocuğuna karşı duyarlılığını ve kontrol davranışlarını etkileyerek çocuğun içselleştirme ve dışsallaştırma davranışlarını ile ilişkilidir” hipotezi test edilmiştir. Çalışmanın örneklemini 98 üç-altı yaş aralığındaki anaokulu öğrencileri ve anneleri oluşturur. Örneklem çoğunlukla yüksek sosyoekonomik statüye sahip ailelerden oluşmaktadır. Anne ve çocuk, gözlemlerin yapılabilmesi için laboratuara çağırılmıştır. Gözlem yapılan oda bir oturma odası gibi düzenlenmiştir. Annenin çocuğa karşı duyarlılığı ve olumsuz kontrol davranışları günlük anne-çocuk ilişkisinin canlandırıldığı etkinlikler sırasında tek-tarafli aynanın ardından kaydedilmiş ve kodlanmıştır. Ayrıca anneye verilen anketler ile annenin ebeveyn davranışları, İAÇ ve çocuğun içselleştirme ve dışsallaştırma davranışlarının ölçülmüştür. Çalışmanın sonuçları var olan literatüre katkı sağlamıştır: (1) İAÇ çocukların içselleştirme ve dışsallaştırma problemleri ile ilişkilidir. (2) Yüksek İAÇ’ye rağmen, annelerin duyarlılığı çocukların dışsallaştırma davranışı göstermesini engelleyebileceği görülmüştür. (3) Yüksek İAÇ yaşadığını düşünen anneler, olumsuz kontrol davranışında bulduklarını düşünmektedir. (4) Annenin duyarlılığı ve olumsuz kontrol davranışları İAÇ ve içselleştirme davranışlarını arasındaki ilişkiyi açıklayamamıştır.

**Anahtar kelimeler:** İş-aile çatışması, ebeveynlik, dışsallaştırma, içselleştirme, sosyoduygusal gelişim, okulöncesi.

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## Chapter 1

### INTRODUCTION

#### 1.1. Statement of the Present Research

“Home has become work and work has become home” is a remarkable observation by Hochschild (1997). This observation summarizes one of the most important enduring social transformations of the late centuries: the change in the workforce characteristics. The entry of women who have young children and other family duties into the workforce can be considered as the major catalyst of this change. Consequently, a readjustment of the work and family roles of women and men is not an unanticipated corollary. Special attention has been directed to explaining a possible result of perceived work and family role demands (Grzywacz & Marks, 2000). The work-family conflict (WFC) as a possible result has been defined as “a form of interrole conflict in which role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985, p. 77).

Family reflects the compound relationship of its members and these members’ connection with external settings, such as parents’ workplace, children’s school settings, and relationships in neighborhood (Bronfenbrenner, 1986). As suggested by the Ecological Systems Theory (Bronfenbrenner, 1986), a change in work and family roles of men and women tends to concern other members of the family, namely the children. The theory states that development of children is influenced by factors related to other environments in which children are not personally active. The parent’s work environment is an important context that

can influence the development of children and one way of this influence is through the parenting (Bronfenbrenner, 1986). Based on the ecological system theory it is possible to argue that the experience of the conflict between work and family roles tends to worsen the parenting, which in turn tends to worsen the responsive environment that is required to facilitate children's healthy development (Bronfenbrenner, 2001). Thus, the current study aims to answer the question of "Does the experience of work-family conflict by employed mothers relate to the behavioral and emotional problems (i.e., externalizing and internalizing) of young children via its role on parenting behaviors?". A mediational model is proposed in which two parenting behaviors of the mothers, responsiveness and control, would mediate the relation between the experience of WFC and the externalizing as well as internalizing problems of their children (See Figure 1). Because maternal responsiveness and control are the two most commonly identified and well-recognized parenting behaviors in studies of child development (Gadeyne, Ghesquiere & Onghena, 2004), the present study focuses on them as mediators of the relation between WFC and the behavioral and emotional problems (i.e., externalizing and internalizing) of young children. As will be discussed in the next chapter, they are various ways of controlling the child's behavior and among them some parental control techniques are seen as ineffective and problematic. In this study, *negative* parental control is focused on.

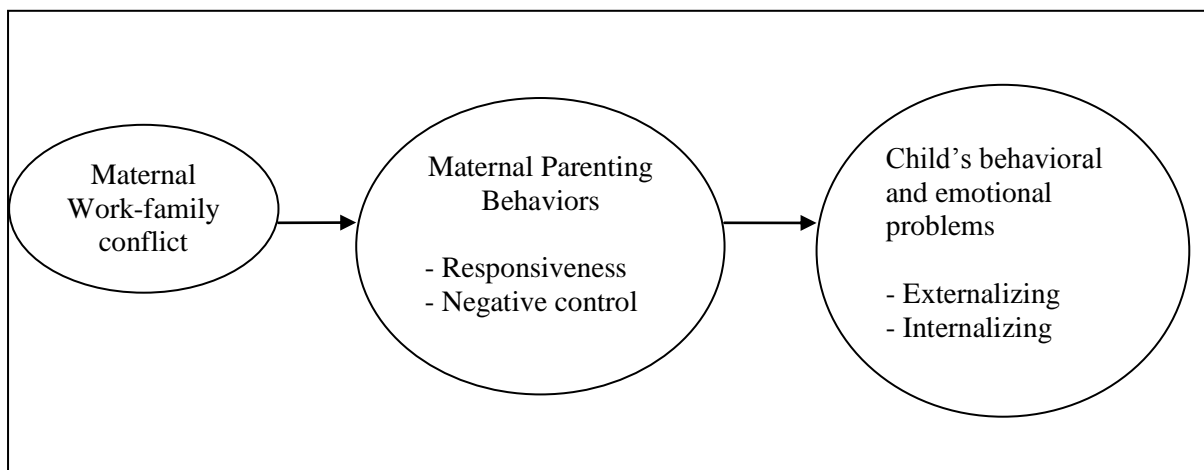


Figure 1. The proposed conceptual model of the study.

Although the contributions of fathers in children's development cannot be denied, the current study focuses on mother's experience of work-family conflict and its association with the children's behavioral and emotional problems. The reason for not including fathers is that the impact of fathers on the development of their children is generally ignored and little research is available to guide current research (Connell & Goodman, 2002). In the examinations of the factors associated with the children's behavioral and emotional problems, the characteristics of mothers have traditionally received the excessive research attention. Developmental theory and research emphasize the major role of the mother-child relationship in child development (Bowlby, 1969; Sameroff & Emde, 1989, as cited in Sroufe, Carlson, Levy & Egeland, 1999). Provided by these research done with mothers, this study includes mothers whose influence on children's development is well-known.

As women started to work outside the family and became a part of the labor force, the family environment has also changed. What it is really changed is not the traditional two-parent family including a man and a woman married and live together to raise their children (i.e., in Turkey, nucleus families constitute 80.7% of the household composition, Turkish Statistical Institute, 2006). Rather the roles undertaken by women have increased. Women continue to perform their traditional roles; they are spouses, mothers, and homemakers in their family. According to traditional role expectations, the largest part of caretaking and household tasks should be beared by women. When the roles related to work are added to the traditional roles of the women, they become susceptible to experiences of WFC. The change in the demographic structure of the work force not only directly affects women but also affects their families.

According to Belsky (1984), one of the determinants of the parenting functioning is the sources of stress and support. The current study focuses on WFC as a source of stress (Huang, Hammer, Neal & Perrin, 2004). The effect of work on parenting was discussed in the context of unemployment (e.g. Belsky, 1984). The roles of maternal employment on parenting and child's development have also been studied (e.g. Hoffman, 1989). However, the role of WFC on parenting and child development has not received research attention. Findings from several the National Institute of Child Health and Human Development (NICHD) Early Child Care Research projects (e.g. 1997) showed that maternal employment *in itself* is not damaging to child development. It is possible that maternal employment negatively influence children to the extent that it leads to WFC.

The link between WFC and the psychological problems of employees (e.g. Frone, Russell, & Cooper, 1992a; Frone, Russell, & Barns, 1996; Parasuraman & Simmers, 2001; Thomas & Ganster, 1995) and the link between the psychological problems (e.g. emotional distress) of mothers and negative parenting behaviors (e.g. Downey & Coyne, 1990; Lovejoy, Graczyk, O'Hare, & Neuman, 2000) are well-established. Combining these two streams of research, it is possible to argue that WFC has roles on parenting and, in turn, the behavioral and emotional problems of children (i.e. externalizing and internalizing).

The externalizing and internalizing problems in young children are a serious mental health concern because of their high prevalence and stability (Stormont, 2002). These problems are highly prevalent among preschool children (Campbell, Shaw, & Gilliom, 2000). These problems are also stable over time (Campbell & Ewing, 1990; Lavigne, Arend, Rosenbaum, Binns, Christoffel, & Gibbons, 1998). Studies showed that they were associated with risk for serious problems in adolescence and adulthood, such as relationship difficulties,

substance abuse and employment problems (Champion, Goodall, & Rutter, 1995; King, Iacono, & McGue, 2004). That is why, examining factors associated with the externalizing and internalizing problems of children is not only of clinical but also of social importance.

Externalizing and internalizing behaviors are considered as two manifestations of the behavioral and emotional problems in young children (Aunola & Nurmi, 2005). Externalizing behaviors refer to aggressive, disobedient, destructive, and impulsive behaviors (Achenbach, McConaughy, & Howell, 1987). Internalizing behaviors refer to withdrawal, fearfulness, anxiety, and inhibition (Eisenberg, Cumberland, Spinrad, Fabes, Shepard, & Reiser, 2001). The distinction between internalizing and externalizing problems is made by highlighting the target of the negative emotionality (Roeser, Eccles, & Strobel, 1998). In externalizing behaviors the negative emotions are directed against others, whereas, in internalizing behaviors the negative emotions are directed at oneself (Roeser et al., 1998).

Studies investigating externalizing and internalizing problems in children mainly focus on the roles of marital conflict (see, Grych & Fincham, 1990, for a review; Ulu & Fıfılođlu, 2002), child's temperament including anger-irritability, positive emotionality, and effortful control (e.g. Zhou, Lengua, & Wang, 2009), parents' psychological health (e.g. Shelton & Harold, 2008), and poor parenting such as using coercive and punitive discipline techniques (e.g. Granic & Patterson, 2006). Except children's temperament, studies showed that externalizing and internalizing problems in the children are associated with the family. Factors in the family such as the mental and physical health of the parents, the spousal/partner relationships between the parents, and the parenting behaviors have been found to predict problems.

Among these three family-related factors associated with externalizing and internalizing problems of children, the relation between WFC and mental health (e.g. Allen, Herst, Bruck, & Sutton, 2000; Frone, 2000), and the relation between WFC and marital satisfaction (e.g. Aycan & Eskin, 2005; Kinnunen & Mauno, 1998) has been well-established. However, previous research did not address the link between WFC and children's outcomes. This study seeks to fill this void by proposing a mediated model.

## **1.2. Expected Theoretical and Practical Contributions of the Study**

The current study is expected to contribute to developmental psychology literature by focusing on the role of one of the most common stressors associated with maternal employment (i.e. WFC) on parenting behaviors and children's behavioral and emotional problems (i.e. externalizing and internalizing). This study hopes to answer the question of when maternal employment and its perceived effects on mothers can be harmful for the healthy socioemotional development of the child. Researchers have seriously questioned the effects of contextual factors of work on well-being of children. If WFC is related to externalizing and internalizing problems of children, future researchers will be informed to consider WFC as a moderator that affects the relation between maternal employment and child's outcomes.

The study is expected to contribute also to the industrial and organizational literature. Most research in the industrial and organizational area has concentrated on the negative effects of WFC on work-, nonwork- and stress-related outcomes (e.g. Allen et al., 2000). Family-related outcomes have been neglected in the industrial and organizational literature. No attempts have been made to examine its negative role on children.



Because the current study has potential to demonstrate the importance of WFC of the mother by showing the possible negative effect on the young children, it is expected to contribute to policy, as well. Based on the findings of the present study, organizations could be informed about the negative role of WFC on children and encouraged to develop policies to reduce WFC by promoting flexible work schedule, providing good quality childcare opportunities, and providing family-friendly environment. Organizations could also design training programs on parenting and offer these to employees who have the most likelihood of experiencing WFC (i.e. those with heavy workload).

The result of the study is expected to encourage families to take preventive actions. Families who are informed by information (e.g. brochures, website, etc.) provided by companies can take some initiatives to reduce the effect of WFC. First, the mother herself who is aware of her WFC may deliberately try to adjust her parenting behaviors to increase the responsive relationship with her child. Second, the support provided from the husband could act as a buffer from stressful events her wife experiences and enhance the relationship between the mother and the child (Bronfenbrenner, 2001). Moreover, intervention programs to reduce externalizing and internalizing problems in young children could target reductions of WFC experiences especially by employed mothers. Furthermore, prevention programs could select their target populations by the level of WFC. Especially children of mothers who score high on WFC would be an appropriate target population for prevention programs to improve maternal responsiveness and control strategies.

## Chapter 2

### LITERATURE REVIEW

#### 2.1. Work-Family Conflict

Research on the relation between work and family roles has increased after the entry of growing numbers of women in the workforce (Lewis & Cooper, 1999). Women in the workforce have undertaken responsibilities from both work and family domains of life (Perry-Jenkins, Repetti, & Crouter, 2000). They need to deal with strain that is frequently arisen due to role expectations of the society. In the U.S., by the year 2008, 56.2% of women participated in the workforce, as compared to 40.8% in 1970 (U.S. Bureau of Labor Statistics). Likewise, the Household Labor Force Survey (TurkStat, 2006) indicates that in Turkey, the rate of labor force participation for women living in urban cities was 17.7% in 1988, as compared to 20.2% in 2007. Even though the global trend of increased female labor force participation seems to weaken the traditional attitudes towards the entry of women into job, it appears not to be followed by an adjustment in the gender role attitudes. For example, in the year 2006, the Family Structure Survey shows that in Turkish households, which live in urban cities, the responsibility of cooking, ironing and preparing the meal belong to women with percentages 87%, 85% and 72%, respectively (TurkStat, 2006). Similarly, the responsibilities of payment of monthly bills and small repair jobs belong to men with percentages 64% and 67%, respectively. Apparently, the segregation of roles by gender does not fade away as the rate of women joining the workforce.

One of the consequences of the trend explained above is the struggle to manage competing demands of work and family. When role expectations in work and family domains are incompatible, the phenomenon known as “work-family conflict” (WFC) occurs (Greenhaus & Powell, 2006). WFC is defined as “a type of role conflict that arises when joint role pressures from work and family domains are experienced as incompatible in some respect, as a result of which participation in one role is made more difficult by virtue of participation in the other role” (Greenhaus & Beutell, 1985, p. 77).

WFC is recognized as having two directions (see, Byron, 2005, for a review): work interfering family (WIF) and family interfering work (FIW). When work interferes with family domain, the demands of work hinder the performance of family-related responsibilities. For example, long work hours might prevent a parent from attending a school activity of his/her child. Equally, when family interferes with work domain, the demands of family hinder the performance of work-related responsibilities (Frone, et al., 1992a). Taking care of a sick family member all night long, for instance, might deteriorate the performance at work.

### **2.1.1. Theoretical Approaches to WFC**

The dominant theoretical perspectives used to study work-family conflict are the role theory (Katz & Kahn, 1978, as cited in Hanson, Hammer, & Colton, 2006) and scarcity perspective (Goode, 1960, as cited in Hanson et al., 2006). The limited resources (i.e. time and energy) used for engagement in one role can impair normal functioning in other roles, having multiple roles (e.g. of employee, spouse, and parent) can create strain on the individual (Geurts, Taris, Kompier, Dijkers, van Hooff, & Kinnunen, 2005).

Greenhaus and Beutell (1985) specified three sources of WFC and distinguished strain-based, time-based and behavior-based conflicts. Strain-based conflict occurs when stress in one domain can cause failure in fulfillment of role requirements in the other domain. Time-based conflict arises when individuals spend time on activities in one role and cannot fulfill obligations in other roles. Behavior-based conflict arises when specific behaviors required in one role are not matched with behavioral requirements in another role. All forms of WFC have a bidirectional nature (i.e. WIF and FIW). Byron's meta-analysis (2005) supported that WFC is a bidirectional construct by showing that antecedents related to work had a stronger influence on WIF than FIW, while antecedents related to family had a stronger influence of FIW than WIF.

Pleck (1977) suggests that there is asymmetrical boundary permeability between work and family. The asymmetric boundary permeability theory posits that WIF is more common than FIW. Research evidence supported the theory showed that individuals reported more WIF than FIW (Frone, Russel, Cooper, 1992b; Simon, Kümmerling, & Hasselhorn, 2004; Somech & Drach, 2007). Similarly, Aycan and Eskin (2005) found that Turkish employees reported work interfered with family life more than family life interfered with work.

### **2.1.2. The Consequences of WFC**

The study of the potential consequences of WFC has received considerable amount of attention in the literature (e.g. Allen et al, 2000). Allen and his colleagues (2000) divided the consequences of WFC into three categories including work-, nonwork- and general stress-related outcomes. According to this categorization, first group includes the work-related outcomes such as job performance, intention to quit and organizational commitment.

Research that examined the relation between WFC and its work-related consequences show that WFC is significantly correlated with low job satisfaction (Parasurman & Simmers, 2001), high turnover intention (Grandey & Cropanzano, 1999), and high absenteeism (Glass & Estes, 1997).

Second group contains outcomes related to the psychological well-being of the person including stress, depression, and burnout (e.g. Frone, Russell, & Cooper, 1992a; Frone, Russell, & Barns, 1996; Parasuraman & Simmers, 2001; Thomas & Ganster, 1995). Except for these work- and family-related outcomes, experiences in WFC can affect individuals' overall health. Higher levels of WFC were found to relate to decreased levels of physical health (Kinnunen & Mauno, 1998; Thomas & Ganster, 1995). van Steenbergen and Ellemers (2009) used objective indicators of health status and found that WFC was associated with increased cholesterol level and being overweight among employees.

Third group involves nonwork-related outcomes including marital, family and life satisfaction. However, family-related outcomes have been ignored in previous research that mainly focused on work- and stress-related outcomes. A few studies (e.g. Aryee et al., 1999; Kinnunen & Mauno, 1998) examining the family-related outcomes have been limited to the satisfaction of the employee in his/her marriage (Aycan & Eskin, 2005), family (Aryee, Luk, Leung, & Lo, 1999) and life (Allen, et al., 2000). Among them, Aycan and Eskin (2005) showed that WFC was negatively associated with satisfaction with parental role performance which contained satisfaction with time spent with children, satisfaction with parenthood and employment-related guilt. Cinamon, Weisel, and Tzuk (2007) concentrated on parental self-efficacy and perceived quality of parent-child interaction. It was found that WFC was

negatively correlated with these outcomes. These studies do not fully reflect the role of WFC in the family.

Studies that focus on the consequences of WFC for the family members are limited to the ‘crossover effect’ that examined the transmission of WFC between spouses. Crossover is an inter-individual transmission of stress and strain (Westman & Etzion, 2005). When one person experiences job stress or psychological strain, this influences the level of strain of another person in the same social environment (Bolger, DeLongis, Kessler et al., 1989). Along with the transmission of depression, burnout and anxiety, most studies found the crossover of WFC between dual-earner couples (e.g. Derya, 2008; Greenhaus et al., 1989; Hammer, Allen & Grigsby, 1997; Westman & Etzion, 2005). Besides crossover studies that provided how stress and strain experienced in the work and family of one individual intersect to his/her partner, there is not a study that investigates the relation between WFC and children’s development. The present study, therefore, is the first to examine the behavioral and emotional problems (i.e. externalizing and internalizing) of children and is expected to fill the void in the literature.

## **2.2. The Mediation between WFC and Externalizing and Internalizing Problems**

### **2.2.1. WFC and Parenting**

The present study examines whether the experience of WFC by employed mothers influence the externalizing and internalizing problems of young children through parenting. A mediational model is offered in which maternal responsiveness and negative control would

mediate the relation between the experiences of WFC and the externalizing and internalizing problems of children.

People who experience WFC tend to have psychological health problems (e.g. Frone et al., 1992a; Thomas & Ganster, 1995). A number of studies have found that increased WFC is negatively related to psychological health including high levels of psychological distress, depression and anxiety (e.g. Frone et al., 1996; Parasuraman & Simmers, 2001). Recently, Kaur (2008) found that WFC was positively related to psychological distress and physical health symptoms in married middle-income earner females with children. Frone (2000) found that anxiety disorders, mood disorders and substance abuse were positively related to high levels of WFC. The quality of parenting decreases as psychological problems increase (for reviews, see Downey & Coyne; Lovejoy et al., 2000; Hay, Pawlby, Angold et al., 2003). Linking these well-established literatures, it is possible to argue that high WFC would be associated with low quality parenting.

In this study, parenting is a mediator between work and child's outcomes. As suggested by Bronfenbrenner (1977), because work, family and individuals are interrelated, the effect of behaviors of employed individuals in their family should be examined. According to Belsky (1984), one of the determinants of parenting is the sources of stress and support. Work environment can be a source of stress that exacerbates the parenting functioning of the individuals. In addition to ecological models (Belsky, 1984; Bronfenbrenner, 1977), Dix (1991) argued that because parents' occupations and other sources of stress/support influence the emotions experienced during the interaction with the child, they shape the quality of parenting. Dix (1991) posited that negative emotions of the parents were responsible for insensitive and coercive parenting. Repetti and Wood (1997)'s

work illustrates how family interactions change in response to work related stress. They examined employed mothers and reunion with their children and they found that if mothers reported a more demanding workload or more negative interactions with coworkers, they spoke less and engaged less emotionally with their preschoolers, compared to their behavior on less stressful days. Story and Repetti (2006) observed increase in irritability and anger with spouse and children as short-term response to job stress.

Maternal stress and depression, which are some of the psychological health related consequences of WFC, have been highlighted by researchers for being associated with coercive and power assertive parenting. Parents who experienced high levels of stress tended to use considerable amount of power assertive techniques while engaging with their children (Goodman & Gotlig, 1999; Hammen, 2003; McLoyd, 1990). Moreover, depressed mothers were found to exhibit less responsive and supportive to child behavior (Field, Healy, Goldstein & Guthertz, 1990). In their meta-analytic study, Lovejoy and her colleagues (2000) found that depression tends to be related most strongly to hostility and coercive behaviors and to be related to somewhat lesser degree with positive activities and play with the mother. Given that WFC is a source of distress and negative emotions in parents, it is reasonable to expect that it would be associated with negative parenting behavior.

## **2.2.2. Parenting Behaviors**

### ***2.2.2.1 Parenting in Cultural Context***

The traditional parenting style paradigm characterized four parenting styles: authoritarian, authoritative, permissive, and uninvolved parenting style and emphasized



parenting as a combination of various levels of behavioral control and responsiveness to the child (Baumrind, 1968, as cited in Bornstein, 1995; Maccoby & Martin, 1983). Authoritarian parenting is characterized by a high level of both parental affection and behavioral control. On contrary, authoritarian parenting is characterized as high behavioral control but low affection.

In western individualistic cultures, authoritarian parenting style was associated with parental rejection and lack of warmth (Coplan, Hastings, Lagace, Seguin, & Moulton, 2002). In collectivist cultures such as China and Turkey high levels of authoritarianism was not be accompanied by high levels of negative affect and rejection (Chao, 1994; Kağıtçıbaşı, 1970; Rudy & Crusec, 2001). Parenting behaviors have been found to relate differently to children's development depending on the contexts in which children are raised. Studies suggested that the role of same parenting behavior (i.e. parental control) may not be direct or universal (e.g. Florsheim, Tolan, & Gorman-Smith, 1996; Pinderhughes, Dodge, Bates, Petit, & Zelli, 2000).

Kağıtçıbaşı (1970) found that Turkish parents used more controlling behaviors towards their children than were parents of the United States, but there were no differences between these groups in terms of parental responsiveness. Although Turkish adolescents perceived more parental control than did their counterparts in the United States they did not interpret strong parental control as lack of affection (Kağıtçıbaşı, 1970). Lansford, Chang, Dodge and their colleagues (2005) included six countries differing in terms of collectivist and individualist orientation in their study and found that the association between mothers' use of physical discipline and child adjustment was moderated by the normativeness of physical discipline in the particular culture. However, even when it was perceived as being normative, higher use of physical discipline was associated with more aggression and anxiety. Same parenting behavior may carry different meanings for children in different cultural contexts

(Kağıtçıbaşı, 2007). Therefore, it is important to take into consideration the dimension of parenting (responsiveness and control) not the combination of different parenting behaviors. This approach is adopted in this study.

#### ***2.2.2.2. Definitions of Parenting Behaviors***

In this study, parenting is conceptualized as consisting of two parenting behaviors. Two most commonly identified parenting behaviors are parental responsiveness and parental control (Gadeyne et al., 2004; Locke & Prinz, 2001). Parental responsiveness, also defined as support, warmth or acceptance, refers to the quality of the parent's reacting to child's needs and demands (Kochanska & Aksan, 2004). Parental control, also called as parental demandingness, discipline, or restrictiveness, refers to demands and disciplinary efforts of parents to discourage inappropriate behaviors, and gain compliance from the child (Locke & Prinz, 2002).

In general, not every attempt of parents for controlling their child's behavior is harmful. In fact, setting some limits and rules for young children has benefits (Pomerantz & Ruble, 1998). Barber, Olsen, and Shagle (1994) found that behavioral control maintaining reasonable and developmentally appropriate limits decreased externalizing problems and increased the compliance of children in social contexts. However, some parental control techniques are seen as ineffective and reinforce child misconduct such as harsh and punitive behaviors and coercion, while emotional unavailability leads to a lack of positive atmosphere in parent and child relationship (Locke & Prinz, 2002). For example, highly controlling mothers (behavioral or psychological) tended to have children and adolescents who were more likely to be socially withdrawn or aggressive than children of mothers who used

normative levels of control (Barber et al., 1994). Therefore, while linking parental control to child's maladjustment it is important to define negative control behaviors of parents that are developmentally inappropriate and include high level use of punishment and verbal commands without an explanation.

Both parental negative control and responsiveness relate to several domains of development. For instance, parental negative control was positively associated with externalizing behaviors of children (Gershoff, 2002; Sheehan & Watson, 2008) and responsiveness was negatively associated with externalizing problems among preschoolers (Dodge, Petit & Bates, 1994; Ispa, Fine, Halgunseth, Harper, Robinson, & Boyce 2004). Moreover, MacLeod, Wood and Weisz (2007) revealed that negative parental control was positively related to child anxiety. Thus, parenting can be considered as having an important role on externalizing and internalizing problems of children.

### **2.3. Externalizing and Internalizing Problems of Young Children**

Early childhood is characterized as a period when children are extremely vulnerable. Roots of maladjustment in this period appear as early forms of externalizing and internalizing problems (Campbell, 1995). In developmental psychopathology research, two broad forms of maladjustment were distinguished: externalizing and internalizing problems. Rubin and Mills (1991) state that while externalizing problems are characterized by difficulties involving undercontrol (behavioral disinhibition), internalizing problems are characterized by difficulties of overcontrol (inhibition). Internalizing problems consist of internal states like anxiety, depression and withdrawal; conversely externalizing problems are reflective of delinquent, hostile and noncompliant aggressive behaviors (Stacks, 2005).

Both externalizing and internalizing problems in early childhood presage possible problems in later childhood and adolescence (e.g. Cicchetti & Toth, 1991, as cited in Connell & Goodman, 2002; King et al., 2004). However, externalizing problems have received more attention from researchers than internalizing problems (Lyons-Ruth, Easterbroks & Cibelli, 1997). One of the reasons for this is that children exhibiting externalizing behaviors are disruptive to parents and teachers (Stacks, 2005). In a study by Mills and Rubin (1990) the behavioral manifestation of externalizing problems were more likely to evoke negative affect in the perceiver than the behavioral manifestation of internalizing problems.

From a developmental perspective, a more important reason why externalizing problems have received more attention from researchers than internalizing problems is that externalizing problems have been found to persist over time (Campbell & Ewing, 1990; Lavigne et al., 1998). In their longitudinal study Campbell and Ewing (1990) found that a high proportion of their preschooler sample with high levels of problems including inattention, hyperactivity and discipline problems met diagnostic criteria for an externalizing disorder at the age of 9 years. In another longitudinal study, Cote, Vaillancourt, Nagin and their colleagues (2006) investigated the developmental trajectories of physical aggression with a representative sample and identified three groups of children with distinct trajectories between 2 and 11 years of age. Only one sixth of the children followed a high stable trajectory of physical aggression. Similarly, Shaw, Gilliom, Ingoldsby and Nagin (2003) differentiated four groups of boys with distinct levels of conduct problems between the ages of 2 and 8 years. Only six percent of those boys from low income families displayed high levels in toddlerhood and sustained elevated levels in middle childhood. Other longitudinal studies showed that problems are comparatively high from preschool age into adolescence (e.g. Smith, Calkins, Keane, Anastopoulos, & Shelton, 2004). For instance, Asendorf and his

colleagues (Asendorf, Denissen, & van Aken, 2008) followed up inhibited and aggressive children at ages 4-6 years until age 23 and compared them with control group who were below average in preschool inhibition and aggressiveness. They found that a significant long-term risk for externalizing problems for aggressive children. However, only the upper 8% in terms of inhibition tended to show internalizing problems. These studies suggested that not every child exhibited elevated aggressive behaviors in toddlerhood maintained high levels of aggression in middle childhood or pre-adolescence. However, an important percentage of children who displayed high levels of aggressive behaviors in early ages sustained the severe dysfunctional behavioral problems. Moreover, this stability carries additional societal implications. Externalizing problems were related to several negative outcomes in adulthood including relationship difficulties, substance abuse and employment problems (Champion, Goodall & Rutter, 1995; King et al., 2004). Preschoolers with problems are likely to demonstrate serious problems (Stormont, 2002), such as academic difficulties (Tomblin, Zhang, Buckwalter & Catts, 2000). Furthermore, children with externalizing problems are at an elevated risk for antisocial behavior in later childhood and adulthood (Kazdin, 1987). In their six-year longitudinal study, White, Moffit, Earls, Robins and Silva (1990) pointed out that parental ratings of their preschool children's behavior problems were the strongest predictor of their antisocial behavior at the age of 11. Furthermore, some studies found that internalizing problems are a risk factor for maladjustment in later childhood and adolescence (e.g. Cicchetti & Toth, 1991, as cited in Connell & Goodman, 2002).

Research has documented that several factors contribute to externalizing and internalizing problems in young children: child characteristics such as temperament (e.g. Rubin & Mills, 1991; Zhou et al., 2009), parent-child interaction characteristics (e.g. Bayer, Sanson, Hemphill, 2006; McKee, 2008; Stacks, 2005) and family characteristics such as

marital conflict and maternal depression (see Stormont, 1998, for a review). The scope of the current study is limited to the investigation of parent-child interaction characteristics, namely parenting. In the following paragraph, empirical evidence is presented that emphasize the importance of the parent-child interaction for externalizing and internalizing problems.

Coercive parent-child interactions are considered to be the foundation of aggressive behaviors (Webster-Stratton, Reid, & Hammond, 2004). The negative responses of parents such as using threats and harsh physical interventions serve as a direct role model and reinforce the child's negativistic and aggressive behaviors (Webster-Stratton et al., 2004). Specifically, Sheehan and Watson (2008) found that child aggression at younger ages (7-13 years) is predicted by maternal use of aggressive discipline. Interestingly, the use of aggressive discipline predicted an increase in child aggression at all ages (7-19 years). Moreover, in Herrenkohl and Russo's longitudinal study (2001) harshness of mother-child interaction occurring at the preschool age were found to be associated with child's aggression at school years. Brestan and Eyberg (1998) suggested that teaching parents to use less harsh discipline style is an effective way of preventing early development of conduct problems. Rothbaum and Weisz (1994) found in their meta-analysis that positive parenting behaviors such as approval of positive behavior, guidance, synchrony and absence of coercive control were negatively related to child externalizing problems. Other studies found that elevated levels coercive parenting behaviors were related to hyperactive, oppositional and aggressive behaviors (Stormshak, Bierman, McMahon & Lengua, 2000) and to the presence of more child externalizing problems (e.g. Gadeyne et al., 2004; Gershoff, 2002).

Several parenting behaviors are thought to contribute to children's internalizing problems such as low warmth, (presenting a lack of involvement), power-assertive parenting,

(controlling children forcefully) and overcontrol (being intrusive) (Rapee, 1997; Rubin & Mills). Aversive interactions with primary caregivers such as rejection and high levels of criticisms of parents that do not strengthen support and safety feelings in children are hypothesized to teach children that the world is an unsafe place (Bayer, Sanson & Hemphill, 2006). This understanding, eventually, may prevent children from learning how to handle the negative feelings aroused in times of stress (Bayer et al., 2006). Similarly, Stark, Humphery, Crook and Lewis (1990) posited that unresponsive and punitive parenting behaviors may create a negative schema of the self and the world in the child and result in selective attention to negative events. The meta-analytic study of MacLeod, Wood and Weisz (2007) revealed that high parental negative control was more strongly related to child anxiety than low parental warmth and parenting accounted for only 4% of the variance in child anxiety. In their observational study, Hudson and Rapee (2001) indicated that in a stressful situation, mothers of anxious children were more intrusive and also negative, namely showing low warmth than mothers of non-clinical children. Colder, Lochman, and Wells (1997) present evidence that parent behaviors are predictive of child depression. Barrett, Rapee, Dadds, and Ryan (1996) found associations of parenting with children's anxiety.

Despite strong theoretical background that relates parents' ineffective behaviors to the internalizing problems, empirical studies investigating the relation between parenting behaviors and internalizing problems are fewer than studies investigating the relation between parenting behaviors and externalizing problems (e.g. Rubin & Mills, 1991) and neither maternal responsiveness nor negative control accounts for most of the variability in children's anxiety or depression symptoms (e.g. MacLeod, et al., 2007; Mattanah, 2001) and externalizing problems have received more attention from researchers than internalizing problems (Lyons-Ruth, Easterbroks & Cibelli, 1997). In spite of less consistent empirical

evidence about internalizing problems than externalizing problems this study also included internalizing problems for two primary reasons.

First, both forms of maladjustment have high rate of occurrence among children. Notably, 5 to 13% of mothers of preschoolers report that their children display moderate to severe externalizing problems (Campbell, Shaw, & Gilliom, 2000; Webster-Stratton & Hammond, 1998). In Turkey, Erol, Şimlek, Öner and Münir (2005) investigated the prevalence of parent-reported externalizing and internalizing problems of two- to three-year-old children in 1997. The results of their study indicated that the total scores on the scale assessing the externalizing and internalizing problems placed 11.9% of the nationally representative sampled children in the clinically significant range. A national survey of well-being in Australia revealed that up to 20% of children and adolescents were affected by internalizing problems (Sawyer et al., 2001). Overall, prevalence estimates indicate that about 4 to 12% of children have significant malfunctioning behavior problems (Lavinge et al., 1996; Qi & Kaiser, 2003). Lavinge and his colleagues (1996) screened 3,860 children ranged between 2 to 5 years old. The CBCL scores indicated a prevalence of internalizing and externalizing problems of 3.7% each and total behavior problems of 8.3%. Estimates from studies on the prevalence of problem behaviors in low-income and minority preschool children of U.S.A. suggest that percentages of children with externalizing problems ranged from 16 to 30%, and the percentage of children with internalizing problems ranged from 7 to 31% (Qi & Kaiser, 2003). A further study showed that 7% of children aged 3–4 years displayed behavior problems (Charlton et al., 1995). Second, there is no previous study investigating the experience of WFC by working mothers and internalizing problems of their children.



Many studies examining parenting behaviors have relied on mothers' self-report. Although measures of this kind provide information about parental perception, there is a gain to use observational methods which present information about how mothers behave in interaction situations with their children. In their meta-analysis, Rothbaum and Weisz (1994) found that studies using questionnaire measures of parenting yielded smaller effect sizes than studies using interview and observation measures. Studies that used observational measures of maternal responsiveness have found a link between low levels of maternal responsiveness and externalizing problems (e.g., Shaw, Winslow, Owens, Vondra, Cohn, & Bell, 1998). Ispa et al. (2004) found that intrusiveness of mothers of 15 months old children during play predicted increases in child negativity when children were 25 months old. In their meta-analysis including 23 studies, van der Bruggen, Stams and Bögels (2008) found that child anxiety and observed paternal negative control were significantly correlated with a medium overall effect size of  $d = .58$ . Zaslow and her colleagues (2006) examined whether parenting assessment methodologies differed in yielding better predictions of child outcomes. Although all parenting methodologies including maternal report, home observation and structured observation showed some predictive value, observational parenting measures showed the strongest and most consistent predictions outcomes in middle childhood. Overall, findings from studies that have used observational methods and those that have used self-report measures of parenting on children's problem behaviors are relatively consistent (for a review, see Hart et al., 2003). As underscored by literature, this study adopts multi-method assessment of parenting: maternal responsiveness and negative control are assessed using not only self-report method but also observational method.

Consequently, guided by previous research revealing that maternal responsiveness and negative control are linked to the externalizing and internalizing problems of children, the following hypotheses focusing on the mediation model are examined:

*Hypothesis 1:* Parenting mediates the relation between WFC and externalizing and internalizing problems in such a way that mothers who experience high level of WFC are expected to display more power-assertive behaviors (i.e. control) towards their children, which will increase the externalizing and internalizing problems in their children.

*Hypothesis 2:* Parenting mediates the relation between WFC and externalizing and internalizing problems in such a way that mothers who experience high level of WFC are expected to be low in responsiveness towards their children, which will increase the externalizing and internalizing problems in their children.

## Chapter 3

### METHOD

#### 3.1. Sample

The data were driven from a research project carried out at Koç University Social Development laboratory. The project aimed at studying socioemotional development of preschool children in Turkish culture. The sample consisted of 98 preschool children (42 girls and 56 boys) and their mothers. The data collected between fall 2008 and spring 2009 when children ranged in age between 26 and 72 months ( $M=54$ ,  $SD=11.4$ ). The sample was recruited from seven private preschools in Istanbul/Turkey and about 10-15% was recruited through announcements circulated to Koç University staff.

The demographic characteristics of mothers indicated that the mean age was 36.4 ( $SD: 3.51$ ). Most of the children were from intact families (88.1 %). The mean year of education for mothers was 15.4. Most of the mothers held at least university degree (78.6 %). The monthly family income of participants was 7000 TL on average. Although most of the mothers worked full-time (63.3 %), sixteen percent of them were part-time employees and twenty percent of mothers were in the category of non-paid employees indicating either volunteer work or work in family business. Indeed, none of the respondents of this category found the items of WFC measure inapplicable to their own lives. Analysis of mean differences between full-time, part-time and non-paid employees did not show any systematic differences.

### 3.2. Overview of the Procedure

The assessments took place in the research laboratory which consisted of two connected rooms. The first room was the entrance room where mothers were informed about the procedures. The second room was the assessment room that was videotaped from behind a one-way mirror. This room was designed as a natural living room and included a couch and play area with toys. In the center of the room, a shelf was furnished with extremely attractive objects, such as beautiful dolls, a decorative box with jewelry, a helicopter, a ship, a make-up set, colorful animals and a polis car. The overall assessment took approximately 2.5 hours for each mother and child dyad. The procedure was conducted by an experimenter. All behavioral data were coded by trained coders who were undergraduate and graduate psychology students.

Before the mother and child entered the assessment room, the experimenter told the overall procedure. The experimenter asked the mother to forbid the child not to touch the attractive toy shelf throughout the entire laboratory session. It was ensured to say that while forbidding the child, mother should behave as she behaves in daily life where she needs to prohibit her child to do something. After the mother signed the consent form, the experimenter, the mother and child entered the assessment room. The experimenter showed the forbidden toys and toys that the child could play (such as painting books, crayons and a bunny), and left the room in order to let them search the room (initial free play time). After 5 minutes, the experimenter entered to the room with the questionnaires including WFC, Child Rearing Questionnaire and Child Behavior Checklist and gave them to the mother (mother busy time). While the mother was busy in completing these self-rating questionnaires, the

child played alone.<sup>1</sup> This episode was an example of typical naturalistic mother-child interaction where maternal responsiveness was observed and coded. Afterwards, the other episodes including free time, snack time, play time and toy clean-up were held in order to observe maternal responsiveness. Maternal negative control was assessed during discipline interactions where child was prohibited to touch attractive toys by the mother. During five sessions including initial free play time, mother busy time, snack time, play time and toy clean-up time, maternal negative control were coded. Detailed information about observed maternal negative control was presented at 3.3.3.2.

### 3.3. Procedures and Measures

The assessment of WFC, parenting behaviors and the externalizing and internalizing problems of children were obtained from questionnaires filled by mothers while the children played alone or was with the experimenter for other assessments that were not related to the current study. The assessment of maternal responsiveness and negative control were obtained from both observation made in laboratory and from a mother-report questionnaire evaluating the child-rearing behaviors.

Table 3.1 presents the scales used in the current study and their Cronbach's alphas. All of the scales revealed reliabilities above  $\alpha = .75$  except Punishment subscale of the Child-rearing Questionnaire which was  $\alpha = .65$  and observed negative control which was  $\alpha = .66$ .

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<sup>1</sup> After 15 minutes, the session was ended and if the mother could not finish completing the questionnaires, she continued in other sessions where the experimenter played with the child and the mother was in the room as well.

Table 3.1  
*Scales used in the study and their internal consistencies*

	<b>Number of items</b>	<b>Cronbach Alpha</b>
1.WFC	12	.89
2. The Child Behavior Checklist		
a. Externalizing	24	.84
b. Internalizing	36	.80
3. The Child-rearing Questionnaire		
a. Warmth	9	.78
b. Punishment	8	.65
c. Inductive reasoning	6	.80
d. Obedience-Demanding	7	.75

### 3.3.1. Work-Family Conflict

Work-family conflict was measured using a scale developed by Carlson, Kacmar and Williams (2000). The scale contained 12 items measuring two types of WFC, namely time and strain, and two directions, namely work interfering family and family interfering work. The items were rated using a 6-point Likert scale where 6 indicated strong agreement and 1 indicated strong disagreement. The total score was used to assess WFC. High scores indicated more conflict. A sample item was “The time I must devote to my job keeps me from participating equally in household responsibilities and activities” (see Appendix A for the Turkish adaptation of WFC scale). Participants were informed to consider past three months while answering the questions. Turkish adaptation has been done by Ayca and her colleagues (2004). The Turkish version of the WFC scale had internal consistency with Cronbach’s alpha .89 (Ayca et al., 2004). The Cronbach’s alpha in the present study was found to be .89 for WFC scale.

### 3.3.2. Externalizing and Internalizing Problems

The empirically driven Child Behavior Checklist (Achenbach, 1991) was used to evaluate children's psychopathology. The CBCL was developed by Achenbach (1991) and is a standardized instrument that provides a parental report of the child's behavior problems. The checklist consisted of 100 items scored on 3-point Likert scale of: Not true (1), Somewhat or sometimes true (2) and Very often or often true (3). Some sample items were: She/he cries a lot; does not get along with other children; avoids making eye-contact; fights a lot. The checklist contained eight narrow-band syndrome scales: Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Aggressive Behavior and Delinquent Behavior. Overall, it gives scores on two broad-band syndrome scales: Externalizing and Internalizing problems and an overall score (Total Problems). Externalizing problems were assessed by the combination of Delinquent Behaviors and Aggressive Behaviors. Withdrawal, Somatic Complaints and Anxiety/Depression formed the assessment of internalizing problems. Higher CBCL scores indicated more maladaptive behaviors. Cross-cultural comparisons of Externalizing and Internalizing problems and Total Problems scores revealed notable similarities regarding overall psychopathology (Crijnen, Achenbach, & Verhulst, 1999). The checklist was adapted to Turkish by Erol and her colleagues (1995). The Turkish version of the CBCL has internal consistency with Cronbach alphas .82 for internalizing problems and .81 for externalizing problems (Erol, Arslan & Akçakın, 1995). The reliability of this scale in the present study was found to be .80 for internalizing and .84 for externalizing problems.

### 3.3.3. Parenting Behaviors

Parenting was measured in two ways: self-report and observational. For the mother-report assessments of perceived maternal negative control and maternal responsiveness, Turkish adaptation of the Child Rearing Questionnaire (Yağmurlu and Sanson, 2009) was completed by the mothers. For the observational assessments of maternal negative control and responsiveness, several interactive control contexts during laboratory session were used.

#### 3.3.3.1 *Perceived Responsiveness and Negative Control*

The original CRQ (Paterson and Sanson, 1999) and Turkish adaptation consisted of 30 items (see Appendix B for the Turkish adaptation of CRQ scale). The response scale was a 5-point Likert scale where the mother indicated the frequency of each behavior ranging from 1 “never” to 5 “always”. The CRQ included four subscales measuring Obedience-Demanding (e.g., “I expect my child to do what he/she is told to do, without stopping to argue about it”), Warmth (e.g., “My child and I have warm, intimate times together”), Inductive Reasoning (e.g., “I try to explain to my child why certain things are necessary”) and Punishment (e.g., “I use physical punishment, e.g., smacking, for very bad behavior”). Internal consistency scores for Obedience-Demanding, Warmth, Inductive Reasoning and Punishment were .73, .78, .82 and .91 for the Australian sample and .78, .68, .76 and .84 for the Turkish sample, respectively (Yağmurlu and Sanson, 2009).

The coefficient alphas in the present study were found to be .75 for Obedience-Demanding, .78 for Warmth, .80 for Inductive Reasoning and .65 for Punishment. Inductive reasoning, punishment and obedience-demanding subscales are different kinds of discipline



strategies. Because inductive reasoning is a positive discipline strategy it has negative correlation with punishment and obedience-demanding subscales. Based on the correlations in this sample, item content and theoretical expectations, mother-report negative control was obtained by subtracting averaged Inductive Reasoning subscale from the total of averaged Punishment and Obedience-Demanding subscales and this score was called as perceived negative control (N. Aksan, personal communication, September 22, 2010). Since warmth subscale measures a theoretically separate aspect of parenting mother-report responsiveness was obtained by using averaged Warmth subscale and called as perceived responsiveness. High scores on perceived negative control indicated more negative control and high scores on perceived responsiveness indicated more responsive behaviors of the mothers.

### ***3.3.3.2. Observed Negative Control***

For the observational assessments of maternal negative control, several interactive control contexts during laboratory session involving a “Don’t” type of task were used (Kochanska & Aksan, 1995). The “Don’t” task required the child to comply with the prohibitions made by the mother (Kochanska & Aksan, 1995).

The mother was asked to forbid the child not to touch the attractive toy shelf throughout the entire laboratory session. The mother told this prohibition to the child after entering the room. This request of the mother was considered as the typical example of “Don’t” command (Kochanska & Aksan, 1995). The child was allowed to play with a few much less attractive toys available from the beginning of the session. Consequently, totaling 38 minutes, four contexts, namely searching the room time (6 min.), mother busy time (15 min.), snack time (12 min.), and play time (5 min.) were coded. The coding system for

maternal control was adopted from Crockenberg and Litman (1990, as cited in Kochanska, & Aksan, 1995). Variations of maternal behaviors that did not address the child were coded as “No involvement”. When the mother addressed the child but did not attempt to control, these were coded as “Social exchange”. When the mother controlled the child’s behavior using reasoning, polite requests, positive comments and suggestions, this was coded as “Gentle control”. When the mother used threats, harsh physical interventions, direct commands and prohibitions with negative comment, this was coded as “Negative control”. The kappa scores between coders were .77, indicating adequate reliability.

As described in work of Kochanska, Aksan and Nichols (2003) and Kochanska and Aksan (1995) coding and computations were applied: Negative control was coded in 30-second segments. The coding of a series of segments began when the child oriented toward the prohibited attractive toys and ended when the child reoriented. In each segment, physical interventions ranging from distal, gentle, assertive (mother holds child firmly, moves child decisively, removes a toy from child’s hand) and forceful (mother shakes, spansks, or handles child roughly, yanks toys, gestures angrily) were attributed as present/absent (see Kochanska, Aksan & Nichols 2003 for details). In each segment a global code was attributed ranging from 0 to 4 (0-no control; 1-no control simple social exchange; 2-gentle power; 3-assertive; 4-forceful-negative) (see Kochanska & Aksan 1995 for details). Relative frequency scores for each type of physical intervention and each global code were computed. Then weighted sum of codes were calculated for physical control (relative frequency of instances of weak control and distal physical were multiplied by -3 and -2 respectively, and instances of gentle physicals were multiplied by 1 and instances of assertive and forceful were multiplied by +2 and +3 respectively) and for global control (same logic was applied). The correlation between physical and general control ( $r = .63$ ) indicated that these two variables were moderately

correlated; as a result they were pooled into a composite score and named as observed control. The Cronbach's alpha in the present study was found to be .66 for observed control. High scores on observed control indicated more negative observed control.

### **3.3.3.3. Observed Responsiveness**

Several mother-child contexts were used to observe maternal responsiveness during the laboratory session. These contexts included typical care and play activities such as searching the room (6 min.), mother busy (15 min.), free time (6 min.), snack time (12 min.), problem-solving (10 min.), and discipline context (toy clean-up, 10 min.). The coding system was adopted from Ainsworth, Bell, and Stayton's coding of maternal responsiveness (1971, as cited in Kochanska, & Aksan, 2004). The combination of the scales Sensitivity-Insensitivity, Acceptance-Rejection and Cooperation-Interference of the coding system was applied (Kochanska, & Aksan, 2004). Therefore, sensitivity and attunement of the mother to the child's need and signals taking into consideration, promptness, sincerity and appropriateness of the mother's response in each context were coded on three (each for sensitivity-insensitivity, acceptance-rejection and cooperation-interference) 7 point scale ranging from 1 (highly unresponsive) to 7 (highly responsive) (see Appendix C). The intraclass correlations ranged from .65 to .85.

Sensitivity, acceptance and cooperation scores in all contexts were averaged and overall sensitivity, acceptance and cooperation scores were obtained. Then the three scores were z-transformed and their average was computed to form an overall responsiveness score.<sup>2</sup>

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<sup>2</sup> During z-transformation, child's negative or positive affect were multiplied by -1 and included to the transformation. The reason of this computation was that there was too much potential confounding between mother and child affect meaning that maternal responsiveness sometimes was dependent on child's negative or

This score was called as observed responsiveness. The Cronbach's alpha for the composite score study was found to be .80, revealing high reliability. High scores indicated high responsiveness.

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positive affect. Consequently, maternal responsiveness independent from child's negative or positive affect was captured.

## Chapter 4

### RESULTS

The main purpose of the present study was to examine the mediating effects of maternal responsiveness and negative control in the relation between work-family conflict and externalizing and internalizing problems of preschool children. In order to test the proposed model presented in Figure 1 path analyses were used.

#### 4.1. Descriptive Findings

WFC, internalizing and externalizing problems did not vary according to participants' demographic characteristics (sex of the child, education level and work schedule of the mother and income of the household) (see Appendix D for the table representing mean comparisons of outcome variables across sample characteristics).

Table 4.1 shows descriptive and inter-correlations among the study variables. Inter-correlation among variables indicated that WFC score was significantly and positively correlated with perceived negative control, internalizing and externalizing problems. WFC score was marginally and positively correlated with observed responsiveness.

Observed negative control was found to be significantly and negatively associated with perceived negative control. This negative correlation between same variable measured in observational and self-report method indicated that the proposed model should be tested for

two separate measurements: self-report measures of maternal behaviors and observational measures of maternal behaviors.

Table 4.1  
*Descriptive and inter-correlations among the study variables.*

	M	SD	1	2	3	4	5	6	7
1. WFC	2.45	.86	-	.18 <sup>t</sup>	-.10	-.09	.28**	.26*	.29**
2. Observed Responsiveness <sup>a</sup>	.12	.92		-	.01	.04	-.28**	-.04	-.23*
3. Observed Negative Control <sup>b</sup>	.06	.95			-	.14	-.24*	-.00	-.02
4. Perceived Responsiveness	4.61	.35				-	-.47**	-.16	-.15
5. Perceived Negative Control <sup>b</sup>	-.16	.35					-	.07	.29**
6. Internalizing Problems	11.82	6.81						-	.48**
7. Externalizing Problems	11.66	6.09							-

Notes: <sup>t</sup> p < .10, \* p < .05, \*\* p < .01, <sup>a</sup>= z-score, <sup>b</sup>=composite score

## 4.2. Model Testing

Two path analyses were utilized using Amos 17.0. The model with observed data included observed responsiveness and negative control along with WFC and externalizing and internalizing problem variables. The model with perceived data included perceived responsiveness and negative control along with WFC and externalizing and internalizing problem variables.

Analyses were applied based on submitting variance-covariance matrix and using maximum likelihood test. There were no missing data in the data set. In order to assess data's fit to the model, several fit indices were used as suggested by Bentler (1990): (a) the chi-square test, (b) , (c) the normed fit index (NFI), (d) the incremental fit index (IFI), (e) the Tucker Lewis index (TLI), (f) the comparative fit index (CFI), (g) root mean square error of approximation (RMSEA).

NFI, IFI and TLI are relative fit indices that compare a chi-square for the model tested to independence model<sup>3</sup>. The Tucker Lewis Index (TLI) is “an unbiased estimation of a quantity that incorporates the parsimony ratio” (McDonald & Marsh, 1990; p. 250). It has values that range between approximately 0 and 1.0. Because TLI and IFI might be larger than 1 or slightly less than 0 they are considered as “nonnormed” (Marsh, Balla, McDonald, 1988). CFI and RMSEA are considered as non-centrality based indices (Byrne, 2001). Bentler (1990) suggested CFI which is based on non-centrality parameters eliminates the small sample bias. RMSEA is sensitive to the number of estimated parameters in the model and gives how well the model fit the population covariance matrix (Byrne, 1998; as cited in Hooper, Coughlan, & Mullen, 2008). The values of TLI and CFI should be greater than .90 and RMSEA should be less than or equal to .10 to indicate a very good fit (La Du & Tanaka, 1989). In the next subsections, the proposed model of the current study was tested separately for perceived data and observed data to found best fitting model for each.

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<sup>3</sup> The independence model is a model tested that specifies that all measured variables are uncorrelated (Byrne, 2001).

#### 4.2.1. Testing the Model with Observed Responsiveness and Negative Control

First, it was started with a fully saturated model including WFC, observed responsiveness and observed negative control along with externalizing and internalizing problems (see Appendix E for the figure depicting saturated model). Regression weights indicated that the path between WFC and observed negative control, the path between observed negative control and externalizing problems, the path between observed negative control and internalizing problems as well as the path between observed responsiveness and internalizing problems were statistically insignificant. In the second step, a second model was defined and insignificant paths involving observed negative control were constrained to zero. That is, the path between WFC and observed negative control, the path between observed negative control and externalizing problems as well as the path between WFC and internalizing problems were equaled to zero. Therefore, by implementing nested likelihood ratio test whether the difference between two models was significant was assessed. This model was improved and fitted to data, Step 2,  $\chi^2(3) = .99$ ,  $p = .80$ . Thus, the saturated model was modified by excluding these three paths. In the third step, a third model was defined and the insignificant path between observed responsiveness and internalizing problems was constrained to zero. The statistic of this model, Step 3, was  $\chi^2(4) = 1.72$ ,  $p = .79$ . Furthermore, nested model comparison indicated that this model was a significant improvement over second model: Step 2 versus Step 3,  $\chi^2(1) = .73$ ,  $p = .39$ . Therefore, third model which included only significant paths was the best fitting model retained for these data.

Table 4.2 represents the model fit indices. The model fit indices suggested that third model was a good fit to the data. The NFI, IFI, TLI and CFI were .97, 1.05, 1.15 and 1.00, respectively. Finally, the confidence interval of RMSEA indicated that this model was an



acceptable fit. Figure 2 displays estimated standardized path coefficients from the final model.

Table 4.2  
Model fit indices for the model with observed responsiveness and control

	$\chi^2$	df	p	NFI	IFI	TLI	CFI	90% of CI RMSEA
Step 1: Saturated Model	0.00	0		1.00	1.00		1.00	
Step 2: WFC → NC, NC → Int. P., NC → Ext. P. constrained to 0	.99	3	.80	.98	1.04	1.17	1.00	.00-.11
Step 3: Resp. → Int. P. constrained to 0	1.72	4	.79	.97	1.05	1.15	1.00	.00-.10

*Note:* NC= negative control, Int. P.= internalizing problems, Ext. P.= externalizing problems, Resp.= responsiveness, CI= confidence interval

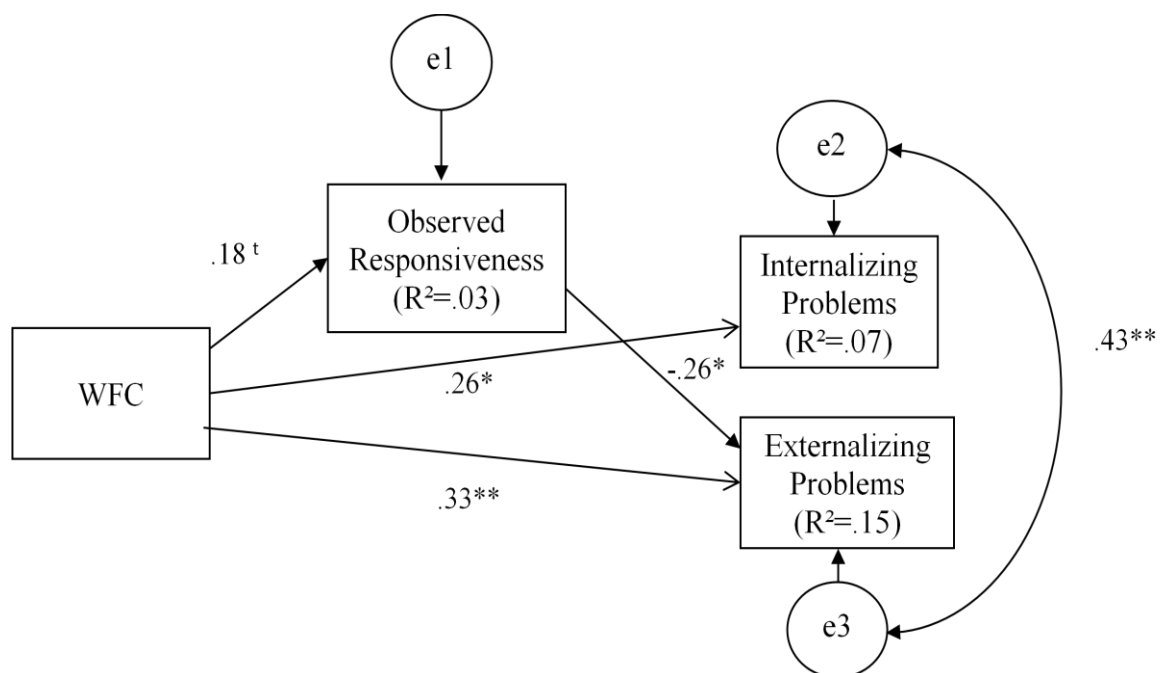


Figure 2. The standardized estimates of significant paths for the model with observed data.  
*Note:* <sup>†</sup> $p = .07$ ; \* $p < .05$ ; \*\* $p < .01$

An overview of path values indicated that the link between WFC and externalizing problems was partially mediated by observed responsiveness. WFC was marginally but positively related to observed responsiveness and observed responsiveness was negatively related to externalizing problems. Mothers who experience WFC were observed as high on responsiveness which in turn decreased their report of externalizing problems in their children. There was no mediation relating to internalizing problems. Direct path from WFC to internalizing problems was significant.

The proposed model suggested that maternal responsiveness mediated the relation between WFC and externalizing and internalizing problems. This suggestion was partially supported in this model. Observed responsiveness partially mediated the relation between WFC and externalizing problems only. The standardized indirect effect of WFC on externalizing problems is  $-.05$ . That is, due to mediated effect of maternal responsiveness on this link, when WFC increased by 1 SD, externalizing problems decreased  $.05$  standard deviations.

#### **4.2.2. Testing the Model with Perceived Responsiveness and Negative Control**

The same procedure as described in previous section was employed. Step 1 included the saturated model including WFC, perceived responsiveness and perceived negative control along with externalizing and internalizing problems (see Appendix F for the figure depicting saturated model). Regression weights indicated that the path between WFC and perceived responsiveness, the path between perceived responsiveness and externalizing problems, the path between perceived responsiveness and internalizing problems as well as the path between observed negative control and internalizing problems were statistically insignificant.

In the second step, a second model was defined and insignificant paths involving perceived responsiveness were constrained to zero. That is, the path between WFC and perceived responsiveness, the path between perceived responsiveness and externalizing problems as well as the path between perceived responsiveness and internalizing problems were equaled to zero. Therefore, by implementing nested likelihood ratio test whether the difference between two models was significant was assessed. This model was improved and fitted to data, Step 2,  $\chi^2(3) = 3.61, p = .31$ . Thus, the saturated model was modified by excluding these three paths. In the third step, a third model was defined and the insignificant path between perceived negative control and internalizing problems was constrained to zero. The statistic of this model, Step 3, was  $\chi^2(4) = 3.61, p = .46$ . Furthermore, nested model comparison indicated that this model was a significant improvement over second model: Step 2 versus Step 3,  $\chi^2(1) = .00, p = .99$ . Therefore, third model which included only significant paths was the best fitting model retained for these data.

Table 4.3 represents the model fit indices for model with perceived responsiveness and negative control. The model fit indices also suggested that Model 3 was a good fit to the data. The NFI, IFI, TLI and CFI were .95, 1.00, 1.02 and 1.00, respectively. Finally, the confidence interval of RMSEA indicated that this model was an acceptable fit. Figure 3 displays estimated standardized path coefficients for the final model.

Table 4.3  
*Model fit indices for the model with perceived responsiveness and negative control*

	$\chi^2$	df	p	NFI	IFI	TLI	CFI	90% of CI RMSEA
Step 1: Saturated Model	0.00	0		1.00	1.00		1.00	
Step 2: WFC → Resp., Resp. → Int. P., Resp. → Ext. P. constrained to 0	3.61	3	.31	.95	.99	.97	.99	.05-.18
Step 3: NC → Int. P. constrained to 0	3.61	4	.46	.95	1.00	1.02	1.00	.00-.15

*Note:* NC= negative control, Int. P.= internalizing problems, Ext. P.= externalizing problems, Resp.= responsiveness, CI= confidence interval

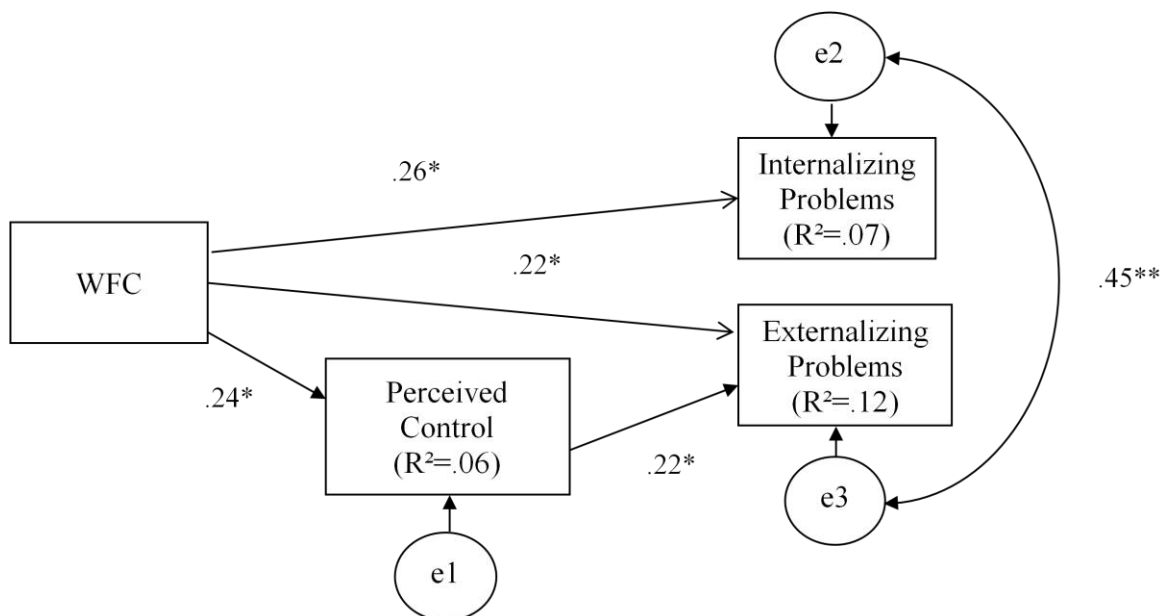


Figure 3. *The standardized estimates of significant paths for the model with perceived data.*  
*Note:* \*  $p < .05$ ; \*\*  $p < .01$

Similar to the results with the observed data, the results with perceived data showed that only the link between WFC and externalizing problems was partially mediated. In this model perceived negative control mediated the relation between WFC and externalizing problems. WFC was positively related to perceived negative control and perceived negative control was positively related to externalizing problems. Mothers who experience WFC were reported themselves as high on negative control and this in turn increased mothers' report of externalizing problems in their children. There was no mediation relating to internalizing problems. Direct path from WFC to internalizing problems was significant.

The proposed model suggested that maternal negative control mediated the relation between WFC and externalizing and internalizing problems. This was partially supported in this model. Perceived negative control partially mediated the relation between WFC and externalizing problems only. The standardized indirect effect of WFC on externalizing problems is .05. That is, due to mediated effect of maternal negative control on this link, when WFC experienced by mothers increased by 1 SD, externalizing problems reported by mothers increased .05 standard deviations.

## Chapter 5

### DISCUSSION

#### 5.1. The Key Findings of the Study

The main aim of the study was to examine the relation between mothers' WFC and externalizing and internalizing problems of Turkish preschool children aged 3-6 years. The parenting behavior of the mothers was considered as a mediator explaining this relation. Responsiveness and negative control were included in the study as two of the most commonly identified parenting behaviors (Gadeyne et al., 2004). The sample was composed of 98 mothers with children from the ages of 3-6 years. Responsiveness and negative control were assessed not only by mothers' self-report but also by observational methods. This is an important methodological strength of the study. Observed and self-report (perceived) data were separately analyzed by path analyses to test the consistency of findings driven from data collected by different methodologies.

The findings revealed that in both models with perceived and observed data, maternal responsiveness and negative control did not **fully** mediate the relation between WFC and children's externalizing and internalizing problems. Observed responsiveness and perceived negative control of mothers partially mediated the relation between WFC and externalizing problems. In addition, WFC was positively and directly related to internalizing problems of children.

### 5.1.1. Findings Pertaining to Internalizing Problems

Findings revealed no significant relation between parenting behaviors (responsiveness and negative control) and internalizing problems. These findings are contrary to what were some studies found in the literature (e.g. Bayer et al., 2006; Colder et al., 1997). It is possible that internalizing and externalizing problems are not affected by parenting behaviors in the same way. Traditional research emphasizes the relation between parenting behaviors and externalizing problems and provides robust and consistent findings (e.g. Gadeyne et al., 2004; Lyons-Ruth et al., 1997; Stormshak et al., 2000). However, studies investigating the relation between parenting behaviors and internalizing problems are few (e.g. Rubin & Mills, 1991) and neither maternal responsiveness nor negative control accounts for most of the variability in children's anxiety or depression symptoms (e.g. MacLeod, et al., 2007; Mattanah, 2001). Future studies should include other dimensions of parenting in addition to responsiveness and negative control to predict internalizing problems. Responsiveness and negative control behaviors of mothers may not be the parenting behaviors that influence the occurrence of internalizing problems in preschool children, but overprotection may. Parental overprotection was found to be associated with childhood anxiety problems (e.g. Moore, Whaley & Sigman, 2004).

Because aggressive behaviors such as fighting, teasing and attacking are more apparent behaviors than internalizing problems, it is more likely for mothers to detect them (Mills & Rubin, 1990). Furthermore, in the collectivistic Turkish context, children are expected to behave in a way that is quiet and calm. Therefore, it would have been possible that mothers whose children were withdrawn or depressed failed to notice internalizing behaviors indicating some maladjustment. However, this possibility was ruled out after

examining descriptive statistics for externalizing and internalizing problems. In both cases, restricted range was not a problem.

### 5.1.2. Findings Pertaining to Externalizing Problems

Although a relation between WFC and internalizing problems through responsiveness and negative control was not found, the relation between WFC and externalizing problems through these parenting behaviors was discovered. Interestingly, the model with perceived data and the model with observed data yielded different results in regards to the mediating role of responsiveness and negative control. Findings from the model with perceived data revealed that *maternal negative control* mediated the link between WFC and externalizing problems, whereas responsiveness did not. Mothers experiencing WFC considered themselves as displaying negative control behaviors such as harsh physical interventions in the case of child misdeed. Confirming the expectation of the study (H1), mothers who experienced WFC perceived themselves as high on negative controlling behavior and these mothers reported that their children exhibited high level of externalizing behaviors. On the other hand, findings from the model with observed data revealed that *maternal responsiveness* mediated the link between WFC and externalizing problems, whereas negative control did not. Mothers who believed they experienced WFC displayed such behaviors as maternal promptness, engagement, sincerity, acceptance, and emotional availability. However, contrary to the expectation (H2), there was a positive correlation between WFC and maternal responsiveness. Mothers who experienced a high level of WFC were high in responsiveness towards their children.



Contrary to what was expected, a possible explanation why WFC was positively associated with observed responsiveness may be about the socioeconomic status of the families. Because mothers had high educational and economic attainments they could have purchased materials, experiences, and services that were helpful to lessen the harming role of WFC (e.g. psychological distress, dissatisfaction with marital, family and life are some of the possible consequences of WFC). Furthermore, they could have accessed to services and materials that are beneficial to children's development and well-being. For example, an assistant who takes care of the household chores can be afforded by high SES families. Children can attend to high-quality daycare centers which provide stimulating, positive and affectionate environments that improve healthy development of children. When child is at home, they can benefit from high-quality home care. High-quality of child care arrangement may lessen the stress mothers may experience. Furthermore, an increased amount of emotional support from the members of well-educated families such as from husbands may help mothers who experience WFC to manage with it and reduce the emotional stress. Importantly, the well-educated mother herself is likely to be equipped with skills and knowledge about how to be a good parent.

An additional explanation can be that these mothers who experienced WFC could have been aware of the negative roles of their inter-role conflict on their children. This awareness may lead them to critically evaluate their parenting. Possibly, because they are overburdened by the effects of WFC in their lives and because they belonged to the high SES they are likely to know good parenting and evaluate their behaviors whether their behaviors are examples of good parenting. They may constantly judge their behaviors as a parent. For example, these mothers may have some concerns such as "Do I behave correct? Am I too permissive towards my child because I don't want to elevate my level of stress and give/let

what he/she wants immediately? Did I overreact last time by shouting when my child insisted on going to park?”. If they are not satisfied with their answers, they may perceive themselves as insufficient parents. In order to compensate for their perceived dissatisfaction with parenting, it is likely that they try to maximize effective parenting (i.e. responsiveness). That’s why, WFC may be associated with high responsiveness, in our sample.

The findings of this study inform research showing that responsive parenting can be a buffer against the negative roles of WFC on externalizing problems. Mothers who experienced WFC reported a high level of externalizing problems in their children. Surprisingly, when maternal responsiveness was included in the model and mediated the relation between WFC and externalizing problems, *the role of WFC on externalizing problems decreased*. In other words, due to the mediated effect of maternal responsiveness in this link, when mothers experienced WFC, their reporting of externalizing problems in their children was diminished. When WFC leads mothers to be responsive, children are less likely to demonstrate externalizing problem than when WFC directly affects externalizing problems. One of the ways to protect their children from the harming effects of WFC is to exhibit responsive behaviors. Although WFC seems to be detrimental for healthy socioemotional development of children, it creates awareness in the mother to adjust her parenting behaviors to increase a responsive relationship with her child which in turn decreases externalizing problems.

As hypothesized, WFC was associated with perceived negative control and in turn perceived negative control was correlated with high level of externalizing problems. Interestingly, WFC was not correlated with observed negative control. WFC may lead inflation in feelings of guilt. Guilt-related inflation in reporting negative control behavior can

be a possible explanation. Mothers may believe when they experience WFC, they behave impatiently towards their children or they punish their children's bad behavior more frequently than when they do not experience WFC. Therefore, they may feel increased guilt. Thus, while they were reporting their control behavior in questionnaire they overestimate the occurrence of negative control (i.e. poor parenting). They perceived themselves as they exhibited high negative control over their children. Actually, when their control behavior was observed in laboratory, they were not as harsh as they reported they were.

### **5.1.3. Findings Pertaining to Parenting Behaviors**

An important strength of the current study is that it relies on both observational and self-report data to assess parental behavior. However, the findings from path analyses of the proposed model revealed that the same model did not replicate when parenting behaviors were assessed differently. This stimulated us to examine the correlations between parenting behaviors assessed by different methodologies. Indeed, perceived negative control and observed negative control was negatively associated. There are three possible reasons why perceived negative control and observed negative control was negatively associated. First, on the one hand, mothers considered a whole bunch of behaviors of their children observed in extended period of time while they were reporting the frequency of each behavior in the questionnaire. The frame of reference of mothers was variety of behaviors in different contexts over long periods of time. On the other hand, in the laboratory mothers considered only one behavior of their children, which was touching the attractive toy shelf. So, the scope of observation differed. Second, Child Rearing Questionnaire included items that referred to severe bad behaviors of children and harsh behaviors of parents. A sample item (for Punishment subscale) was that “*I use physical punishment, e.g. smacking, for very bad*

*behavior*". This kind of parenting such as smacking referred in questionnaire is a harsh behavior to display under observation. In laboratory, they were asked to forbid the child not to touch the attractive toy shelf. The laboratory context was not conducive to display negative behaviors such as physical punishment, social isolation or withdrawal of privileges. The most severe negative control behavior in laboratory can be shaking or handling child roughly, yanking toys, gesturing angrily. Furthermore, mothers may not take the instructions of the experimenter to control child's behavior seriously. Third, during laboratory observations, some mothers may behave in a socially desirable way. Mothers may not display their usual behaviors towards their children.

## **5.2. Limitations and Suggestions for Future Research**

One of the main limitations in the study is the use of the cross-sectional and correlational design which makes it difficult to make causal inferences. Second shortcoming is related to the generalizability of findings. The study sample was recruited from private preschools in Istanbul, Turkey and about 10-15% was recruited through announcements circulated to Koç University staff. The sample belonged mostly to high SES mothers living in the biggest city in Turkey. Most of the mothers held at least a university degree. Maternal education is the best predictor of parenting behaviors (Hoff, Laursen & Tardif, 2002). The role of WFC on parenting behavior and externalizing and internalizing problems of children should be observed also with samples from nonurban, less educated and lower income mothers. A comparison between employed mothers from different socioeconomic backgrounds would give valuable information.

Third, the sample size may have diminished the power to detect true relations among the variables examined here. The marginal relation between WFC and observed responsiveness could have been more significant if more than 98 mother-child dyads had been included in the study. Fourth, twenty mothers out of a total 98 indicated that they did not work full-time outside the home. Future researchers should focus on full-time employees only.

Another potential limitation of the present study is related to the assessments of problem behavior. Externalizing and internalizing behaviors were assessed on the basis of mothers' self-report. Moreover, common-method variance is a possible limitation. WFC, child outcomes and perceived parenting behaviors were collected from the same source, the mother. The common rater used in collecting data may lead to false covariance shared among variables. Future research should use other data sources such as fathers and teachers. Future studies can also explore the relation between WFC and subscales of CBCL. This may show a more detailed understanding of the effects of WFC on separate symptoms of internalizing and externalizing problems. Different types of behavior problems (e.g. depression, anxiety, aggression or delinquency) can be associated with different parenting behaviors (Frick, van Horn, Lahey, Christ, Loeber et al., 1993).

### **5.3. Scientific and Practical Contributions of the Current Study**

The current research as the first scientific study examines whether WFC is related to externalizing and internalizing problems through parenting. Most of the research on WFC has focused on the employees themselves without considering effects on their families. No attempt has been made to examine the relation of WFC to children's development. Even

though negative consequences of WFC have been recognized for the individual himself/herself or for his/her spouse, none of WFC studies so far have considered what happens to children of employees who experience WFC. On the other hand, many researchers in developmental studies have argued the importance person-environment interaction to predict child development (Bronfenbrenner, 2001), however, no attention has been paid to WFC as a stress-producing construct. The findings of this study add to the previous literature by showing, first, that WFC appears to be a detrimental experience for children. Second, despite high WFC, mothers' responsive parenting behavior may prevent children from developing externalizing problems. Third, mothers who experience WFC were perceived as exhibiting high negative control over children's behavior such as slapping the child when he/she misbehaves over children's behavior. Fourth, maternal responsiveness and control cannot explain the association between WFC and internalizing problems. These results partially support the hypotheses of the current study that WFC is associated with externalizing and internalizing problems of preschool children by its relation to parenting behaviors.

This study investigated the relation between WFC of mothers and the externalizing and internalizing problems of preschool children. In order to explain this relation, this study focused on the parenting behaviors of the mothers. Two streams of literature were used as the background in this study: (1) Psychological health problems (i.e. stress and depression) are one of the well-known consequences of WFC (e.g. Frone, Russell, & Cooper, 1992a; Frone, Russell, & Barns, 1996; Parasuraman & Simmers, 2001; Thomas & Ganster, 1995) and (2) There is a strong correlation between maternal psychological health and parenting behavior (e.g. Downey & Coyne, 1990; Lovejoy et al., 2000). Because several decades of research indicate these relations, this study did not test psychological health problems as the mediator between WFC and parenting behaviors. The findings of the current study showed that

although the relation between WFC and externalizing and internalizing problems was moderate, maternal responsiveness and negative control as mediating parenting behaviors in this link was not strong. In fact, maternal responsiveness and control cannot explain the association between WFC and internalizing problems. Parenting behaviors did not provide a strong explanation for the link between WFC and internalizing and externalizing problems. Future researchers could adopt two possible actions. First, empirically testing the underlying stress and depression assumption of the present study could give valuable information. That is, it is possible that psychological health problems experienced by mothers can explain the strong relation between WFC and externalizing and internalizing problems. In other words, it is reasonable to think that not the parenting behaviors but the mothers' stressful events or depressive symptoms explain how WFC is related to externalizing and internalizing problems. Second, guilt associated with parental role performance appeared as an important theme. WFC may create a special awareness among these mothers who may feel guilty as a result of perceived failure to fulfill parental role performance. Therefore, maternal guilt may be a mediator that explains how WFC is related to their children's negative behaviors.

The result showing a strong relation between WFC and externalizing and internalizing problems of children supports the notion of extant developmental psychology studies that indicate maternal employment in itself is not detrimental to children's development. This result also suggests that when mothers experience inter-role conflict between work and family a possible harm to children's socioemotional development may arise. Furthermore, this result adds to the existing industrial and organizational psychology literature by showing the negative consequences of WFC on children's development.

The findings of the current study also contribute to practice and policy making. The results provide insight into execution of organizational policies to reduce WFC. Possible organizational policies could involve providing family-friendly environments and good quality childcare opportunities and promoting flexible work schedules. More importantly, organizations could design training programs on WFC or provide information through websites or brochures to increase the awareness of employees about optimizing positive parenting. That is, employees could learn the natural consequences of WFC and how to overcome them without being too disturbed (such as not feeling guilt). Furthermore, support from an informed husband about the negative consequences of WFC may enhance the relationship between the mother and the child. It is essential to underline the importance of reducing WFC for healthy development of future generations.



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## APPENDIX A

## HAYAT DENGESİ

Lütfen bu sayfadaki soruları yanıtlarken geçtiğimiz 3 ayı düşününüz. Her bölümde, cümlelerin başlarındaki boşluklara ölçekte bulunan uygun rakamlardan birini işaretleyiniz.

## İŞ VE AİLE SORUMLULUKLARINIZLA NASIL BAŞEDİYORSUNUZ?

<b>Kesinlikle katılmıyorum</b>	<b>Katılmıyorum</b>	<b>Biraz katılmıyorum</b>	<b>Biraz katılıyorum</b>	<b>Katılıyorum</b>	<b>Kesinlikle katılıyorum</b>	
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	
1. İşim beni aile aktivitelerimle ilgilenmekten fazlasıyla alıkoyuyor.	1	2	3	4	5	6
2. Aile sorumluluklarımı yerine getirmek için geçirdiğim zaman, genelde işimi yapmamı engelliyor.	1	2	3	4	5	6
3. İşten eve geldiğimde, genelde aileyle ilgili aktivitelere katılmayacak/aile sorumluluklarımı yerine getiremeyecek kadar bitkin ve yorgun oluyorum.	1	2	3	4	5	6
4. İşimde harcadığım zaman yüzünden aileyle ilgili aktiviteleri kaçırmak zorunda kalıyorum.	1	2	3	4	5	6
5. İşimde yaşadığım baskı yüzünden, bazen eve geldiğimde zevk aldığım şeyleri yapamayacak kadar gergin oluyorum.	1	2	3	4	5	6
6. Ailemle geçirdiğim zaman, işle ilgili aktivitelere katılmamı genelde engelliyor.	1	2	3	4	5	6
7. Evdeki stres yüzünden, işte genelde kafam aileyle ilgili şeylerle meşguldür.	1	2	3	4	5	6
8. Aile sorumluluklarımı yerine getirmek için geçirdiğim zama yüzünden işle ilgili aktiviteleri kaçırmak zorunda kalıyorum.	1	2	3	4	5	6
9. Aile sorumluluklarım nedeniyle genelde gergin olduğumdan, işime konsantre olmakta güçlük çekiyorum.	1	2	3	4	5	6
10. İşime ayırmak zorunda olduğum zaman, evimle ilgili sorumluluk almamı ve aktivitelere katılmamı engelliyor.	1	2	3	4	5	6
11. Genelde işten eve geldiğimde duygusal olarak o kadar yıpranmış oluyorum ki, bu benim aileme katkıda bulunmamı engelliyor.	1	2	3	4	5	6
12. İş dışı hayatımdaki stres ve gerginlik genelde işime yansıyor.	1	2	3	4	5	6

## APPENDIX B

## ÇOCUK YETİŞTİRME ANKETİ

Aşağıdaki cümleler çocuk yetiştirmeye ait bazı durumları anlatmaktadır. Bu ifadelerin size ne kadar uyduğunu, "hiçbir zaman" "çok seyrek" "bazen" "çoğu zaman" veya "her zaman" seçeneklerinden birisini seçerek belirtiniz. Doğru veya yanlış cevap yoktur. Amacımız, yalnızca annelerin çocuk yetiştirme konusundaki davranışlarını öğrenmektir.

	Hiçbir Zaman	Çok Seyrek	Bazen	Çoğu Zaman	Her Zaman
1. Çocuğumun kendisine söyleneni açıklamasız yapmasını beklerim.	1	2	3	4	5
2. Çocuğumun daha iyi davranmasını sağlamak için ona tokat atarım.	1	2	3	4	5
3. Çocuğum korkmuş ya da üzüntülü olduğu zaman, onu rahatlatır ve ona anlayışlı davranırım.	1	2	3	4	5
4. Ondan istediğim bir şeyi, çocuğumun oyalanmadan hemen yapmasını beklerim.	1	2	3	4	5
5. Çocuğumdan bir şey istediğimde, onun isteklerine ya da itirazlarına aldırım.	1	2	3	4	5
6. Çocuğuma sevgimi, onu kucaklayarak, öperek ve sarılarak ifade ederim.	1	2	3	4	5
7. Çocuğumun, anne ve babasına sorgusuz itaat etmesini beklerim.	1	2	3	4	5
8. Çocuğumun davranışını kontrol etmek için ona tokat atar veya vururum.	1	2	3	4	5
9. Belirli bir neden olmaksızın, çocuğumu kucaklar veya sarılırım.	1	2	3	4	5
10. Çocuğuma, davranışlarının sonuçlarını açıklarım (örneğin; birisine vurursa onun canı acır veya sıcak tencereye dokunursa eli yanar gibi).	1	2	3	4	5
11. Çocuğum, yanlış davrandığında ona bağırırım.	1	2	3	4	5
12. Çocuğuma bazı şeylerin neden gerekli olduğunu açıklamaya çalışırım.	1	2	3	4	5
13. Çocuğuma, onun beni ne kadar mutlu ettiğini söylerim.	1	2	3	4	5
14. Çocuğum yanlış davrandığında fazla açıklama yapmadan, onu yanımdan uzaklaştırırım.	1	2	3	4	5
15. Çocuğumun, kendisine söyleneni tartışmasız yapmasını isterim.	1	2	3	4	5
16. Çocuğumla benim, sıcak ve çok yakın olduğumuz anlar vardır.	1	2	3	4	5
17. Yanlış davrandığı zaman çocuğuma, sevdiği bir şeyi yasaklarım (Televizyon seyretmek ya da arkadaşlarıyla oynamak gibi).	1	2	3	4	5
18. Çocuğumu dinlemek ve onunla bir şeyler yapmaktan zevk alırım.	1	2	3	4	5
19. Çocuğuma, kurallara neden uyması gerektiğini açıklarım.	1	2	3	4	5
20. Canımı sıktığı zaman, kendimi çocuğumdan uzaklaştırırım.	1	2	3	4	5
21. Çok kötü davrandığında, çocuğuma fiziksel	1	2	3	4	5

	<b>Hiçbir Zaman</b>	<b>Çok Seyrek</b>	<b>Bazen</b>	<b>Çoğu Zaman</b>	<b>Her Zaman</b>
ceza veririm; örnek, tokat atarım.					
22. Çocuğuma, neden cezalandırıldığını veya kısıtlandığını açıklarım.	1	2	3	4	5
23. Çocuğumu kucaklamayı ve öpmeyi severim.	1	2	3	4	5
24. Çocuğumun davranışını düzeltmek için ona fiziksel ceza veririm (örneğin: sarsarım, vururum, çimdik atarım).	1	2	3	4	5
25. Çocuğuma, kuralların nedenini açıklarım.	1	2	3	4	5
26. Çocuğum mutlu olduğunda da, endişeli olduğunda da kendimi ona yakın hissedirim.	1	2	3	4	5
27. Çocuğum itaatkar davranmadığı zaman, ona tokat atarım.	1	2	3	4	5
28. Çocuğum yanlış davrandığı zaman, onunla mantıklı bir şekilde konuşur ve olayın üzerinden geçerim.	1	2	3	4	5
29. Çocuğumla şakalaşır ve oyun oynarım.	1	2	3	4	5
30. Çocuğum itiraz etse bile, önüne koyduğum yemeği sonuna kadar yemesini sağlarım.	1	2	3	4	5

**APPENDIX C****Annenin Çocuğa Duyarlılıđı**

Katılımcı no \_\_\_\_\_ Kodlayan \_\_\_\_\_ Mpg dosya ismi \_\_\_\_\_

1. Etkinlik: Anneyle oda keşfi (6dk)

1 2 3 4 5 6 7

2. Etkinlik: Annenin işi var (15dk)

1 2 3 4 5 6 7

9. Etkinlik: Anneyle bisküvi-kurabiye molası (12dk)

1 2 3 4 5 6 7

11. Etkinlik: Anne- çocuk serbest oyun (6 dk)

1 2 3 4 5 6 7

12. Etkinlik: Oyuncak toplama (10 dk)

1 2 3 4 5 6 7

13. Etkinlik: Anneyle beraber problem çözme (10 dk)

1 2 3 4 5 6 7

## APPENDIX D

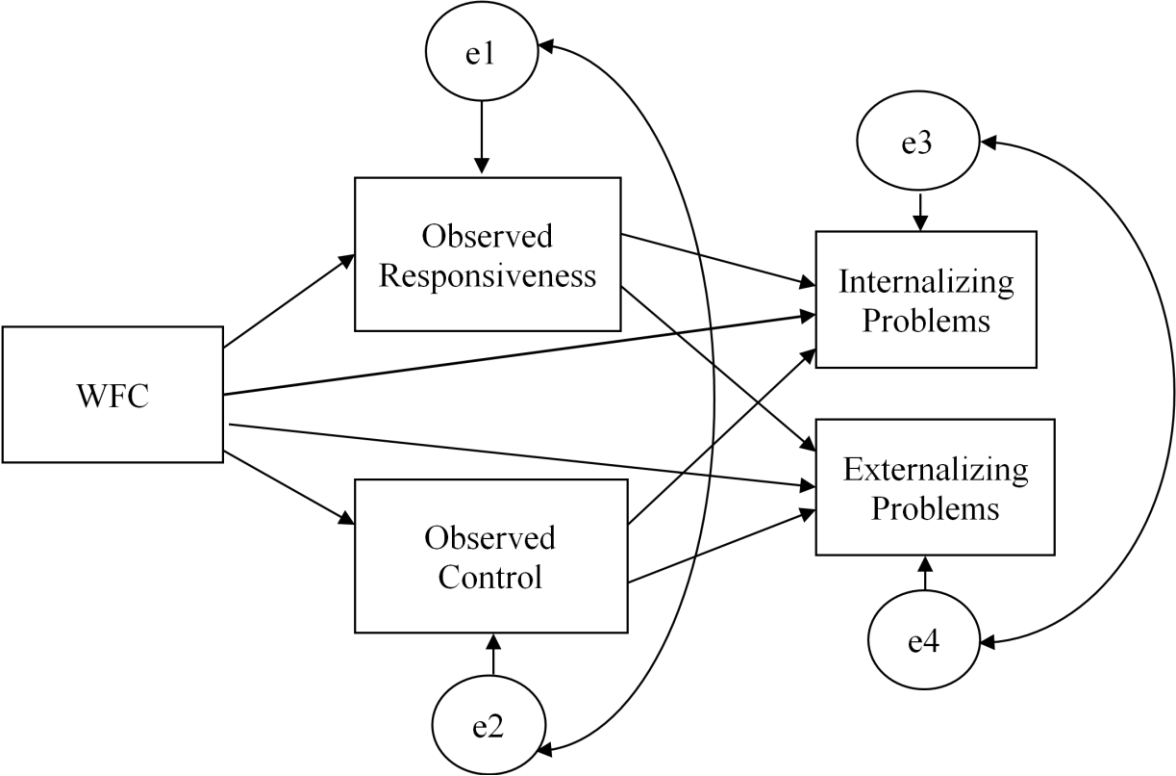
*Mean comparisons of outcomes variables across sample characteristics*

Variable	Work-Family Conflict			Internalizing Problems			Externalizing Problems		
	M	SD	F	M	SD	F	M	SD	F
<b>Age of the child (in months)</b>									
26-48	2.56	.88	.66	13.61	6.33	3.18	14.54	7.46	11.22***
>48	2.40	.86		11	6.91		10.32	4.85	
<b>Sex of the child</b>									
Female	2.52	.79	.47	12.38	6.97	.48	11.40	5.99	.13
Male	2.40	.91		11.41	6.72		11.85	6.21	
<b>Education</b>									
Less than University	2.29	1.01	1.84	13.95	7.16	1.92	12.9	7.81	.59
University	2.37	.82		10.57	6.51		11.17	5.13	
Higher than University	2.70	.78		12.3	6.82		11.56	6.22	
<b>Work schedule</b>									
Part-time	2.13	.59	2.38	10.93	6.12	.36	11.87	6.28	.54
Full-time	2.59	.84		11.72	7.14		11.22	6.25	
Volunteer	2.22	1.02		12.85	6.45		12.85	5.54	
<b>Income (household)</b>									
1000-3000	2.18	.75	1.78	15.25	7.30	1.16	15.62	10.64	1.61
3000-5000	2.98	.80		15	8.36		11.62	4.8	
5000-7000	2.13	.88		11.58	6.65		9.17	4.18	
7000-10000	2.59	.94		11.61	7.13		12.07	6.30	
More than 10000	2.49	.77		10.81	6.20		11.76	5.51	

Note: Mean difference is significant at the .001 level ( $p < .001$ ).

APPENDIX E

The Figure Depicting Saturated Model with Observed Responsiveness and Control



APPENDIX F

The Figure Depicting Saturated Model with Perceived Responsiveness and Control

