PREDICTIVE VALUES OF SOCIAL SUPPORT, COPING STYLES AND STRESS LEVEL IN POSTTRAUMATIC GROWTH AND BURNOUT LEVELS AMONG THE PARENTS OF CHILDREN WITH AUTISM

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ÖZCAN ELÇİ

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Approval of the Graduate School of Social	Sciences
	Prof. Dr. Sencer Ayata Director
I certify that this thesis satisfies all the requor	
	Assoc. Prof. Dr. Nebi sümer Head of Department
This is to certify that we have read this thesadequate, in scope and quality, as a thesis	
	Prof. Dr. A. Nuray Karancı Supervisor
Examining Committee Members	
Prof. Dr. A. Nuray Karancı	
Prof. Dr. Ferhunde Öktem	
Assoc. Prof. Dr. Hürol Fışıloğlu	

ABSTRACT

PREDICTIVE VALUES OF SOCIAL SUPPORT, COPING STYLES AND
STRESS LEVEL IN POSTTRAUMATIC GROWTH AND BURNOUT LEVELS
AMONG THE PARENTS OF CHILDREN WITH AUTISM

Elçi, Özcan

M.S., Department of Psychology

Supervisor: Prof. Dr. A. Nuray Karancı

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The purpose of the present study was to examine the predictive power of some demographic variables and ways of coping, social support and perceived stress level in predicting burnout and posttraumatic growth levels of parents who have a child with autism. Data was collected by administering a sociodemographic form and four self-report questionnaires. These were the Questionnaire on Resources and Stress Short Form (QRS), Posttraumatic Growth Inventory (PTGI), Multidimensional Scale of Perceived Social Support (MSPSS), Ways of Coping Inventory (WCI), and Maslach Burnout Inventory (MBI). 136 adults representing 58 parent couples and 13 mothers and 7 fathers, with 71 mothers and 65 fathers who had a child with autism participated in this study. Data was collected in Özel İlgi Special Education School, Bariş Special

Education School, Ankara University Center of Research for Children with Autism (OÇEM), Bağcılar School for Children with Autism and Hacettepe University Child Psychiatry Clinic.

The factor analysis of the MBI yielded two of the three factors of the original factor structure. The depersonalization factor was not found in this sample. It was found that, mothers were experiencing significantly higher emotional exhaustion than the fathers. The regression analysis results revealed that social support and problem solving/optimistic coping were significant predictors of posttraumatic growth among mothers. Social support, problem solving/optimistic coping, religiosity, age, years of marriage were the significant predictors of posttraumatic growth among fathers. Stress level was the only significant predictor of burnout and emotional exhaustion among mothers. Stress level was a significant predictor of both burnout and emotional exhaustion among fathers, but helplessness/self blaming approach was also a significant predictor of paternal burnout. Social support, problem solving/optimistic approach, and stress level were significant predictors of lack of personal accomplishment among mothers. Presence of a caregiver and helplessness/self blaming approach were the significant predictors of lack of personal accomplishment among fathers.

The importance of the results for clinical interventions with parents and their shortcomings were discussed within the relevant literature.

Keywords: Posttraumatic Growth, Parental Stress, Burnout, Coping Strategies, Social Support, Autism

OTİZMİ OLAN ÇOCUK AİLELERİNDE SOSYAL DESTEK, STRES DÜZEYİ VE BAŞA ÇIKMA STRATEJİLERİNİN, TRAVMA SONRASI BÜYÜMEYİ VE TÜKENMİŞLİĞİ YORDAMA DÜZEYİ

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Bu çalışmanın amacı, otizmi olan çocuk ailelerinde, bazı sosyodemografik değişkenler ile sosyal destek, stres düzeyi ve baş etme yollarının travma sonrası büyüme ve tükenmişliği yordama etkisi ölçülmeye çalışılmıştır. Katılımcılara sosyo-demografik formun yanı sıra, Travma sonrası Büyüme Envanteri (PTGI), Çok Boyutlu Algılanan Sosyal Destek Ölçeği (MSPSS), Baş Etme Yolları Ölçeği (WCI), Özürlü veya Kronik Rahatsızlığı olan Çocuk Ailelerinde Stres Kaynakları Ölçeği (QRS), ve Maslach Tükenmişlik Ölçeği (MBI) uygulanmıştır. Örneklem 58 çift, 13 tek anne ve 7 tek baba olmak üzere toplam 71'i kadın 65'i erkek toplam 136 kişiden oluşmaktadır. Veriler Özel İlgi Özel Eğitim Merkezi, Barış Özel Eğitim Merkezi, Ankara Üniversitesi Otistik Çocuklar

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Bu çalışmadaki örneklemde, MBI'ın faktör analizi orijinal faktör yapısından faklı olarak iki faktör vermiştir. Duyarsızlaşma faktörü bulunmamıştır. Annelerin, babalardan anlamlı olarak daha fazla duygusal tükenmişlik yaşadığı bulunmuştur. Regresyon analizi sonuçları, sosyal desteğin ve problem çözme/iyimser başa çıkma stratejisini kullanmanın annelerdeki travma sonrası büyümeyi anlamlı olarak yordadığını göstermiştir. Sosyal desteğin ve problem çözme/iyimser başa çıkma stratejisini kullanmanın, dindarlığın, yaşın ve evlilik süresinin babalarda travma sonrası büyümeyi anlamlı olarak yordadığını göstermiştir. Annelerdeki toplam tükenmişliği ve duygusal tükenmişliği sadece stres düzeyi anlamlı olarak yordamıştır. Stres düzeyinin, babalardaki hem toplam tükenmişliği hem de duygusal tükenmişliği anlamlı olarak yordadığı bulunmuştur, ancak, çaresiz/kendini suçlayıcı yaklaşımın da babalardaki toplam tükenmişliği anlamlı olarak yordadığı bulunmuştur. Sosyal destek, problem çözme/iyimser başa çıkma stratejisi ve stres düzeyi annelerdeki kişisel başarı eksikliğini anlamlı olarak yordamıştır. Babalardaki kişisel başarı eksikliğini anlamlı olarak yordayan değişkenlerin bakıcı yardımının olup olmaması ve çaresiz/kendini suçlayıcı yaklaşım olduğu bulunmuştur.

Çalışmanın kısıtlılıkları ve ebeveynler için geliştirilecek programlar için önemi literatür ışığında tartışılmıştır.

Anahtar Kelimeler: Travma Sonrası Büyüme, Ebeveyn Stresi, Tükenmişlik, Başa Çıkma Yolları, Sosyal Destek, Otizm To My Family

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X

I hereby declare that all information in this document has been obtained and

presented in accordance with academic rules and ethical conduct. I also declare

that, as required by these rules and conduct, I have fully cited and referenced all

material and results that are not original to this work.

Date: 27.04.2004

Signature:

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CHAPTER 1

INTRODUCTION

The birth of a child puts some important roles on the members of the family, especially the parents. The child within the family system can be a source of joy for the parents. The child also represents a way for the parents to fulfill their own dreams. According to Kağıtçıbaşı (1980), the new child in the family acts as a completing factor. In Turkey, the child is also seen as a source of financial benefit in his or her adulthood. It is proposed that, the family's development has parallel lines with the developmental stages of the child (Akkök, 1997). However, the child who is less than perfect or with developmental delays may be very frustrating for the families. When the children are disabled, they need additional physical and personal attention, which has consequences for all the members of the family. Moreover, the child with a handicap is far from fulfilling the family's expectations. As a result, parents may face with a crisis of changed expectations.

It is proposed that, the parental reactions to the disability of the child may include the sequential stages such as shock, denial, anger, bargaining, depression, guilt, disappointment, and adjustment (Valman, 1981, as cited in Shapiro, 1983). The diagnosis of the child as having a severe disability can be perceived as a traumatic event by the family (Turnbull & Turnbull, 1986, as cited in Symon, 2001).

Children with a disability may disrupt family routines, may require extra care, and create new stress in family relationships. The impact of disability cannot be restricted to individuals with disabilities but affects all family members in some degree (Crnic, Friedrich & Greenberg, 1983). Having a child with mental disability cause a strain on financial burdens for medical specialists, diagnostic tests, special education, and special treatments. Since caring for a handicapped child is demanding and difficult and requires additional effort, it is not surprising that the parents of handicapped children report more stress than the parents of nondisabled children (Chetwynd, 1985; Kazak & Marvin, 1984). Among the families of handicapped children, parents who have a child with autism have reported the greatest levels of stress (Boyd, 2002).

The stress experienced by the parents and adjustment depends on some objective and subjective factors, including severity of the disability, parents' appraisal of the situation, and their coping resources (Dyson 1991; Floyd & Gallagher, 1997; Gallagher, Beckman, & Cross, 1983).

Because of experiencing high levels of stress due to rearing a child, it is found that the parents experience burnout (Freudenberger & North, 1986; Pelsma, Roland, Tollefson, & Wigington, 1989).

There is a wide literature about families of handicapped children, which show that these families are at risk of experiencing more stress in comparison to the normal children's families. Most of these researches have documented adverse effects of the handicapped child on the family system. However, there are few studies, which examined positive experiences that a handicapped child may generate in the family system. The persons can experience positive outcomes because of dealing with the severe stress and coping efforts.

In the present research, burnout levels of the parents and their perceived benefits from caring for a child with autism were investigated. The relationship of coping strategies, perceived level of social support, stress levels, and sociodemographic variables with burnout and posttraumatic growth were studied. Definition of autism and its possible effects on the family, factors related to burnout and posttraumatic growth will be presented separately in the following sections. Subsequently, the aims of present study, major expectations, and importance of the study will be presented.

1.1. Autism

Autism is characterized by the presence of severe impairments in social interaction, communication and restricted repetitive mannerisms, interests, behaviors, and activities (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition [DSM-IV]; American Psychiatric Association, 1994; Piven & Palmer, 1997; Koegel & Koegel, 1995, as cited in Symon, 2001). Although children with autism may not show all the same symptoms and

deficits, they tend to share some common features. First, they have failure in social interaction, which includes failure in maintaining eye contact, failure to develop peer relationships, lack of spontaneous joy or interest, and lack of social or emotional reciprocity. Second, they have problems both in verbal and nonverbal speech, sometimes the verbal language may be nonexistent. They have stereotyped, repetitive, idiosyncratic language. Finally, the children with autism have stereotypic and repetitive behaviors such as hand flapping and spinning, inflexibility and rigidity about the changes in their surrounding and routine, and preoccupations with parts of objects. Most of the children with autism have been found to have mental retardation in some level. The ratio of males is found to be four times of females (Crighton, 1998; Koegel & Koegel, 1995, as cited in Symon, 2001; Newsom, 1998, (p.416); Tinbergen & Tinbergen, 1983, (p. 9-10)).

1.1.2. Being a Parent of a Child with Autism

Caring for a child with a handicap may be very difficult for parents. When the symptoms of autism gets clear the parents have confusion because of the uncertainity about their children. The parents may have feelings of fear, rejection, or shock after the diagnosis is made by the professional following the assessment of the child. Unless the parents are given some hope, they may have a severe grief reaction (Lainhart, 1999). Seligman, (1985) proposes that the diagnosis of the child with a developmental disorder is sometimes viewed as the death of the expected normal child. Most parents experience the mourning

process but the stage progression and/or the length of the stages may vary from person to person. The parental mourning process includes the following stages; shock, denial, guilt, isolation, panic, anger, bargaining, acceptance and hope (Drotar, Baskiewicz, Irvin, Kennel, & Klaus, 1975, Valman, 1981, as cited in Shapiro, 1983).

It is clear that a child with autism will have a great effect on the life of the parents. Parenting a handicapped child may yield some additional stress domains, such as negative reactions from others, less time to engage in leisure activities, daily management of disruptive behaviors, caregiving responsibilities, and concerns about the future of the child's life after the parents are no longer able to care (Beavers, Hampson, Hulgus, & Beavers, (1986); Kazak & Marvin, 1984; Turnbull & Turnbull, 1986, as cited in Symon, 2001).

The stress domains that the family of the handicapped child may face can be summarised as;

- a) behavioral level : family need to provide immediate care or specific special education, arrange transportation for treatment and/or education, alter previous scheduling time and social activities because of excessive time demands and meet new financial needs,
- b) affective level: family may experience negative emotions, namely grief, anger, guilt, helplessness and isolation, stress, and burnout,
- c) phsical and sensory level: somatic symptoms may arise due to the crisis,
- d) inter-personal level: the family may have to deal with the labeling and so the stigmatization. This may result in a sense of isolation,

e) cognitive level: the family has to learn new medical information about the disability and they have to manage the effects of the diagnosis on their previous beliefs and life expectations. The family also has to face the concerns about the child's dependency (Fortier & Wanlass, 1984; Rodrigue, Morgan, & Geffken, 1990; Wallander, Pitt, & Mellins, 1990).

Turnbull & Turnbull, (1986, as cited in Symon, 2001) propose that when a child is diagnosed as having a severe disability the parents experience similar cognitive processes to those individuals who have experienced a traumatic event. Similarly, Zucman (1982), claims that the professionals in the field of rehabilitation, should be aware of the psychological trauma experienced by the parents when informed about their child's disability.

1.2. Burnout

1.2.1. Vocational Burnout

Freudenberger, is the first researcher who used the term "burnout" in 1974, in his article titled "personnel burnout". He identified burnout as a problem affecting volunteers working in a health care agency. He observed that the volunteers' motivation and passion for the work decreased gradually and they experienced several mental and physical symptoms. These volunteers have claimed that they experienced feelings of being useless and incompetent despite the fact that they helped lots of people. In order to define their feelings,

they have used the term burnout (Paine, 1982). Freudenberger and North (1986), describe burnout as, "an exhaustion resulting from excessive inner or environmental demands, and it depletes person's energy and inner resources. Great levels of stress accompany burnout and effect one's motivation, attitudes and behavior" (p 9-10). Pines and Aronson (1988, as cited in Figley, 1998) defines burnout as a state of physical, emotional and mental exhaustion caused by the long term involvement in emotionally demanding situations.

After Freudenberg's first studies it was Christina Maslach, a social psycologist, who was interested in emotional arousal of human service workers who put emotional distance between themselves and their clients (Procaccini & Kiafaber, 1983). Maslach has emphasised the depersonalisation feature of burnout and she has claimed that the human service workers could act with a negative attitude toward their clients.

The staff members in human services and educational institutes are required to work long hours with the client's psychological, physical, and social problems and they are expected to provide aid for them. Because of such type of interaction they can be charged with heavy psychological burden and with some negative emotions, such as anger, fear, or despair. In the absence of the solutions or the ambiguity of solutions the situation can be additionally stressful which can lead to burnout. Burnout is a sydrome including three main subdomains, namely, emotional exhaustion, depersonalization, and reduced sense of personal accomplishment. Emotional exhaustion is the key concept of the burnout sydrome and refers to the depletion of the emotional resources.

Depersonalization refers to the cynical and negative feelings and attitudes toward clients, and reduced sense of personal accomplishment refers to the tendency to evaluate oneself and one's accomplishments negatively (Maslach, 1982; Maslach & Jackson, 1986). In 1982, Maslach and Johnson introduced Maslach Burnout Inventory (MBI), a standardised objective mesaurement device to assess burnout (Maslach & Jackson, 1985).

Burnout is a risk factor not only for work-related attitudes such as turnover, absenteeism and low morale, but also for the physical and psychological health. Burnout is associated with alcohol and drug abuse, marital and family conflict, and psychological problems (Barnett, Brennan, & Gareis, 1999).

The studies about burnout includes staff from different human service departments, such as nurses (Boyle, Grap, Younger, & Thornby, 1991; Ceslowitz, 1989; Constable, & Russell, 1986; Ergin, 1992; Fagin, Carson, Leary, De Villiers, Bartlett, O'Malley, West, McElfatrick, & Brown, 1996), social workers (Anderson, 2000; Davis-Sacks, Jayaratne, & Chess, 1985; Himle, & Jayaratne, 1991), teachers (Burke & Greenglass, 1993; Cherniss, 1988; Cheuk, & Wong, 1995; Nagy, & Davis, 1985; Savicki & Cooley, 1982; Torun, 1995), special education teachers (Stevens, & O'Neill 1983; Sucuoğlu, & Kuloğlu, 1996;) officers (Dignam, Barrera, & West, 1986), AIDS volunteers (Maslanka, 1996), doctors (Ergin, 1992; Yaman & Ungan, 2002), police officers (Torun, 1995), state officers, psychologists and psychiatrists (Maslach & Jackson, 1985).

In these studies, different factors relating to burnout, such as workplace conditions, demographic variables, and psychological features of the participants namely hardiness, coping strategies, stress levels, and social support have been studied. Burke & Greenglass (1993), conducted research with 833 teachers to examine their burnout levels using four groups of predictors. The predictors were demographic and situational variables, work stressors, role conflict, and social support. The results revealed that, work stressors were the best predictors of burnout, and role conflict and decreased levels of social support had little but significant effect on the burnout.

Maslanka (1996), found that, staff support had a stronger relationship than the demographic variables with the AIDS Volunteers' stress and their burnout. In another study, which was conducted with 657 Israeli managers and human service professionals, Etzion (1984), found that burnout was positively correlated with stress and negatively correlated with social support. Hardiness, ways of coping, social support and burnout among 103 critical care nurses were assessed, after conrolling for the effect of the working conditions, it was found that burnout was negatively related to social support and hardiness but positively related to emotion-focused coping (Boyle et al., 1991). Similar results were taken in Ceslowitz's (1989) study, which consisted of 150 randomly selected nurses. Nurses who experienced increased levels of burnout used more escape/avoidance, self-controlling and confronting coping styles than the nurses who reported less burnout. The nurses who experienced decreased burnout reported more frequent use of planful problem solving, positive

reappraisal and seeking social support coping styles than the nurses who reported higher levels of burnout.

In another study, 648 mental health nurses were surveyed. The main stressors for the staff were staff shortages, health service changes and poor morale. The ones which had highest scores on MBI, had the lowest scores on the Cooper Coping Skills Scale and they had higher alcohol consumptions (Fagin et al., 1996).

It can be seen that the phenomena of burnout has been widely studied in the human service area. Several common factors of burnout attract attention. These are work conditions, the stress level, social support and coping styles.

1.2.2. Parental Burnout

Despite the fact that the stress and components of stress has been videly studied among the parents of the handicapped children, the experienced burden of and burnout among the parents of the handicapped children has not been studied frequently. The caretaking role of parents can be described differently from the formal caregiver staff and it is certain that parents are not "professional non-uniformed caregivers". The close contact with the handicapped child and emotional attachment is common and this closeness may result in emotional exhaustion as well as burnout (Almberg, Grafström, Krichbaum, & Winblad, 2000). However, recently, the researchers have begun

to show more and more interest in experienced burden and burnout phenomena among different samples, such as caregivers of people with Alzheimer Disease or stroke patients and parents of handicapped children. There are few empirical studies about the parental burnout (Duygun, & Sezgin, 2003; Figley, 1998; Pelsma et al., 1989; Procaccini & Kiafaber, 1983).

Family burnout, refer to the disharmony among the members of the family and breakdown of the commitment to work together resulting from crisis and traumatic events which cause exhaustion among members of the family (Figley, 1998). Figley, also uses the term "compassion fatigue" to refer the family burnout.

According to Procaccini and Kiefaber (1983), parental burnout occur as a function chronic stress due to encountering with persisting demands of the family's needs. These persisting demands depletes the energy and motivation of the parents and they may experience the emotions of self-blame and anger.

Burden can be described as the total of the practical difficulties and psychological pain that the caregiver experiences during the caregiving process. Objective burden refers to both controlling the hostile and/or unpredictable behaviors of the child and assisting the daily activities of the child because of her/his lack of these abilities. Subjective burden refers to the negative emotions namely, stress, tension, anger, worry, sadness, feelings of shame and guilt (Schwartz, & Gidron, 2002). According to Kasuya, Polgar-Bailey, and Takeuchi (2000), caregiver burnout is the final step in the

progression of caregiver burden, where the experience is no longer healthy for both the caregiver and the person receiving care.

In a recent study, the burnout level of the relatives of psyciatric patients were assessed. 119 members of a family support group and for the control group 45 relatives, who had joined just one-session information meeting, participated. The family support group had significantly less scores on two of the MBI subscales, emotional exhaustion, and lack of personal accomplishment as compared to the control group (Stam & Cuijpers, 2001).

Almberg, Grafström, and Winblad, (1997), conducted research with 46 relatives of demented elderly, to find out their coping styles and assess their burnout level. The ones who had higher scores on burnout, used emotion focused strategies (grieving, worrying and self-accusation) more frequently. They were also the only ones using wishful thinking. The ones who had less burnout level used more often the problem-focused strategies, namely confronting the problem, seeking information and seeking social support. In another study to find out the risk group for burnout, 212 caregivers of stroke patients were assessed. The results revealed that, women, younger caregivers, caregivers in poorer physical health were risk groups. Perception of positive self-efficacy, satisfaction with social support and use of confronting as a coping strategy were negatively related with burnout (Van del Heuvel, 2001).

Duygun, & Sezgin (2003), compared the mothers of mentally handicapped children and mothers of healthy children to find out the effects of stress symptoms, coping styles and social support on their burnout level. They found

that cognitive affective factor of the Stress Self-Assessment Checklist and submissive style coping and seeking social support were the predictors of burnout among the mothers of mentally handiapped children.

In conclusion, results of these studies point out that, using active coping styles is related to decreased levels of burnout. On the other hand, using emotion focused coping styles is related to higher levels of burnout. Additionally, presence of social support is another important factor in predicting burnout.

1.2.3. Variables Related to Parental Burnout

1.2.3.1. Stress

Stress is a videly used term in our everyday life. It takes different meanings depending on the context. Selye (1956, as cited in Figley, 1998), is the first researcher who intruduced the "stress" term in to the scientific area. He defined stress as the nonspecific reactions of the body as a result of the demands upon the person. According to Folkman and Lazarus (1985), stress is the result of the disturbed relationship between the person and the environment due to the external and/or internal demands exceeding the individual's resources for managing them. Depending on the imbalance between the person and the environment we experience more or less stress (Lazarus & Lazarus, 1994).

The impact of disability affects not only the retarded individual but also the members in the surrounding, especially the members of the family. The carer's stress is important because it affects not only the parent's well-being but also its' outcome is important for the child (Quine & Pahl, 1991).

The literature comparing the families of handicapped and normal children show that parental stress is higher in the handicapped group. Chetwynd (1985), compared 91 mothers of children with Down Syndrome, mental retardation, and cerebral palsy with the mothers of non handicapped children. Significantly higher levels of stress was present among the handicapped group. Similar findings were present in another study conducted by Wilton, & Renaut, (1986), the mothers of handicapped children had higher scores on 12 of 15 subscales of the Questionnaire on Resources and Stress. In another study, mothers of mentally retarded children showed higher levels of depressive affect than did the healthy group or the chronically ill group (Cummings, Bayley, & Rie, 1966).

Among the parents of handicapped children the mothers of children with autism are more prone to be negatively affected by stress resulting from caregiving of a disabled child (Boyd, 2002). Konstantareas (1991), claims that the higher degrees of stress in the families of children with autism, is because of the characteristics of autism. The autistic group may have some similar features with learning disabled and delayed children in terms of some developmental domains, but additionally, the children with autism present communication and socioaffective deficit, and streotypical self stimulatory and bizzare behaviors. Kazak & Marvin (1984), point outs that some children with autism may be more frustrating because of the limited communication skills.

Rodrigue et al. (1990), compared the mothers of children with autism and mothers children with Down Syndrome (DS) with the mothers of non-handicapped children. The mothers of the handicapped children had greater scores than the normal group in terms of disrupted planning, caretaker burden,

and family burden. Sanders & Morgen (1997), conducted a research with 54 families of autistic children, children with DS and normal group, 18 families representing each group. The results revealed that the parents of autistic children showed significantly higher stress level than DS group and control group. In a similar study the caregivers of children with pervasive developmental disorder (PDD) were compared with DS and normal group. The caregivers of children with PDD were found to score higher on the distress and depression than the DS and control group. Another finding in this research was that, the higher stress level of the caregivers of the children with PDD was persistent in three years follow-up (Fisman, Wof, Ellison, & Freeman, 2000). Donovan (1988), compared 36 autistic and 36 mentally retarded children's mothers and demonstrated that the parents of autistic children showed significantly higher level of family stress.

The research literature which examines the sources of parental stress in families of handicapped children show that, both the type and the severity of the disability, the child's behavioral features, child's age and child's gender, socio-economic status (SES) of the family are all important factors that affect the stress level. But the results may sometimes be incongruent, probably due to working with small samples.

Gallagher et al., (1983), proposed that the parental stress was related to not only the age and gender of the child but also to the severity of the disability and caregiving demands of the child. Dyson (1991), conducted a study with 55 families of developmentally handicapped children and 55 families of healthy

children. The results revealed that family stress is related to both the amount of the child's speacial needs and also to the parents' pessimism and negative view of child's limitations.

Floyd & Gallagher (1997), compared 112 parents of children with mental retardation (66 of which had no behavioral problem) with 73 parents of children with physical disability or chronic illness (diabetes, asthma, spina bifida), and 46 parents of children with non-disabled but with behavior problems. They concluded that the behavior problems of the child was the best predictor variable of parental stress, not the disability type. Beckman (1983), emphasized similar factors. Parental stress was significantly related to some of the child characteristics, such as responsiveness, temperament, repetitive behavioral patterns, and unusual caregiving demands. On the contrary, Wallander et al. (1990), found different results about the child characteristics. In their research, 131 mothers of chidren with either cerebral palsy, spina bifida, or hearing problems participated. They found that there was no association between the child's functional independence and maternal stress and mother's adaptation social domains.

Gray (2003), speculated that women tend to have more stress and depression than man when they encounter with a stressful situation, especailly, when this stressful situation icludes a person whom they are in emotional relationship, like family members. On the other hand, men seem to be more stressed about financial problems. Herken, Turan, Şenol, & Karaca (2000), compared 43 parents of children with DS with 42 parents of non handicapped

children. They found that the depression scores of the mothers were higher than the fathers among the DS group. On the other hand, different results were found in another study. In Baker's study (1994), 20 sets of parents of children with ADHD participated. It was found that there were no differences between the mothers and fathers in terms of parental stress. Parenting stress decreased as the number of years of marriage increased. The parenting stress was higher among the ones whose socio-economic level was higher.

Frey, Greenberg, & Fewell (1989), conducted research with 48 mothers and 48 fathers of children with DS, cerebral palsy, and William's syndrome. The results revealed that the parents who had male children and parents whose children had poor communication skills showed higher levels of stress.

It was found that, religious commitment is related to great acceptance, positive adaptation, and less stress among parents of handicapped children (Levinson, 1976, as cited in Crnic et al., 1983)

Despite some incongruent findings, it is considered that, age and gender of the child (parents of male children have reported higher stress), the severity and type of disability, behavior problems of the child, SES of the parents, years of marriage, appraisal of the parents, religious commitment of the parents are all related to parental stress.

1.2.3.2. Stress and Coping

Coping is a complex process related to both personal characteristics and life conditions. When the personal resources exceed the environmental demands, stress is low or absent. Some conditions such as war combat, natural disasters, and loss of a loved one are universal stressors. However, the environmental situations are not stressful for everyone. Stress depends on both the external conditions and on the vulnerability of the individual and his/her defense system. The circumstances of stress may include both uncommon life events and common daily hassles, which may include social obligations, financial concerns, work issues and maintenance of house etc. (Lazarus, 1976). Parental stress is related to both parental emotional functioning and coping ability. Among the parents of handicapped children, some cope better than the other and react differently to the same stressors. One of the factors that explain this issue may be the coping style.

Coping is defined as the use of thoughts and actions, regardless of how well it works, to manage the stressful situations and negative emotions related to stress. If, coping succeeds the person is no longer in jeopardy and reasons for emotional distress disappear. The things that the people do in order to alter the stress or to cope, depends on the situation being faced, the threat, the personality and beliefs of the persons and the immediate results (Lazarus, & Lazarus, 1994).

Coping is composed of two stages of appraisal process, namely primary and secondary appraisal. The appraisal process is not static rather it emerges and reemerges on the transactions of the conditions between the environment and the person. Primary appraisal is the process by which the environment is evaluated as either irrelevant, positive or stressful. Primary appraisal addresses whether and how an encounter is relevant to a person's well being. based on the personal relevance of what is happening, which in turn depends on goal commitments. Through primary appraisal, the person judges whether an encounter is irrelevant, benign-positive, or stressful. Irrelevant encounter has no effect on the well being of the person and the person has no gain in the outcome. In a benign-positive encounter positive results are possible. The stressful appraisals are characterized by threat, challenge or harm-loss. Threat refers to the potential for harm or loss; challenge refers to the potential for growth, mastery and gain; and harm-loss refers to injury that the person already experienced (Folkman & Lazarus, 1985). Threat depends on the extent to which a person is capable of mastering danger. When the person feels capable of preventing harm, there will be no threat or it will be minimal. When the person feels weak, the threat increases depending on the anticipated harm.

Secondary appraisal refers to the evaluation of evaluation of the person's options and coping resources, which can be used to deal with the threat. The more perceived resources are, the more efficiaous will be the coping. Lazarus (1991) proposes that the possible key questions are "are my coping resources

adequate to manage things?", "am I helpless?", "what are the possible results?" (p.142).

Primary and secondary appraisal processes are interdependent. For example, if coping resources are seen as adequate, then threat perception may diminish. Or the nonthreatening event may become threatening if the coping resources turn out to be inadequate (Folkman, & Lazarus, 1985).

Coping resources may include both personal and situational factors such as high self-esteem, better social networks and personal support, which have been found to be effective in buffering the stress and mediating better psychological adjustment (Bright & Hayward, 1997; Folkman & Lazarus, 1985).

The five types of coping resources are defined by Folkman et al. (1979, cited in Crinic et al., 1983).

- a) parental health/energy: physical and emotional wellbeing
- b) problem solving skills to search and analyze information and generate diffrerent actions

c)social networks: potentially supportive relationship which facilitates positive adaptations

- d) utilitarian resources including SES and income variables
- e) general specific beliefs like self efficiacy, self-esteem and religiousity

Coping strategies can be divided in two main categories. The first is the emotion focused coping strategies which refers to the attempts to regulate the negative emotions that occur as a result of stressful conditions. If the problem solving coping fails or even it may not be used because the problem is too resistant to change, the person generally uses the emotion-centered coping strategies to overcome the distressing emotions which occur due to the problem. Emotion centered coping strategies are used to control distress and the dysfunction, where there is little or nothing else to be done (Folkman, & Lazarus, 1985).

Problem focused coping refers to the the overt behavioral efforts to alter or to control the problem (Billing & Moos, 1981, as cited in Bright & Hayward, 1997; Folkman & Lazarus, 1985). According to Folkman and Moskowitz (2000), problem solving coping refers to thoughts and actions serving to solve the causes of distress and is more commonly used when the personal control over the result is higher. If the situation is appraised as amenable to be prevented or to be corrected, the use of problem solving coping is more common.

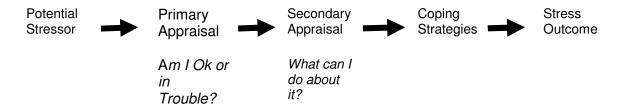


Figure 1. Folkman and Lazarus' Model of Stress & Coping (Quine & Pahl, 1991).

Luecher, Dede, Giten, Fennel, & Maria, (1999), conducted a research with 49 parents of children with Joubert syndrome and they found that the caregiver burden was not related to the severity of the child's illness. Rather the use of palliative coping skills, namely wishful thinking, self-blame, and avoidance was related to burden. The use of problem focused coping and social support seeking coping were found to be used significantly more often than the use of palliative coping styles in this sample.

In another study, it was found that the parents of handicapped children who were in early intervention programmes used the problem focused coping strategies more (58 %) and emotion focused coping styles less (42 %) (Judge, 1998).

Frey et al. (1989), found that avoidance coping and wishful thinking was related with high distress among both 48 fathers and 48 mothers of handicacpped children.

Park (1998a), proposed that personal characteristics directly influence the positive outcomes (such as thriving and growth) but those characteristics may be mediated by the appraisal and coping processes. Lazarus 'transactional model of coping posits that peoples' interpretations of an event determine the emotional reactions and coping efforts of them. On the other hand, characteristics of stressful situation, and personal and social resources also influence the people's interpretation. So, the outcomes of stressful events are

determined by person's demographic features and personality, worldviews, social support and previous experience.

As a result, the experience of stress not solely depends on the stressfull condition itself, rather, how the persons act, namely their coping strategies are also important in terms of the experienced stress. Therefore, coping strategies of the parents have been evaluated in the present study, to examine their predictive power on the burnout and growth experienced by the families.

1.2.3.3. Stress and Social Support

According to Boyd (2002), social support refers to a multidimensional construct which includes emotional and informational sharing, physical and instrumental help, and attitude transmission. Thoits (1986), defines social support as a total of instrumental, informational and emotional aids, fullfilled by the significant others in the person's life who is under stres. The significant other may refer to all of the possible support sources such as family members, close friends, neighbours, relatives, and work friends. Lazarus (1990), emphasizes the perceived feature of social support and claims that what is supportive lies beyond support's meaning for the receiver. Folkman and Lazarus (1985), take social support as a part of coping resource and define three kinds of support;

 Emotional support which contributes to the feeling that one is loved or cared about,

- 2. Tangible support which involves assisting about service or material goods,
- 3. Informational support, which include giving information and advice.

According to Crnic and others, getting sufficient social support increases personal resources, and diminishes the gap to perceived demands (Crnic & Greenberg, 1990; Crnic & Booth, 1991). Koeske and Koeske (1990), found a buffering effect of social support on parenting stress and they showed that parenting stress was associated with lower role satisfaction and maternal self-esteem and with more extensive psychological and somatic symptomatology under low support conditions.

According to Boyle et al. (1991), social support is the belief that one is cared for, esteemed and belong to a group. Social support may have two functions: it can either prevent the stressful situation or it may assist individuals to appraise stressful events as less threatening.

In a cross-cultural study, Shin (2002), compared 38 American and 40 Korean mothers of children with mental retardation and proposed that when the social support exists the mother experienced less levels of stress. Rimmerman, & Duvdevany (1996), conducted a research with Israeli parents who applied for out-of-home placement of their mentally retarded children. They found that the emotional burden of care increased as the child grew up. Additionally, they found that among the families who applied for a out-of-home placement of their

mentally retarded children who showed high level of stress reported less social support.

In summary, social support seems to be effective in reducing the experienced stress. Sense of being understood or knowing that there are some people standing by the person may let the person feel stronger and thus, may reduce the stress. Because of this, social support was included in the present study.

1.2.4. Critiques of Studies about Parental Stress

The literature about the parents of handicapped children has given very much importance on the stress experienced by these parents and negative outcomes. The studies that focus on the rewards of the caregiving are very few. Yau & Li-Tsang (1999), proposed that despite the fact that the birth of a child with developmental disability may impose extra demands on the parents, some adaptive and successful functioning can also occur in these families. However, this has not received enough attention, similarly, Byrne, & Cunningham (1985), claimed that, the assumption that psychological impairment is an inevitable consequence for the familes of handicapped children, has turned to an overgeneralization. This lead to the conception that this group is a homogenous group.

According to Shapiro (1983), parents are troubled about the tendency of the professionals to put too much emphasis on the negative aspects of the experience, and underestimate their capacity of adjustment.

Folkman and Moskowitz (2000), claim that, altough studies about stress have been mainly about the negative outcomes, there is a growing trend of positive features of the stress process. Greenberg et al. (1994, cited in Scwartz & Gidron, 2002) proposed that the caring for a mentally ill child has led some parents to personal growth and self-awareness. They reported that, they feel more tolerant, stronger, and less judgemental. It was also found that the divorce rate among parents of autistic children were significantly lower than the average of the population (Akerley, 1984, as cited in Rodrigue et al., 1990). The possible positive outcomes of having a disabled child will be discussed in the following section.

1.3. Posttraumatic Growth

As mentioned earlier, the literature on stress and coping has focused mostly on the negative consequences of the stressful events. The positive outcomes resulting from coping efforts has been recently taken into consideration. To define such positive outcomes after a severe stressful event or a trauma, different terms are used by different authors, namely, "perceived benefits", "thriving", "stres-related growth" or "posttraumatic growth" (Park, Cohen, & Murch, 1996; Tedeschi, Park, & Colhoun, 1998). Park (1998b), makes a

distinction between growth and thriving. According to Park, growth refers to the positive changes (i.e. changes in relationships, coping skills, philosophy of life) that a person experience in the aftermath of the crisis or trauma. On the other hand thriving refers to a higher level and stress-related growth is likely to lead to thriving.

Individuals tend to have assumptions like believing in a just world or seeing themselves as invulnerable (Janoff-Bulman, 1992, as cited in Tedeschi, Park, & Colhoun, 1998). The traumatic experiences shatter those assumptions and after experiencing trauma, people seek to reestablish the equilibrium in their life, which is not apart from a process of reevaluation. This process may result in personal growth referring to greater appreciation of relationship with others, increased personal strength, the evaluation of new possibilities in life and an enhanced spiritual connection (Cadell, Regeur, & Hemsworth, 2003; Tedeschi, & Calhoun, 1996).

Calhoun & Tedeschi (1998), proposed that, perceived growth of the individuals who experience a traumatic life event, tends to be in three main domains:

- Changes in perception of self: self perception of the individual can be changed according to persons' vulnerability to difficulties in life and capacity of coping with difficult challenges.
- Changes in relationship with others: Increase in interpersonal and emotional closeness with others, increase in expressing emotions, increase in understanding of the other sufferers.

 Changes in philosophy of life: Change in life priorities, wisdom and interest and openness to spiritual matters.

Siegel & Schrimshaw (2000), proposed that people under high stress, like women suffering from HIV/AIDS at various stages of disease progression, could find positive meanings and develop better behaviors. In their study, they studied 54 women who were living with HIV/AIDS. A surprisingly high number of women reported that HIV/AIDS had changed their lives in some positive way. Qualitative coding of the interview transcripts revealed that over 83% of the women reported at least one positive change that they attributed to HIV/AIDS, with most reporting multiple positive changes. Those positive changes included health related behaviors such as quitting smoking, decreasing alcohol consumption, and following a healthier diet. They have also reported an increment in their religious growth and better relationship with their family members.

Folkman (1997), conducted research with 314 gay men who were caring for a partner with AIDS, to assess how they coped with the severe stress. The spectacular finding of their research was that, the participants reported not only intense negative psychological states, but also they experienced positive psychological states throughout caregiving and bereavement. The positive psychological states were associated with four types of coping processes:

 Positive reappraisal, which refers to the use of reframing a situation to see it in a positive way.

- Problem-focused coping, refers to the goal-directed coping strategies such as gathering information, decision making, planning and resolving conflicts to solve or manage problems which create distress.
- Spiritual beliefs and practices: spirituality/religiosity which facilitate positive reappraisal of the difficult situation
- Finding a positive meaning.

Thus, persons can perceive benefits in the aftermath of the stressful conditions and/or traumatic events. The positive changes may include three main domains, namely about the self, about the relations of the person and about the philosophy of life.

1.3.1. Variables Related to Posttraumatic Growth

The variables affecting the level of growth of a person is very much related with the variables associated with stress. In a study with 72 husbands of breast cancer survivors, Weiss (2004) found that posttraumatic growth of the husbands was positively associated with social support, marital support, marital commitment, and greater level of growth in wife. Of these variables, it was found that marital commitment and wife's level of growth were the significant predictors.

Cadell et al. (2003), conducted a study about the caregivers of the individuals suffering from AIDS. They used structural equation modeling to find the relation ship between spirituality, social support and level of distress and

posttraumatic growth. They found that social support, spirituality, and stressors had positive direct effect on posttraumatic growth. Their research was important about that, if there are more stressors, the probability of reevaluation and having a different focus would be easier. According to Park (1998b), if the traumatic experience is more stressful, then, it will provide more opportunities to experience growth because their effect on breaking the pre-event assumptions will be stronger. Thus, the higher is the dose, the higher will be the response.

The research about the posttraumatic growth and adjustment after the stressful events has given incongruent evidence. In a study, it was found that 29% of the parents of children who died in motor vehicle accidents reported that their quality of marriage became "somewhat much better" (Lehman et al, 1989, as cited in Calhoun, & Tedeschi, 1998). But, in Lehman's study the relationship between the reported positive changes and psychological adjustment was not significant. According to Taylor, Litchwarz, and Wood (1984, as cited in Calhoun, & Tedeschi, 1998), among the women with breast cancer, the ones who perceived positive changes also had higher levels of psychological adjustment. Similarly, in a sample consisting of stroke patients and their primary caregivers, perceiving benefits was reliably predictive of adjustment (Thonmpson, 1991, as cited in Calhoun & Tedeschi, 1998). According to the findings of the study, people, who had the highest mental health recovery, had the most severe exposure and perceived benefit shortly after the disaster (Mc Millan et al, 1997, as cited in McMillan & Fisher, 1998).

There may be some misinterpretations in the growth literature. First, not all people experience such growth. Second, the experience of growth does not

mean that the person does not experience the pain. Despite the fact that posttraumatic growth seems to be related with adjustment, there is still some need for more evidence to diminish the incongruence between the posttraumatic growth and posttrauma adjustment. One of the explanation for this incongruency may be such that, well being and distress may not be necessarily opposite ends of a stick and even they can be independent dimensions. Because of the violation of assumptions, distress and growth can be seen together in the persons who experienced trauma. Persons who have lost a loved one may experience growth, but still the pain of loss may continue (Calhoun & Tedeschi, 1998).

There is not very much research about the perceived benefits of the families who have a handicapped child. In a recent study (Taunt & Hastings, 2002), the researchers conducted semi-structural interviews with 14 parents and conducted an electronic mail survey with 33 mothers of handicapped child. Their content analysis results revealed that 80 % of the parents reported that they gave more value to others, they established more goals, and changed career expectations. More than half of the families reported that their sensitivity, awareness of others, tolerance to others have changed in a positive direction. They have also reported gratifications from their child caring process.

It is proposed that, the positive perceptions in the disability field could be both an outcome or can be taken as a resource factor, which would buffer the negative impact of the child's disability on the family (Beresford, 1994; Hastings & Taunt, 2002; Taunt & Hastings, 2002).

The literature shows that social support seems to be acting as a positively contributing factor to posttraumatic growth. Another variable is the severity of the traumatic experience, which would shatter the pre-trauma assumptions of the person and let the person to gain insight and positive view. Active coping styles and positive reappraisal are found as contributing factors to posttraumatic growth. Despite the positive gains after the traumatic events, the posttraumatic growth literature has conflicting evidence about the posttrauma adjustment and perceived benefits after the trauma.

1.4. Aims of the study

The aims of the current study were:

- 1- To examine the predictive power of perceived social support, ways of coping, and stress level in explaining posttraumatic growth and parental burnout among the parents of children with autism, after controlling the effects of socio-demographic variables,
- 2- To examine differences between mothers and fathers in the frequency and type of coping style used by the parents of the children with autism,
- 3- To investigate the factors of burnout and severity of the burnout of the parents,
- 4- To investigate possible gender differences in burnout and posttraumatic growth.

Expectations of the present study are presented as;

- Social support, active coping style, stress level are significantly related to and predict posttraumatic growth level of the parents of children with autism. In addition, social support, emotion focused coping style, and stress level are significantly related to and predict burnout level of the parents.
- 2. The burnout level of the mothers is expected to be higher than the fathers because they are seen as the primary caregiver and they are more involved in the caring of the child.

1.5. Importance of the Study

This study is important because parents of children with autism are prone to high stress. It is essential to develop appropriate psychological services appropriate for their needs. Since this study focused not only on the possible negative outcomes of having a handicapped child, but also examined possible positive outcomes and its predictors it can contribute to the development of effective clinical interventions with parents. Both burnout and posttraumatic phenomena is new in the literature about the families of handicapped children. Use of standardized measures for the perceived gains among these families, would enable the development of effective clinical support programs. Research conducted with parents of handicapped children heavily relied upon maternal reports. This study included both mothers and fathers, thus can produce results on the whole family atmosphere.

CHAPTER 2

METHOD

In this section, subjects, instruments, procedure, and analyses of the data will be explained.

2.1. Sample

A total of 136 adults representing 58 parent couples and 13 mothers and 7 fathers who had a child with autism participated in this study. Fifty two percent of the sample were (n=71) female and 48% were male (n=65). The mean age of the participants was 38.7 (SD=6.8) with a range of 23 to 58. The mean age of the mothers was 37.2 (SD=7.3) and mean age of the fathers was 40.5 (SD=6.0). In order to have a homogenous sample, four divorced people and one widowed person were not included. The mean number of years of education of the whole sample was found to be 12.7 (SD=3.8); for female participants 11.7 (SD=4.1) and for male participants 13.9 (SD=3.3). 61% of the respondents had two children, 33% of the respondents had one child, and 6% of the respondents had 3 or more children.

The mean age of the children who had autism was found to be 8.9 (SD=5.2) and ranged between 4 -26. Of the children who had autism, 7.4 %

were female (n=6), and 92.6% were male (n=75). Demographic characteristics of the sample are presented in Table.1.

Table 1 Sociodemographic Variables of the Sample

		Fe	Females (n=71)			N	1ales	(n=6	5)
		Mean	SD	N	%	Mean	SD	N	%
Age		37.2	7.3			40.5	6.0		
Years of		13.4	6.1			13.7	5.7		
Marriage		10.4	0.1			13.7	5.7		
Year of		11.6	4.1			13.8	3.9		
Education		11.0	7.1			10.0	0.0		
Presence of	Yes			34	48			33	51
Caregiver	No			37	52			32	49
Who helps in	Grand			16	47.1			17	51.5
caregiving	mother/father Aunt			7	20.6			5	15.6
	Paid			2	5.9			2	6.1
	caretaker			۷	5.9			2	0.1
	Sister/brother			3	8.8			2	6.1
	Kindergarten			6	17.6			7	21.2

Table 1 Sociodemographic Variables of the Sample (Continued)

Somilabilion 25 35.2 25 38.5 15 16 16 17 10 15.4 1.5 16 17 10 15.4 1.5 16 17 10 15.4 1.5 16 17 10 15.4 1.5 14 19.7 10 15.4 10 15.5 14 15.5 14 15.5 14 15.5 15 15 15 15 15 15						
1billion 15 16.9 10 15.4	Income	< 500 million	9	12.7	6	9.2
1billion 1bil1.5 billion 12 16.9 10 15.4		500mil	25	35.2	25	38.5
1.5 bil2 billion		1billion	23	33.2	25	30.3
Dillion 14 19.7 10 15.4		1bil1.5 billion	12	16.9	10	15.4
Dillion Self-employed Se		1.5 bil2	1.4	10.7	10	15.4
Job worker		billion	14	19.7	10	13.4
Civil servant 10 14.1 29 44.6		> 2 billion	11	15.5	14	21.5
Self-employed 13 18.3 22 33.8 Trade person - - - 3 4.6 housewife 45 63.4 - - -	Job	worker	-	-	9	13.8
Trade person housewife housewife retired 3 4.2 Place participant lived most of her/his life Town City 19 26.8 Relatives living in Ankara Trade person 3 4.6 63.4 2 3.1 1.5 Town 6 8.5 4 6.2 City 19 26.8 20 30.8 Metropolitan city* A3 60.6 Few 24 33.8 5ew 5ew 24 33.8 5ew 5ew 5ew 12 16.9 5ew 5ew 12 16.9 5ew 5ew 12 16.9 5ew 12 18.5 5ew 5ew 14 19.7 5ew 15 23.1 5ew 16 24.6 5ew 17 15 23.1 5ew 18 27.7 5ew 19 26.8 5ew 20 30.8 10 24.6 5ew 21 33.8 5ew 32 33.8 5ew 33 4.2 5ew 34 6.2		Civil servant	10	14.1	29	44.6
housewife retired 3 4.2 2 3.1		Self-employed	13	18.3	22	33.8
Place participant lived most of her/his life		Trade person	-	-	3	4.6
Place participant lived most of her/his life Village 3 4.2 1 1.5 Town 6 8.5 4 6.2 City 19 26.8 20 30.8 Metropolitan city* 43 60.6 40 61.5 Relatives living in Ankara None of few 13 18.3 18 27.7 few 24 33.8 16 24.6 some 12 16.9 12 18.5 most 14 19.7 15 23.1 all 8 11.3 4 6.2		housewife	45	63.4	-	-
None of in Ankara None		retired	3	4.2	2	3.1
Town 6 8.5 4 6.2 City 19 26.8 20 30.8 Metropolitan city* Relatives living in Ankara None of 13 18.3 18 27.7 few 24 33.8 16 24.6 some 12 16.9 12 18.5 most 14 19.7 15 23.1 all 8 11.3 4 6.2	lived most of	Village	3	4.2	1	1.5
Metropolitan city* 43 60.6 40 61.5 Relatives living in Ankara None of few 13 18.3 18 27.7 few 24 33.8 16 24.6 some 12 16.9 12 18.5 most 14 19.7 15 23.1 all 8 11.3 4 6.2		Town	6	8.5	4	6.2
Relatives living in Ankara None of few 24 33.8 16 24.6 some 12 16.9 12 18.5 most 14 19.7 15 23.1 all 8 10.6 61.5		City	19	26.8	20	30.8
City* Relatives living in Ankara None of 13 18.3 18 27.7 few 24 33.8 16 24.6 some 12 16.9 12 18.5 most 14 19.7 15 23.1 all 8 11.3 4 6.2		Metropolitan	40	60.6	40	C1 E
few 24 33.8 16 24.6 some 12 16.9 12 18.5 most 14 19.7 15 23.1 all 8 11.3 4 6.2		city*	43	60.6	40	61.5
some 12 16.9 12 18.5 most 14 19.7 15 23.1 all 8 11.3 4 6.2		None of	13	18.3	18	27.7
most 14 19.7 15 23.1 all 8 11.3 4 6.2		few	24	33.8	16	24.6
all 8 11.3 4 6.2		some	12	16.9	12	18.5
		most	14	19.7	15	23.1
* Apkaya Jatanbul Jamir		all	8	11.3	4	6.2
Afikara, istanbui, izinii	* Ankara, Istanbu	, Izmir				

2.2. Instruments

Data was collected by using a Sociodemographic Information form and four self-report questionnaires. These were the Questionnaire on Resources and Stress Short Form (QRS), Posttraumatic Growth Inventory (PTGI), Multidimensional Scale of Perceived Social Support (MSPSS), Ways of Coping Inventory (WCI), Maslach Burnout Inventory (MBI).

2.2.1. Sociodemographic Information Form

This form was prepared by the investigator in order to obtain information about sociodemographic characteristics of the sample such as gender, age, level of education, number of children, age and sex of the child who has autism, employment and work status. In order to evaluate the religious commitment two items were presented, these were "How committed do you feel yourself to your religion/how much do you believe in your religion, if you evaluate your belief and your life?" and "how often do you fulfill the requirements of your religious charges". The answers were rated in 5-point Likert scale (1=not committed and 5=very much committed) and (1=none of them, and 5=all of them), respectively. The mean values of the two items were taken as an indicator of religiosity. The Cronbach Alpha was .86.

2.2.2. The Questionnaire on Resources and Stress Short Form (QRS)

The Questionnaire on Resources and Stress Short Form (QRS) was administered in order to assess the level of the stress experienced by the

participants. QRS was developed by Holroyd to assess the stress levels of the families with chronic illness or developmental disabilities (Holroyd, 1974). The original QRS consists of 285 true-false questions, which represent 15 subscales of variables associated with the resources of family stress domains. The short form consists of 66 questions and 11 sub-scales (Holroyd, 1987). These are Dependency & Management, Cognitive Impairment, Limits on Family Opportunities, Life Span Care, Family Disharmony, Lack of Personal Reward, Terminal Illness Scale, Physical Limitations, Financial Stress, Preferences for Institutional Care, and Personal Burden for Respondent.

The translation and adaptation of QRS was done by Akkök (1989). Each item is answered as either true or false. Higher scores indicate the higher level of stress. Akkök (1989), found that the families who had children with autism and intellectually handicap showed higher stress than the normal control group. She also proposed that parents who had handicapped children had significantly different scores in some subscales related to the child's age, gender, and the severity of the handicap.

In this study, QRS total score was used. One of the items "I worry that my son may sense that s/he does not have long to live" was omitted because it was not suitable for the sample. In order to make comparable with the original questionnaire the scores are multiplied by 66/65. Cronbach Alpha for the present sample was .83.

2.2.3. Posttraumatic Growth Inventory (PTGI)

PTGI was developed by Tedeschi and Calhoun (1996), in order to assess positive changes that may occur in people after a traumatic event. It consists of 21 items on a 6-point Likert scale (0=I did not experience this change as a result of my crisis; 5=I experienced this change to a great degree as a result of my crisis). For the participants of the study the instructions were modified to "after having a child with autism" rather than "as a result of my crisis". PTGI yields a total score and also it includes five factors: relating to others (7 items), new possibilities (5 items), personal strength (4 items), spiritual change (2 items), and appreciation of life (3 items). In the present study PTGI total score was used in order to assess the level of growth.

The scale was translated into Turkish by two psychology professors. Two psychology lecturers and a psychologist who were fluent in English evaluated the translations. The final decision was taken by choosing the best translation for each item.

The first item's item-total correlation was very low (.05) so the first item was omitted. In order to make comparable with the original questionnaire the scores are multiplied by 21/20 and mean scores of PTGI for females (M= 64.7, SD=14,2) and for males (M=57.1, SD=18,1) were found, which were consistent with those of mothers and fathers who had lost a child (M=62.5) and (M=58.3), respectively, (Polantinsky & Esprey, 2000). The Cronbach alpha of PTGI was .88 in the present study.

2.2.4. Multidimensional Scale of Perceived Social Support (MSPSS)

Multidimensional Scale of Perceived Social Support (MSPSS) is a 12-item questionnaire, which was developed by Zimet, Dahlem, Zimet, & Farley, (1988), in order to measure perceived social support from three support domains, family, friends and significant others. MSPSS is rated on a 7-point scale (1=disagree very strongly; 7= agree very strongly).

MSPSS was translated into Turkish by Eker and Arkar (1995) and the psychometric properties of the Scale demonstrated that the defined three factors are also valid for our society. The Cronbach alpha values were found to be between .83 and .91 in 3 Turkish samples, where the means were (M=53.56, SD=16.99) for psychiatry, (M=65.98, SD=15.63) for surgery, and (M=66.42, SD=11.60) for normal (Eker, Arkar, & Yaldız, 2000). Higher scores on the scale indicate perception of positive social support. In the present study the mean was found to be (M=57.72, SD=1,44) which was consistent with Eker et al.'s research (2000). The Cronbach Alpha was found to be = .90.

2.2.5. Ways of Coping Inventory (WCI)

WCI is a commonly used instrument to examine the behavioral and cognitive strategies that people use under stressful conditions. It was developed by Folkman and Lazarus (1980) and it has been revised by the same authors (Folkman & Lazarus, 1985). The response format of the revised version has been changed into 4-point scale ranging from "*0=not used*" and "3= used a great deal" from yes-no answering.

Folkman and Lazarus (1985), conducted a research with a university student sample, and after the factor analysis, they reported that he WCI has eight subscales. The subscales were problem-focused coping, wishful thinking, distancing, seeking social support, emphasizing the positive, self-blame, tension-reduction, and self-isolation. The Cronbach alphas ranged between .56 and .85.

Parker, Endler, and Bagby (1993), used the 66-item WCI for a sample of 392 college students who were preparing for a midterm exam. After using both oblique and varimax rotations they found the same four factors, namely distancing/avoidance, confrontive/seeking social support, problem focused, and denial.

Chan (1994), also used WCI for a Chinese sample of 657 secondary school students and teachers, found 4 factors after factor analysis. These were rational problem solving, resigned distancing, seeking support and ventilation, and passive wishful thinking.

In 1988, the revised version of WCI was translated and adapted to Turkish culture by Siva (cited in Uçman, 1990). With the addition of 8 new items, which were tapping fatalism and superstition, relevant to Turkish culture, the WCI had 74 items. The internal consistency of whole scale was high (Cronbach alpha=.91). Siva found eight factors after the factor analysis: planful problem solving, escape/avoidance, emotional control, growth, fatalistic approach, helplessness, self-blame and seeking refuge in supernatural forces.

Şahin and Durak (1995) used WCQ, an abbreviated form of WCI, in three different samples for 575 university students, 426 bank workers and 426 people

living in Ankara. They found five factors with reliability coefficients ranging between .45 and .80; namely, optimistic approach, self-confidence approach, helpless approach, face saving approach, and seeking social support.

Karancı, Alkan, Akşit, Sucuoğlu, Balta, (1999), used the WCI with the survivors of Dinar earthquake. After deleting some items and some minor changes due to the results of the pilot study, a sixty one item form of WCI with a three-point scale (1=never, 2=sometimes, 3=always) was used. One item was deleted because of the difficulty in comprehension. With a factor loading of .35, the factor analysis yielded five factors. Seven items were excluded due to not meeting the criterion. The factors were problem solving, fatalistic approach, helplessness approach, and seeking social support. The Cronbach alphas were between .39 and .78.

In the current study, the 42-item WCI form obtained from Karancı et al. (1999) study, to assess the type and the frequency of coping strategies of the parents to overcome with the difficulties related to having a child with autism. In the present study, the 35 items whose factor loadings were over .40 in previous study were used.

2.2.6. Maslach Burnout Inventory (MBI)

MBI is a 22-item instrument developed by Maslach & Jackson (1986) to assess the three components of the burnout syndrome: emotional exhaustion, depersonalization, and lack of personal accomplishment. The respondents answer the statements about personal feelings or attitudes in terms of how frequently they experienced the stated situation on a 7-point scale. It is

adapted and translated by Ergin (1992), and the 7-point scale was converted into a 5-point scale (0=never; 4=always). Duygun & Sezgin (2003), changed the instructions of the questionnaire into "my child" instead of "my recipients" and "the care of my child" instead of "my work" or "my job".

Duygun & Sezgin (2003), found that the MBI had two factors in a sample of mothers who had mentally retarded children. In his study, the Cronbach Alpha values were .80 for both emotional exhaustion and lack of personal accomplishment factors. In the present study, the alpha values were .87 for emotional exhaustion, .74 for lack of personal accomplishment and .85 for total burnout scale.

2.3. Procedure

The participants were selected from Özel İlgi Special Education School, Barış Special Education School, Ankara University Center of Research for Children with Autism (AUCRCA), Bağcılar School for the Education of Children with Autism (OCEM) and Hacettepe University Child Psychiatry Clinic. The special education schools were all located in Ankara. Only the parents who had an approved health report, which stated that their child either had autism and/or pervasive developmental disorder diagnosis, were included in the sample.

The parents were met either in the special education centers, or in Hacettepe University Child Psychiatry Clinic, or in AUCRCA, while their children were having special education in the school or their children were having play therapy, depending on the place. The parents were given explanation about the aim of the research and their oral or written informed consent was taken. At the

beginning of the meeting, verbal instructions were given to the parents by the researcher. The socio-demographic form and other inventories were completed by themselves. Total time for completing the questionnaire was approximately 30-45 minutes. The data were collected between April and June 2003 by the researcher.

2.4. Statistical Analysis

In the present study, the data obtained from 138 adults who had a child with autism were analyzed. Prior to the analysis, all data were examined through various programs of Statistical Package for Social Sciences (SPSS) for the accuracy of data. To reduce extreme kurtosis and skewness the multivariate and extreme univariate outliers were deleted. After conducting Factor Analysis for WCI and MBI, a correlation matrix was prepared. To investigate the effects of gender repeated measures ANOVA was conducted for WCI and MBI. Finally, the predictors of the Posttraumatic Growth, burnout, and factors of burnout were examined by using Hierarchical Multiple Regression.

CHAPTER 3

RESULTS

In this chapter, the factor analysis of WCI and sex with WCI factors repeated measures ANOVA results will be presented. Then similar results for MBI will be presented. In later sections results of mean differences between the mothers and fathers and between the working mothers and nonworking mothers and the multiple regression analysis of Burnout and Posttraumatic Growth will be presented.

3.1. Factor Analysis of Ways of Coping Inventory (WCI)

The responses to the 42 items of WCI were subjected to factor analysis using principal component analysis (PCA) with varimax rotation. The initial analysis resulted in 13 factors employing eigenvalue of 1.00 and explained 66.9% of the variance. With the use of scree plot and further analysis with restrictions on the number of factors, a four-factor solution explaining 38.6 % of the variance produced the clearest result. A factor loading of .40 was used as the criterion to determine the item compositions of the 4 factors. Each item was included under the factor on which it had the highest loading. However, item 6 had the highest loading under factor 4, and item 22 had the same factor loading

under factor 2; both of the items were included under factor 1 because of their theoretical fit with factor 1. Seven items were excluded from further analysis due to not meeting the criterion. Mean factor scores were obtained by summing up the responses given to the items of the factors and by dividing them by the number of items in each factor.

Table 2 presents the four factors, factor loadings, and Cronbach Alpha reliability coefficients. The first factor was labeled as "problem solving/optimistic coping", the second factor was labeled as "helplessness/self-blaming approach", the third one was labeled as "fatalistic approach", and finally the fourth one was labeled as "seeking social support". The Cronbach Alpha values of the factors ranged between .85 and .60.

Table 2 Item Composition of the WCI factors, Their Factor Loadings, Percentage of Explained Variance and Cronbach Alpha Values

	F	actor I	Loadin	gs
Factors and Items	Fact	Fact		
Factor: 1 Problem solving/optimistic coping	or 1	or 2	or 3	4
α= .80 Explained Variance= 11.32 %				
28. I just concentrate on what I have to do next	.72	.06	20	.03
19. I know what have to be done. so I double my effort to make things work	.65	14	18	.06
I inspire to do something creative about the problem	.64	03	.01	.06
38. I try not to act very hastily or follow my first hunch	.55	.01	.07	03
31. I make a plan of action and follow it	.52	13	01	.05
I bargain or compromise to get something positive from the situation.	.51	04	.14	11
25. I come out of with couple of different solutions the problem	.48	.14	06	13
3. I try to look on the bright side of things 27. I try to adopt a new perspective	.47 .46	03 .30	.19 05	04 .14
7. I try to analyze the problem in order to understand it better	.45	23	.31	45
42. I change or grow as a person 8. I maintain pride and keep a stiff upper lip 22. I stand my ground and fight for what I wanted 6. I try to think calmly and not get angry	.44 .42 .41 .47	10 30 41 09	.17 11 01 .29	.24 .16 .17 49
Factor:2 Helplessness/Self Blaming Approach α= .79 Explained Variance= 11.02 %				
 17. I can not help thinking about the problem 36. I do not understand my fault 12. I feel helpless 35. I think if only I were stronger 26. I wish that I can change what has happened 40. I realize that I bring the problem on myself 2. I hope for a miracle 	03 06 17 08 .14 03 15	.69 .64 .62 .61 .61 .59	.00 .15 .21 .21 03 .12	.07 .03 .19 03 03 15
29. I accept the next best thing to what I want	.08	.49	.00	.07

Table 2 Item Composition of the WCI factors, Their Factor Loadings, Percentage of Explained Variance and Cronbach Alpha Values (Continued)

Factor Loadings				
Factors and Items	Fact or 1	Fact or 2	Fact or 3	Factor 4
Factor 3: Fatalistic Approach α= .85 Explained Variance= 10.84 %				
14. I think that everything in life has a positive side	.12	.01	.77	14
15. I pray for help	.07	.16	.74	04
37. I believe that God knows the best 16. I try to be happy with what I have	04 .04	.32 10	.71 .61	.09 17
34. I think, what happens is my fate	04	.50	.60	.24
10. I go along with fate; sometimes I just have bad luck	14	.29	.60	.17
20. I think that it depends on how it develops	12	.08	.56	.25
24. I think that it is my destiny and it does not change	21	.40	.52	.22
30. I give money to poor people to escape my trouble	.04	.34	.44	.16
9.I try to forget the whole thing	.23	.03	.43	.07
Factor 4: Seeking Social Support α= .60 Explained Variance= 5.42 %				
18. I express anger to the person(s) who cause the problem	.25	.02	.15	.65
4. I expect others to help me in solving my problems	.09	.27	.00	.54
21. I ask friends before I make and action	.15	16	.11	.46
α= .80 Total Explained Variance= 38.60 %				
Excluded Items				
41. I try to be assertive and defend my right	.36	38	03	.13
5. I make light of the situation; I refuse to get too serious about it	.38	26	.37	14
32. I quit fighting	35	.27	.11	17
11. I try to understand the seriousness of the situation.	.31	.03	.02	.08
33. I think that I make the problems	24	.28	.16	31
13. I expect understanding from people to whom I express my feelings	03	.09	.23	.31
I turn to work or another activity to take my mind off	.02	.10	02	24

In order to examine the inter correlations among the factors, Pearson product-moment correlation coefficients were computed. As can be seen from the Table 3 helplessness/self-blaming approach was negatively correlated with problem solving/ optimistic approach, and positively correlated with fatalistic approach.

Table 3 Pearson Correlations Among Subscales of WCI

	1	2	3	4
1. Problem Solving / Optimistic		188(*)	.010	.146
2. Helplessness / Self-Blaming			.461(**)	.058
3. Fatalistic Approach				.166
4. Seeking Social Support				

^{*} p< .05 level; ** p<.01

3.2. Gender Differences in Coping Strategies

In order to find out the gender differences a 2 (gender) by 4 (coping; problem Solving/optimistic, helplessness/self-blaming approach, fatalistic approach, and seeking social support) ANOVA with repeated measures on WCI factors was conducted. Mean factor scores were computed by summing up the responses of the factor items and dividing them by the number of items in each factor. The results revealed that the main effect of coping was significant $\underline{F}(3,132)=52.23$ g<.001; the main effect of gender was significant $\underline{F}(1,134)=7.11$ g<.01; and the interaction of gender by coping was significant $\underline{F}(3,402)=2.76$ g<.05. The results are presented in Table 4, and Table 5 presents the means of the four factors of WCI, by gender.

Table 4 Results of Gender by Coping Style Analysis of Variance

Source of Variation	SS	DF	MS	F	Sig. of F
Within Residual	29.83	134	.223		
Gender	1.58	1	1.58	7.11	.009
Within Residual	57.83	402	.144		
Coping	19.52	3	6.51	45.23	.000
Gender by Coping	1.19	3	.39	2.76	.042

The results of pairwise comparisons revealed that Problem solving /Optimistic Coping is the most frequently used coping style (M=2.47). The least frequently used coping style was the seeking social support (M=1.99). There was no significant difference between the Helplessness/Self-Blaming approach (M=2.03) and seeking social support. Fatalistic approach (M=2.13) was less frequently used coping style than problem solving/optimistic coping, but more frequently used than helplessness/self blaming and seeking social support.

According to the results, there was no significant difference in the frequency of using coping styles between mothers (M=2.12) and fathers (M=2.10).

The results of Tukey Honestly Significant Difference Test (Tukey HSD) for the interaction effect of gender by coping style demonstrated that there was no significant gender difference in the frequency of using problem solving/optimistic coping, fatalistic approach, and seeking social support. On the other hand, women's mean scores on helplessness/self-blaming were significantly higher than the men's mean scores. Among males, there was no significant difference between the frequencies of using helplessness/self

blaming, fatalistic approach and seeking social support coping styles but the problem solving/optimistic coping was significantly more frequently used. Among females, problem solving/optimistic coping scores were significantly higher than other types of coping. Furthermore, fatalistic approach was more frequently used than seeking social support coping but there was no significant difference between the scores of frequency of using fatalistic approach and helplessness/self blaming approach among women. The results also showed that there was no significant difference in using helplessness/self blaming approach and seeking social support approach among women (critical difference=.20).

Table 5 Means and Standard Deviations of WCI Factors for Mothers and Fathers (*,†)

	Problem Solving/		Helplessness/Self		Fatalistic		Seeking	
	Optimist	ic coping	Blaming		Approach		Social	
							Support	
	М	SD	M	SD	M	SD	М	SD
Females	2.48 _a	.28	2.14 _{bc}	.39	2.22 _b	.40	2.00 _c	.49
Males	2.46 _a	.29	1.91 _d	.41	2.04 _{bd}	.48	1.99 _{bcd}	.42

^{*} Means with different subscripts are significantly different from each other at .05 level.

† Since the number of items of the two factos are not same, in order to make a comparison, the mean factor scores were computed by summing up the responses of the factor items and dividing them by the number of items in each factor.

3.3. Factor Analysis of Maslach Burnout Inventory (MBI)

Factor analysis was conducted to examine the factor structure of the MBI. An initial principal component analysis with varimax rotation revealed 5 factors with eigenvalue over 1 and these factors explained 57.4% of the variance. Examining scree plot and applying the criteria of minimum factor loading .40, 3-factor solution was checked. The 3-factor solution was not satisfactory because, the third factor included only two items with loading was over .40. Finally, a two-factor solution, which explained 38.8 % of the variance, demonstrated the clearest result.

Each item was included under the factor on which it had the highest loading. The first factor explained 23.6 % of the variance and the second factor explained 15.2 % of the variance.

In the factor analysis, 11 items converged under the first factor whose loadings ranged between .72 and .42. The second factor included 7 items with factor loadings ranging between .70 and .47. Four items (22, 5, 21, and 15) did not meet the criteria and were excluded from further analysis. Mean factor scores were obtained by summing up the responses given to the items of the factors and by dividing them by the number of items in each factor.

Table 6 presents the two factors, factor loadings, and Cronbach Alpha reliability coefficients. The first factor was labeled as "emotional exhaustion", and the second factor was labeled "lack of personal accomplishment".

Reliability Analysis of MBI and its factors

Cronbach Alpha reliability of overall MBI was .85. The alpha reliability scores of emotional exhaustion and lack of personal accomplishment were .87 and .74, respectively.

Table 6 Item Compositions of the Two Factors of MBI, Factor Loadings, Percentage of Explained Variance and Cronbach Alpha Values

Factors and Items	Factor	oadings.
	1	2
Factor 1: Emotional Exhaustion		
α= .87 Explained Variance= 23.6%		
Working with my child directly puts too much stress on me.	.72	.17
6. Working with my child all day is really a strain for me.	.71	.14
8. I feel burned out with my child	.71	.15
3. I feel fatigued when I get up in the morning and have to face another day.	.70	.22
11. I worry that taking care of my child is hardening me emotionally.	.69	.09
20. I feel like I'm at the end of my rope	.68	.19
10. I have become more callous toward people since I took this job.	.68	.08
2. I feel used up at the end of the day	.68	02
13. I feel frustrated by my child.	.64	.04
14. I feel I am working too hard on taking care of my child	.48	35
 I feel emotionally drained from my child. 	.42	.36
Factor 2: Lack of Personal Accomplishment		
α= .74 Explained Variance= 15.2 %		
17. I can easily create a relaxed atmosphere with my child	.24	.70
7. I deal very effectively with the problems of my child	06	.69
9. I feel I'm positively influencing my child's life by taking care of him	.02	.68
4. I can easily understand how my child feel about things	19	.64
19. I've accomplished many worthwhile things in taking care of my child	.02	.59
18. I feel exhilarated after working closely with my child	.29	.50
12. I feel very energetic.	.25	.47

Table 6 Item Compositions of the Two Factors of MBI, Factor Loadings, Percentage of Explained Variance and Cronbach Alpha Values (Continued)

	Factor L	oadings
Factors and Items		Factor
	1	2
Factor 1: Emotional Exhaustion		
α= .85 Total Explained Variance=38.8		
Excluded Items		
22. I feel my child blame me for some of his/her problems	.31	.05
5. I feel I treat my child as if s/he was an impersonal object.	.24	.35
21. When taking care of my child. I deal with emotional problems very calmly	.28	.27
15. I don't really care what happens to my child	.15	.21

To examine the inter correlations among the factors, Pearson product-moment correlation coefficients were computed. As can be seen from the Table 7 emotional exhaustion was positively correlated with lack of personal accomplishment.

Table 7 Pearson Correlation Coefficient Between Factors of MBI

	1	2
1.Emotional Exhaustion		.273**.
2.Lack of Personal Accomplishment		

^{**} p<.01

3.4. Gender Differences in Factors of Burnout

To find out gender differences in burnout a 2 (gender) by 2 (burnout types; Emotional Exhaustion, Lack of Personal Accomplishment) ANOVA with

repeated measures on MBI factors were conducted. Mean factor scores were computed by summing up the responses of the factor items and dividing them by the number of items in each factor. The results yielded a significant main effect of burnout factors $\underline{F}(1,134) = 12,00 \ \underline{p} < .01$ and gender by burnout factors interaction was also significant $\underline{F}(1,134) = 5.88 \ \underline{p} < .001$. The main effect of gender was not significant. The results of this analysis are presented in Table 8. Means and standard deviations of the MBI factors for males and females are presented in Table 9.

Table 8 Results of Gender by Coping Style Analysis of Variance

Source of Variation	SS	DF	MS	F	Sig. of F
Within Residual	66.59	134	.49		
Gender	1.54	1	1.54	3.11	.80
Within Residual	33.55	134	.25		
Burnout	3.00	1	3.00	12.00	.001
Gender by Burnout	5.88	1	5.88	23.47	.000

The results of pairwise comparisons revealed that there was significant difference between the participants' scores on emotional exhaustion (M=1.37) was higher than the scores of lack of personal accomplishment (M=1.17).

According to the results of Tukey Honestly Significant Difference Test (Tukey HSD), the females were significantly more emotionally exhausted than males. There was no significant gender difference in the lack of personal accomplishment scores. Emotional exhaustion scores were significantly higher than the lack of personal accomplishment scores among mothers. There was no

significant difference between the emotional exhaustion and lack of personal accomplishment scores among fathers (critical difference= .22).

Table 9. Means and Standard Deviations of MBI Factors for Mothers and Fathers (*, †)

	Emotional E	Exhaustion	Lack of F Accompl	
	М	SD	М	SD
Females	1.60 a	.75	1.09 _b	.56
Males	1.15 _b	.54	1.23 _b	.57

^{*} Means with different subscripts are significantly different from each other at .05 level.

† Since the number of items of the two factos are not same, in order to make a comparison, the mean factor scores were computed by summing up the responses of the factor items and dividing them by the number of items in each factor.

3.5. Predictors of Posttraumatic Growth and Burnout

Hierarchical multiple regression analysis were carried out to examine the predictive values of demographic variables, social support, religiosity, stress level, and four types of coping strategies in the prediction of Posttraumatic Growth and Burnout scores. In the analysis the first block consisted of demographic variables such as, age, year of education, years of marriage, number of children, the age of the child with autism, proportion of relatives in the city, having or not a caretaker, religious commitment and income. The second block consisted of perceived social support and stress level. In the third block

namely the coping styles would reflect only the personal contribution of the participants were introduced. The regression analyses were conducted for men and for women separately in order to examine gender differences. Table 10 presents the means and standard deviations of the predictor variables as well as the t-test results of some variables to see the mean differences between mothers and fathers. The Pearson product moment correlations among the predictor variables and criterion variables namely, Emotional Exhaustion, Lack of Personal Accomplishment, Total Burnout, and Posttraumatic Growth level are presented in Table 11.

Table 10 Means and Standard Deviations of All Variables including t-test mean comparisons of some Variables

	Possible Range	t	Mother	(n=71)	Father (n=65)		
			М	SD	М	SD	
Age			37.2	7.1	40.5	6.1	
Years of education	5-15		11.6	4.1	13.8	3.3	
Years of marriage			13.4	6.1	13.7	5.7	
No of children			1.8	.7	1.8	.7	
Presence of help in caregiving	1=no 2=yes		1.5	.5	1.5	.5	
Location where s/he has lived	4-1		3.4	.8	3.5	.7	
Age of child			8.9	5.3	8.8	5.1	
Income	1-5		2.9	1.3	3.0	1.3	
Presence of Relatives	5-1		2.7	1.3	2.6	1.3	
QRS (Stress level)	0-66	.228	29.8	7.9	29.3	7.5	
MSPSS (Social Support)	12-84		56.6	18.9	58.8	15.4	
Religiosity	2-10		6.9	1.9	6.4	2.2	
Problem Solving / Optimistic			2.5	.3	2.5	.3	
Helplessness / Self-Blaming			2.1	.4	1.9	.4	
Fatalistic Approach			2.2	.4	2.0	.5	
Seeking Social Support			2.0	.5	1.9	.4	
PTG (Posttraumatic Growth)	21-105	2.59*	64.6	14.2	57.1	18.0	
Emotional Exhaustion	0-44	3.94*	17.6	8.3	12.7	5.9	
Lack of Pers. Acc.	0-28	-1.49	7.7	3.9	8.7	3.9	
MBI (Burnout)	0-88	2.36	28.3	11.4	23.9	9.0	

^{*} The mean difference is significant, p< .05

Table 11 Correlation Matrix of the Variables

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.Gender	,029	,240**	,023	,029	-,008	-,064	,289**	,043	-,128	,063	-,027	-,219*	-,042	-,258**	-,207*	-,016	-,322**	,128	-,199*
2.Caregiver		-,064	,003	,241**	-,125	,185*	,140	,224**	-,032	,232**	-,025	-,052	,035	-,121	-,094	,048	-,182*	,075	-,106
3.Age			,762**	,118	,645**	-,190*	,350**	,399**	-,181*	,083	,005	-,083	,048	-,192*	-,203*	,113	-,108	,125	-,057
4.Years marriage				,327**	,796**	-,156	,089	,229**	-,082	,053	,102	-,120	,027	-,121	-,090	,063	,042	,204*	,096
5.No of Children					,076	-,005	-,166	-,311**	,030	-,002	-,231	,043	,049	,044	,057	,063	,043	,198*	,107
6.Child's age						-,026	,039	,174*	-,066	,002	,092	-,043	-,037	-,037	-,051	,011	,122	,183*	,166
7.Relatives							-,214*	-,185*	,100	,032	,197	,044	-,093	,244**	,189*	-,031	,051	,069	,087
8.Years edu.								,633**	-,316**	,144	-,180	-,166	-,039	-,273**	-,318**	,016	-,273**	-,101	-,263**
9.Income									-,468**	,206*	-,347*	-,197*	,045	-,366**	-,447**	-,045	-,215*	-,162	-,257**
10.Religiousity										-,095	,283*	,282**	-,003	,203*	,652**	,100	,060	,061	,077
11.Social Support											-,305*	,274**	,253**	-,095	,025	,321**	-,301**	-,338**	-,376**
12.Stress Level												-,028	-,405**	,373**	,116	-,120	,567**	,371**	,613**
13.Posttraumatic Go	wth												,339**	,200*	,355**	,232**	-,025	-,218*	-,126
14. Problem Sol. /Op	ot.													-,144	,028	,154	-,201*	-,370**	-,363**
15. Helplessness /Se Blm.	elf-														,461**	,058	,514**	,218*	,515**
16. Fatalistic Approa	ach															,166	,209*	,113	,203*
17. Seeking Social S	Support																-,031	-,097	-,064
18. Emotional Exhau	ustion																	,273**	,902**
19. Lack of Persona	I Acc.																		,628**
20. Burnout																			

^{**} Correlation is significant at the 0.01 level 2-tailed.
* Correlation is significant at the 0.05 level 2-tailed.

3.5.1. Regression Analysis: Predictors of Posttraumatic Growth for Mothers

Hierarchical multiple regression analyses were conducted to examine how well the demographic variables, stress level, level of perceived social support, religiosity, and coping strategies, predicted Posttraumatic Growth of mothers and fathers. Table 12 displays the unstandardized regression coefficients, standardized regression coefficients (β), R² and R² Change after each block of the regression analysis for mothers in predicting Posttraumatic Growth.

Table 12 Predictors of Posttraumatic Growth for Mothers

Variable	Block	R²	R² Change	β	В
Demographics	1	.11	.11		
	2	.25	.14**		
Social Support				.36*	.16
	3	.35	.10		
Problem Solving / Optimistic				.35**	.88

^{*} p<.05; ** p<.01

According to the analysis, only the second block significantly predicted Posttraumatic Growth among mothers; \underline{R}^2 =, 25 and $\underline{F}(2,59)$ = 1.76, \underline{p} <.01. Using all factors in the model, 35% of the variance in Posttraumatic Growth was explained. When each single variable was considered in the final analysis, social support, and problem solving/optimistic way of coping were significant predictors of posttraumatic growth and were related to higher levels of growth among mothers.

3.5.2. Predictors of Posttraumatic Growth for Fathers

Similar Hierarchical regression analyses were conducted for fathers. Table 13 displays the unstandardized regression coefficients, standardized regression coefficients (β), R² and R² Change after each block of the regression analysis for mothers in predicting Posttraumatic Growth.

Table 13 Predictors of Posttraumatic Growth for Fathers

Variable	Block	R²	R² Change	β	В
Demographics	1	.20	.20		
Religiosity				.33*	.28
	2	.30	.10*		
Year of Marriage				58*	09
Religiosity				.36*	.30
Social Support				.31*	.22
	3	.46	.16*		
Age				.39*	.06
Year of Marriage				57*	09
Problem Solving /				.30*	.93
Optimistic				.50	.93

^{*} p<.05

According to the analysis, the second block significantly predicted Posttraumatic Growth among fathers; \underline{R}^2 = .30 and $\underline{F}(2,53)$ = 2.07, \underline{p} <.05. Coping styles (the third block) was significant in the last step, \underline{R}^2 change = .16, F(4,49)= 2.74, \underline{p} <.05. Using all factors in the model, 46% of the variance in Posttraumatic Growth among fathers was explained. When each single variable was considered in the final analysis, year of marriage was the significant predictor of Posttraumatic Growth but it was negatively correlated. On the other hand, age, religiosity, social support, and problem solving/optimistic way of coping were significant predictors of posttraumatic growth and they were related to higher level of growth.

3.6.1. Regression Analysis: Predictors of Burnout for Mothers

Hierarchical multiple regression analysis were conducted to examine how well the demographic variables, stress level, level of perceived social support, religiosity, and coping strategies predicted Burnout of mothers. Table 14 displays the unstandardized regression coefficients, standardized regression coefficients (β), R² and R² Change after each block of the regression analysis for mothers in predicting Burnout.

Table 14 Predictors of Burnout for Mothers

Variable	Block	R²	R² Change	β	В
Demographics	1	.18	.18		
	2	.57	.39***		
Stress level				.72***	3.05
	3	.61	.04		
Stress level				.61***	2.57

^{*} p<.05; ** p<.01; *** p<.001

According to the analysis, only the second block significantly predicted burnout among mothers; $\underline{R}^2 = .57$ and $\underline{F}(2,59) = 7.18$, $\underline{p} < .001$. Using all factors in the model, 61 % of the variance in burnout was explained. Stress level was the only significant predictor of burnout among mothers and it was positively related with burnout.

3.6.2. Regression Analysis: Predictors of Burnout for Fathers

Hierarchical regression analyses were conducted separately for fathers. Table 15 displays the unstandardized regression coefficients, standardized regression coefficients (β), R² and R² Change after each block of the regression analysis for fathers in predicting Burnout.

Table 15 Predictors of Burnout for Fathers

Variable	Block	R²	R² Change	β	В
Demographics	1	.13	.13		
	2	.43	.30***		
Stress level				.55***	1.93
	3	.59	.16**		
Stress level				.37**	1.30
Helplessness / Self- Blaming				.36**	.36

^{*} p<.05; ** p<.01; *** p<.001

According to the analysis, the second block significantly predicted burnout among fathers; \underline{R}^2 = .43 and $\underline{F}(2,53)$ = 3.61, \underline{p} <.001. Coping styles (the third block) was also significant, \underline{R}^2 = .59, $\underline{F}(4,49)$ = 4.73, \underline{p} <.01. Using all factors in the model, 59% of the variance in burnout among fathers was explained. When each single variable was considered in the final analysis, stress level and helplessness/self-blaming coping were the significant predictors of burnout among fathers, both of the predictors were related with higher levels of burnout.

3.7.1. Regression Analysis: Predictors of Emotional Exhaustion for Mothers

Hierarchical multiple regression analysis were conducted to examine how well the demographic variables, stress level, level of perceived social support, religiosity, and coping strategies, predicted Emotional Exhaustion. Table 16 displays the unstandardized regression coefficients, standardized regression coefficients (β), R² and R² Change after each block of the regression analysis for mothers in predicting Emotional Exhaustion.

Table 16 Predictors of Emotional Exhaustion for Mothers

Variable	Block	R²	R² Change	β	В
Demographics	1	.19	.19		
	2	.50	.30***		
Stress level				.67**	4.09
	3	.52	.02		
Stress level				.57**	3.46

^{*} p<.05; ** p<.01; *** p<.001

According to the analysis, only the second block significantly predicted Emotional Exhaustion among mothers; \underline{R}^2 =.50 and $\underline{F}(2,59)$ = 5.33, \underline{p} <.001. Using all factors in the model, 52 % of the variance in emotional exhaustion was explained. Stress level was the only significant predictor of emotional exhaustion among mothers and it was positively related.

3.7.2. Regression Analysis: Predictors of Emotional Exhaustion for Fathers

Hierarchical regression analyses were conducted separately for fathers. Table 17 displays the unstandardized regression coefficients, standardized regression coefficients (β), R² and R² Change after each block of the regression analysis for fathers in predicting Emotional Exhaustion.

Table 17 Predictors of Emotional Exhaustion for Fathers

Variable	Block	R²	R² Change	β	В
Demographics	1	.07	.07		
	2	.37	.30***		
Stress level				.60***	2.74
	3	.48	.11*		
Stress level				.48**	2.19

^{*} p<.05; ** p<.01; *** p<.001

According to the analysis, the second block significantly predicted emotional exhaustion among fathers; $\underline{R}^2 = .37$ and $\underline{F}(2,53) = 2.79$, $\underline{p}<.001$. Coping styles (the third block) was also significant, $\underline{R}^2 = .48$, $\underline{F}(4,49) = 3.01$, $\underline{p}<.01$. Using all factors in the model, 48 % of the variance in emotional exhaustion among fathers was explained. When each single variable was considered in the final analysis, stress level was the only significant predictor of emotional exhaustion among fathers, and it was related with higher levels of burnout.

3.8.1. Regression Analysis: Predictors of Lack of Personal Accomplishment for Mothers

The last group of hierarchical multiple regression analysis were conducted to examine how well the demographic variables, stress level, level of perceived social support, religiosity, and coping strategies predicted lack of personal accomplishment among mothers. Table 18 displays the unstandardized regression coefficients, standardized regression coefficients (β), R² and R² Change after each block of the regression analysis for mothers in predicting Lack of Personal Accomplishment.

Table 18 Predictors of Lack of Personal Accomplishment for Mothers

Variable	Block	R²	R² Change	β	В
Demographics	1	.10	.10		
	2	.37	.27***		
Social Support				33*	12
Stress level				.40**	1.84
	3	.47	.10*		
Stress level				.35*	1.57
Problem Solving / Optimistic				33**	66

^{*} p<.05; ** p<.01; *** p<.001

According to the analysis, both the second block and the third block (coping) significantly predicted Lack of Personal Accomplishment among mothers. For the second block, $\underline{R}^2 = .37$ and $\underline{F}(2,59) = 3.14$, $\underline{p}<.001$. The third block was also significant; $\underline{R}^2 = .47$ and $\underline{F}(4,55) = 3.26$, $\underline{p}<.05$. Using all factors in the model, 47 % of the variance in lack of personal accomplishment was explained. When each single variable was considered, stress level, social

support, and problem solving/optimistic coping were significant predictors. Stress level was related with higher level of lack of personal accomplishment where social support and problem solving/optimistic approach were negatively related.

3.8.2. Predictors of Lack of Personal Accomplishment for Fathers

Hierarchical regression analyses were conducted separately for fathers. Table 19 displays the unstandardized regression coefficients, standardized regression coefficients (β), R² and R² Change after each block of the regression analysis for fathers in predicting Lack of Personal Accomplishment.

Table 19 Predictors of Lack of Personal Accomplishment for Fathers

Variable	Block	R²	R ² Change	β	В
Demographics	1	.25	.25		
	2	.36	.11*		
Caregiver (1=no; 2=yes)				.27*	.31
•	3	.46	.10		
Caregiver				.30*	.34
Helplessness / Self- Blaming				.33*	.45

^{*} p<.05; ** p<.01;

According to the analysis, only the second block was significant; $\underline{R}^2 = .36$, $\underline{F}(3,53) = 2.70$, $\underline{p}<.05$. Using all factors in the model, 46 % of the variance in Lack of Personal Accomplishment among fathers was explained. When each single variable was considered in the final analysis, caregiver (1=no; 2=yes) and helplessness/self-blaming coping were the significant predictors of Lack of

Personal Accomplishment among fathers. Caregiver and helplessness/self-blaming coping were positively related with lack of personal accomplishment.

3.9. Comparison of working and nonworking mothers

A t-test comparison of working and nonworking mothers were conducted in order to examine the employment effect on stress level, posttraumatic growth, total burnout, emotional exhaustion and lack of personal accomplishment. There was a significant effect for employment, $\underline{t}(69) = -4.57$, $\underline{p} < .001$, with nonworking mothers receiving higher scores than working mothers on stress level. The emotional exhaustion scores of non working mothers were significantly higher than the working mothers $\underline{t}(69) = -2.84$, $\underline{p} < .01$. There was also a significant effect of employment, $\underline{t}(69) = -2.47$, $\underline{p} < .05$, with nonworking mothers receiving higher scores than working mothers on burnout. There was no significant difference in the scores of lack of personal accomplishment and posttraumatic growth between the working and nonworking mothers. Table 20 displays the mean scores, standard deviations, and t values of the mothers.

Table 20 Mean differences between the working and nonworking mothers

		Employment Status				
		Working (n=24)		Not working (n=4		
	t	M	SD	M	SD	
Stress Level	-4.57***	24.06	6.46	32.05	7.20	
Emotional Exhaustion	-2.84**	13.86	7.81	19.58	7.92	
Lack of Personal Acc.	81	7.14	3.57	7.91	4.06	
Posttraumatic Growth	.61	63.00	15.01	60.81	13.86	
Total Burnout	-2.47*	23.53	10.03	30.35	11.50	

^{*} p<.05; **p<.01; ***p<.001

Table 21 Significant Predictors of All Variables

	Mother	Father
	Social Support	Social Support
Posttraumatic		Religiosity
Growth		Year of Marriage (-)
		Age
	Problem Solving / Optimistic	Problem Solving / Optimistic
	Total R ² =.35	Total R ² =.46
Burnout	Stress level	Stress level
		Helplessness / Self
		Blaming
	Total R ² =.61	Total R ² =.59
Emotional Exhaustion	Stress level	Stress level
	Total R ² =.52	Total R ² =.48
Lack of Pers. Acc.	Social Support (-)	Helplessness / Self Blaming
	Problem Solving /	
	Optimistic (-)	Caregiver (1= no; 2=yes)
	Stress level	
	Total R ² =.47	Total R2=.46

CHAPTER 4

DISCUSSION

The aim of this study was to explore the predictive power of some demographic and some psychological variables, namely social support, ways of coping and stress level in predicting Posttraumatic Growth and Burnout among parents of children with autism. In this chapter, the results of the analysis will be discussed. Subsequently, possible clinical implications of the findings and the shortcomings of the study will be discussed.

4.1. Ways of Coping

Four groups, namely problem solving/optimistic approach, helplessness/self blaming approach, fatalistic coping and seeking social support emerged as ways of coping in the present sample. The Cronbach reliability of the factors and of the scale was satisfactory.

Previous studies conducted to explore the factor structure of WCI have yielded different results (Parker et al., 1993). The factor structure of WCI was consistent with Parker et al.'s (1993) and Chan's (1994) studies. The factor

structure was also similar to but slightly different from Güneş's (2001) study. The inventory has been used with very different samples and different subscales have been obtained. So the factor structure seems to vary in different samples.

Helplessness/self blaming coping and fatalistic coping were positively correlated with each other and helplessness coping had a negative correlation with problem solving/optimistic coping.

Among mothers the most frequently used coping strategy was problem solving/optimistic coping. Next, in the order of frequency, fatalistic approach, helplessness/self blaming approach and seeking social support were used by the mothers. This ranking was different among males. In terms of frequency, fathers used problem solving/optimistic coping most, followed by fatalistic approach, seeking social support, and helplessness/self blaming coping. Since the education level of the sample was quite high, it seems reasonable for the parents to report high scores on the frequency of using problem solving/optimistic coping. The only significant difference between fathers and mothers was in the frequency of using helplessness/self-blaming approach. Mothers' scores on frequency of using helplessness/self-blaming approach were significantly higher than the fathers.

According to the cognitive theory of coping, problem focused coping is more commonly used when the situation is seen as more controllable, and emotion centered coping is more frequently used when the situation is appraised as uncontrollable and unchangeable (Folkman, 1984). Thus, because of being more involved with the child's needs, mothers may be appraising the situation as more uncontrollable, due to their high emotional exhaustion.

According to Lazarus' (1990), theoretical framework during appraisal process, persons first evaluate the harmfulness of the situation and then they evaluate the coping resources. The high education level may be a resource factor for using problem solving approach more frequently for both mothers and fathers.

4.2. Factor Structure of Burnout

On the basis of factor analysis, two factors were obtained from the burnout inventory. The factors were, emotional exhaustion and lack of personal accomplishment. The depersonalization factor was not found. The Cronbach reliability for the emotional exhaustion was .87 and for personal accomplishment .74.

This factor structure was consistent with the results of Duygun's (2003) and Pelsma et al.'s (1989) studies, conducted with parents. So, it may be concluded that the depersonalization factor may not be very suitable for samples of parents. Maslach and Johnson (1992, as cited in Ybema et al., 2002) define depersonalization for the hospital staff as a negative and indifferent attitude towards patients. This conceptual issue may not be appropriate when we take the parents as a sample. Since child and caregiver have a different dimension from the vocational service giving, it is understandable that the three-factor structure may not be suitable in the caregiving context. Pelsma et al. (1989), proposes that burnout among mothers may involve detachment rather than depersonalization. Thus, the three-factor structure of MBI may be improved by tailoring the factor structure to different samples.

There was a positive correlation between the two factors. Regarding the relationship between gender and burnout, there were significant differences. There was no significant difference between mothers and fathers in terms of lacking personal accomplishment, however, mothers' emotional exhaustion scores were significantly higher than the fathers. This finding is reasonable regarding that the mothers are more prone to the stress, which grow out of caring for a handicapped child. Nearly sixty of the mothers were not working. Due to being at home most of the time, they may be more involved with the caring of the child, and may lack network of social support that is available for employed parents at work.

Further comparisons that were conducted between the working and nonworking mothers yielded a significant effect of employment. Mothers who did not work had significantly higher scores on the stress level, emotional exhaustion and total burnout dimensions. It could be speculated that, the working mothers were less involved with the caring of the child during the workday, and thus their stress would be less due to the burden of the caregiving. Moreover, the working mothers may feel themselves more independent as they experience less financial problems and may find more social networks and means of distraction by being involved in work.

4.3. Predictors of Posttraumatic Growth

Some of the parents involved in the study stated that, it was a nice experience to read positive questions in the whole data form. One of the parents stated that "we are fed up with reading the depressing questions, it is nice to

look from the positive side". The total mean scores of the mothers were between moderate and high (M=64) and total mean scores of the fathers on the PTGI was moderate (M=57). Thus the parents of children with autism have considerable perceived growth because of coping with the stress of caring for a child with autism. The total mean scores were consistent with Polantinsky & Esprey's study (2000) with those of mothers and fathers who lost a child (M=62.5) and (M=58.3), respectively.

Mothers reported significantly higher levels of posttraumatic growth than the fathers. This finding is consistent regarding the literature which points out that women have a tendency to report higher levels of growth (Tedeschi & Calhoun, 1996). For the occurrence of perceived growth among individuals, it is proposed that the event should be stressful enough in order to shatter the former assumptions (Calhoun, Cann, Tedeschi, & McMillan, 2000; Tedeschi, 1999). So, it can be expected that there would be a positive relation between the perceived stress level and posttraumatic growth. However, the stress level of the mothers and fathers has not been found to be a significant predictor of posttraumatic growth. The posttraumatic growth of the mothers were significantly higher than fathers but the difference between stress level of the mothers and fathers was not significant, so further studies are needed. Thus, the relationship between stress and growth needs to be examined longitudinally. It is possible to conceive that parents who initially have higher stress experience more growth. Since the present study is cross-sectional in nature it is not possible to demonstrate such a process.

The results of the regression analysis showed that social support and problem solving/optimistic approach were significant predictors of posttraumatic growth among both mothers and fathers. Appraisal and coping are close terms with the posttrauma adjustment. Optimism, or in other words, focusing on the positive aspects of the situation to minimize the negative aspects of the crisis, may enable the person to emphasize the benefits of the crisis (Folkman & Moskowitz, 2000). On the other hand, setting achievable goals and following problem solving coping to reach those goals may lead to a feeling of control and mastery (Hastings & Taunt, 2002; Kesimci, 2003). Thus, the present finding is consistent with this view by showing that problem solving/optimistic approach contributes to the posttraumatic growth.

As mentioned before, the appraisal process is not independent from the personal resources. Individuals with supporting resources are less likely to appraise the life crisis as a threat and/or are more likely to rely on active coping strategies, which are related to better adjustment and posttraumatic growth. Thus the relationship between social support and growth noted in the present study shows that existence of social resources relates to growth.

The predictors of posttraumatic growth among fathers also included religiosity, age and years of marriage. Religiosity and age were positively related with posttraumatic growth, whereas years of marriage were negatively correlated with PTG. Spirituality dimension, was noted to be related to PTG in the posttraumatic growth literature (Cadell et al., 2003; Calhoun & Tedeschi, 1998; Saakvitne, Tennen, & Affleck, 1998). As mentioned earlier, traumatic events produce a significant change on the person's pre-existing beliefs.

Cognitive processing is an important process in rebuilding the cognitions about the world and to adapt to the traumatic event. During this rebuilding process religiosity may play a role either as an outcome or as an input. Tedeschi & Calhoun (1996) proposed that, the person who has experienced a traumatic event either seeks out more religious experiences or religious commitment contributes to spiritual growth. According to Tedeschi et al. (1998), persons may use the spirituality in order to give a meaning to the traumatic experience or may use it as a way of coping. Some may understand their spiritual changes in a certain religious context and others may report awareness without using a result, the finding in the present study is consistent with the previous findings.

There has not been very much related literature explaining why years of marriage contributes negatively to posttraumatic growth. However, by taking the age variable, it can be speculated that the fathers who have married in their late ages have more posttraumatic growth. Thus, this phenomenon may be related to spontaneous development of a sense of personal growth rather than the result of coping with the stress.

4.4. Predictors of Burnout

The burnout level of the sample was quite low. Regarding the possible total mean score as 88, the total mean for the mothers was 28.3 and for the fathers was 23.9.

Among mothers the stress level was the most important predictor of both types of burnout, namely emotional exhaustion and lack of personal

accomplishment and the total burnout. Stress level was also an important factor for fathers in terms of emotional exhaustion and lack of personal accomplishment. This finding in the present study is not an unexpected finding. The perceived stress level, reflecting both objective and subjective burden on the person may have common features with burnout. Procaccini and Kiefaber (1983) define parental burnout as a physical, emotional, and spiritual exhaustion resulting from both chronic high stress and perceived low autonomy. By definition, stress level and burnout has a strong relationship. The only predictor of emotional exhaustion was the stress level.

As mentioned earlier, if the situation is seen as harmful and if the personal resources have not been evaluated well, then the situation may be seen as unchangeable and the person may feel helpless. Thus, this appraisal may lead to higher levels of burnout. Persons with lower levels of burnout may perceive the event as amenable to change and/or they may find their personal resources as adequate. In the present study, helplessness/self-blaming approach was another predictor of total burnout and lack of personal accomplishment among fathers. This finding was consistent with Ceslowitz' (1989) study which found that the nurses who experienced higher levels of burnout used escape/avoidance, self controlling, and confronting coping strategies and the nurses who experienced decreased levels of burnout used more planful problem solving, positive reappraisal and seeking social support. Problem solving coping style and perceived social support were found to be significant predictors of lack of personal accomplishment among mothers, which was another finding consistent with the literature. Both of the variables, problem solving/optimistic approach and social support were negatively related to lack of personal accomplishment among mothers.

As mentioned earlier, social support has a positive relationship with adjustment and negative relationship with distress (Crnic & Booth, 1991; Koeske & Koeske, 1990; Rimmerman & Duvdevany, 1996). The total mean value of perceived social support in this sample for the mothers was 56,6 and and for the fathers was 58,8. Eker & Arkar (1995), found total mean scores of perceived social support as 64.3 for the university students and 48.8 for the psychiatry department patients. So the social support level of the present sample is moderate.

An interesting finding in the present study was that, the presence of caregiver in the family had a significant contribution on the lack of personal accomplishment scores of the fathers. There has not been any research about this subject but possible explanations would be about the person who is in the role of the caregiver. Presence of the grandparents may have a contribution on the burnout of the fathers and this issue needs further research.

4.5. General Conclusions

Regarding the whole findings some of the expectations of the study were met. The first expectation was that social support, coping styles, stress level would be significantly related to and predict burnout and posttraumatic growth level of the parents of children with autism. This expectation was supported for

both burnout and posttraumatic growth except for the stress level, which did not predict burnout.

In line with the literature social support was found to be a significant predictor of both burnout (Crnic & Booth, 1991; Koeske & Koeske, 1989; Rimmerman & Duvdevany, 1996) and posttraumatic growth (Weiss, 2004; Cadell et al., 2003). So, social support is an important factor not only in buffering stress and burnout, but also in contributing to posttraumatic growth. Therefore, it seems important to increase the social support sources of the parents.

Coping styles were also found to be significant predictors of both burnout and posttraumatic growth. Consistent with the previous literature, problem solving/optimistic coping was related negatively with the level of lack of personal accomplishment and burnout, whereas helplessness/self blaming approach was related positively to lack of personal accomplishment and total burnout (Calhoun, Cann, Tedeschi, & McMillan, 2000; Ceslowitz 1989; Rimmerman & Duvdevany, 1996). Thus, it seems important to empower parents and foster problem solving/optimistic coping.

Finally, stress level was found to be a significant predictor of burnout. But it did not predict posttraumatic growth. There is a strong theoretical link between the stress level and the burnout. Therefore, this finding points out to the need to devise methods to decrease stress levels in parents.

The second expectation of the present study was that the burnout level of the mothers is expected to be higher than the fathers as they are seen as the primary caregiver and as they are more involved with the caring of the child. Despite the fact that there was no significant difference between the fathers and mothers in terms of stress level, the mothers had significantly higher scores on the emotional exhaustion scale. Thus, the present finding suggest that mothers who take the primary caregiving role may experience more emotional exhaustion and need special support to combat this exhaustion.

4.6. Limitations of the Study

There are some limitations of the study. The most important limitation of the study was that it was a cross-sectional study which did not examine the pre-existing growth and burnout levels. It is not very possible to suggest how much of the burnout and posttrumatic growth can be attributed to having a child with autism because same participants were not examined repeatedly. Secondly, coping was taken as a static concept instead of a dynamic process. If we take the stage phenomena of the crisis into consideration longitudinal designs would be a better solution. Moreover, families may experience additional stress in some developmental stages, such as peer's beginning of school, puberty, adolescence, etc. So, a longitudinal research design would eliminate some confounding factors. The severity of the child's condition was not included in the study. The families' objective and subjective burden was assessed by Questionnaire on Resources and Stress Short Form. However, the study lacked an evaluation of the severity of autism, with objective measures.

The SES of the present sample was high. So the findings can be generalized only to the samples which have similar characteristics.

Taken together, pre-existing beliefs, appraisals, coping, burnout, and posttraumatic growth have to be examined in the future studies using longitudinal design with more heterogenous sample of parents.

4.7. Suggestions for future research

Since the use of burnout and posttraumatic growth variables are quite new in research on the parents of children with autism, more studies are needed for sound inferences.

The burnout level among the participants in the present study was quite low. Assessing burnout among parents of children with other disorders would make comparisons possible. Tudies including the severity of the disorder, and comparing with normal populations and parents of children with other problems should be conducted.

The use of Posttraumatic Growth Inventory is new in Turkey. The scale needs to be used with different populations. As mentioned in the previous section, longitidunal research designs would be better in eliminating some of the confounding factors.

The research also should be replicated in different SES groups. So that the findings could be generalized to different samples.

4.8. Clinical Implications of the Findings

Knowing that having a child with a handicap affects the whole family there are important findings in this research which have clinical implications for clinical approaches with the parents. Firstly, coping strategies have been found to be an important factor in both burnout and posttraumatic growth of the parents. Problem solving/optimistic approach was found to be positively related to posttraumatic growth and it was inversely related to burnout. So, it is important for the practitioners to direct the parents to use more problem solving coping styles by educating them about how to cope with the problems actively. This will also help to reduce their sense of helplessness. Helplessness/ self blaming approach was found to have a positive contribution to the burnout. Therefore, self blaming may be an issue to be worked on in the clinical and psychoeducational settings. Psychoeducational programs that give information on the causes of autism may combat the self-blame in the parents.

Secondly, social support has an inverse effect on burnout and positive effect on posttraumatic growth. Education of the parents in the social support groups and sharing experiences in order to prepare them for their future problems seems to be important. Also, enhancing support of the couples to each other can be implemented in clinical settings. Moreover, community interventions can be developed to improve the parents' social support networks, not only to support and educate the parents in relation to their possible problems with their children, but also it is important for the families to learn their rights and available social resources.

Stress level has been a very powerful predictor of burnout. From the point of the view that the "best intervention is prevention", educating the parents about their possible stress resources and teaching them how to solve the problems would help them to experience less stress, which consequently will reduce their burnout.

Finally, if the parents are aware of the perceived benefits of having a child with a handicap, this should be supported. In clinical settings, posttraumatic growth may be used as a resource to cope with stress or a positive result of the negative process. Therefore, facilitation of posttraumatic growth needs to be actively focused on in clinical interventions.

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Appendix-A

Socio-Demographic Form/ Sosyo-demografik form

her soru grubundan önce verilen açıklam	çocuğunuzla ilgili sorular bulunmaktadır. Lütfen, aları dikkatlice okuyunuz ve bu açıklamalar Her bir soru grubunun başındaki yönerge							
Sizin görüş ve değerlendirmeleriniz bu araştırma için çok büyük değer ve önem taşımaktadır. Bu nedenle lütfen değerlendirmelerinizi sizi yansıtacak şekilde dürüstçe ve titizlikle yapınız.								
Araştırmaya katılanların kişisel bilgileri ve verdiğiniz cevaplar <u>kesinlikle gizli tutulacak, yanıtları başkaları ile paylaşılmayacaktır</u> ve yalnızca araştırmanın amacına yönelik kullanılacaktır. Soru paketinin her hangi bir yerine isminizi yazmayınız. Araştırmaya katkılarınızdan ötürü teşekkür ederiz.								
Araş. Gör. Özcan Elçi ODTÜ Psikoloji Bölümü, Ankara Tel:210 5110	Anketin Uygulandığı Kurum							
Cinsiyetiniz: Kadın Erkek	Yaşınız:							
• Eğitim durumunuz nedir?:	kokul mezunu Lise mezunu							
O:	rta okul mezunu Üniversite ve üstü							
• Şu anki evlilik durumunuz: Bekar 🗌 🛭	Cvli 🗌 Boşanmış 🔲 Dul (Eşi vefat etmiş) 🗌							
• Evli iseniz kaç yıldır : ()	Toplam kaç çocuğunuz var: ()							
Mesleğiniz:	Şu anda yaptığınız iş:							
Yaşamınızın en uzun süresini geçirdiğiniz yer	neresidir?							
☐ Büyük şehir (Ankara, İstanbul, vb) ☐ Ş	Sehir 🔲 İlçe 🔲 Köy							
Aylık eve giren para miktarı ne kadardır: 500 milyondan az 500milyon – 1 mil								
	ilyar ve üstü							
 Aşağıdaki tabloda otizmi olan çocuğun cinsiyetini ve yaşını belirtiniz 	uzun (birden fazlaysa çocuklarınızın)							
1. Çocuk: Cinsiyeti: Kız Erkek	Yaşı:							
2. Çocuk : Cinsiyeti: Kız Erkek	Yaşı:							
Çocuğunuzla sizden başka ilgilenen var mı?	☐ Evet ☐ Hayır							
Evet ise kimler?	teyze Bakıcı Diğer)							
• Hısım ve akrabalarınızdan ne kadarı Ankara'e Hepsi Çoğu Bir kısm								

Appendix-B

Maslach Burnout Inventory Maslach Tükenmişlik Envanteri

Bu araştırmada anne/babaların yaşamlarındaki sıkıntılar, stresler ve yorgunluklar incelenmektedir. Bu amaçla hazırlanan elinizdeki ankette bu konuları yansıtan ifadeler yer almaktadır. Sizden istenen **her bir ifadenin örneklediği durumu ne kadar sıklıkla yaşadığınızı uygun yanıt aralığına** (x) **işareti** koyarak belirtmenizdir.

Cevaplarda kimliğiniz gizli tutulacaktır. Yani, araştırmacıların dışında hiç kimse cevaplarınızı öğrenemeyecektir. Verdiğiniz cevaplar bizim için çok değerlidir. Bu araştırmada bize yardımcı olduğunuz için teşekkür ederiz.

	Hiçbir zaman	Çok Nadir	Bazen	Çoğu zaman	Her Zaman
1. Çocuğumdan soğuduğumu hissediyorum.	0	1	2	3	4
2. Gün sonunda kendimi ruhen tükenmiş hissediyorum.	0	1	2	3	4
3. Sabah kalktığımda bir gün daha bu işi kaldıramayacağımı hissediyorum.	0	1	2	3	4
4. Çocuğumun ne hissettiğini hemen anlarım.	0	1	2	3	4
5. Çocuğuma sanki insan değilmiş gibi davrandığımı fark ediyorum.	0	1	2	3	4
6. Bütün gün çocuğumla uğraşmak benim için gerçekten çok yıpratıcı.	0	1	2	3	4
7. Çocuğumun sorunlarına en uygun çözüm yollarını bulurum.	0	1	2	3	4
8. Çocuğumun bakımına yönelik olarak yaptığım işlerden tükendiğimi hissediyorum.	0	1	2	3	4
9. Yaptığım şeylerle çocuğumun yaşamına katkıda bulunduğuma inanıyorum.	0	1	2	3	4
10. Çocuğumla birlikte olmaya başladığımdan beri insanlara karşı sertleştim.	0	1	2	3	4
11. Çocuğumun/çocuklarımın bakımının beni giderek katılaştırmasından korkuyorum	0	1	2	3	4
12. Çok şeyler yapabilecek güçteyim	0	1	2	3	4
13. Çocuğumun beni kısıtladığını hissediyorum.	0	1	2	3	4
14. Çocuğumun bakımı konusunda çok fazla çalıştığımı hissediyorum	0	1	2	3	4
15. Çocuğuma ne olduğu umurumda değil.	0	1	2	3	4
16. Doğrudan doğruya çocuğumla ilgilenmek bende çok fazla stres yaratıyor.	0	1	2	3	4
17. Çocuğumla aramda rahat bir hava yaratırım.	0	1	2	3	4
18. Çocuğumla birlikte olduktan sonra kendimi canlanmış hissederim.	0	1	2	3	4
19. Çocuğumun bakımına yönelik olarak birçok kayda değer başarı elde ettim.	0	1	2	3	4
20. Yolun sonuna geldiğimi hissediyorum.	0	1	2	3	4
21. Çocuğumla ilgili duygusal sorunlara serin kanlılıkla yaklaşırım.	0	1	2	3	4
22. Çocuğumun kendisinin bazı problemlerini sanki ben yaratmışım gibi davrandığını hissediyorum.	0	1	2	3	4

Appendix-C

Posttraumatic Growth Inventory Travma Sonrası Büyüme Envanteri

Otistik bir çocuğa sahip olmak bir çok aile için uyum göstermelerini gerektiren bir sürece neden olabilir. Siz de, çocuğunuzun otistik olmasına bağlı olarak yaşadığınız zorlukları düşünün ve aşağıdaki konular hakkında yaşadığınız değişikliklerin derecesini verdiğimiz ölçeği kullanarak lütfen belirtiniz. Katılımınız için teşekkür ederim.

Otistikbir çocuğum olması nedeniyle bu değişimi hiç yaşamadım = 0

Otistikbir çocuğum olması nedeniyle bu değişimi çok az yaşadım = 1

Otistikbir çocuğum olması nedeniyle bu değişimi biraz yaşadım = 2

Otistikbir çocuğum olması nedeniyle bu değişimi orta düzeyde yaşadım =3

Otistikbir çocuğum olması nedeniyle bu değişimi <u>oldukça fazla yaşadım</u> =4

Otistikbir çocuğum olması nedeniyle bu değişimi çok fazla yaşadım = 5

ÖRNEĞİN, "duyguları paylaşma" konusunda; hiç değişim yaşamadıysanız 0'1, çok az bir değişim yaşadıysanız 1'i, biraz bir değişim yaşadıysanız 2'yi, orta düzeyde bir değişim yaşadıysanız 3'ü, oldukça fazla bir değişim yaşadıysanız 4'ü, çok fazla değişim yaşadıysanız 5'i işaretleyiniz.

		Hiç	Çok	Biraz	Orta	Olduk	Çok
1.	Yaşamımda önem verdiğim şeylerin sırası değişti	0	1	2	3	4	5
2.	Yaşamımın değerini daha iyi anladım	0	1	2	3	4	5
3.	Yeni ilgi alanları geliştirdim.	0	1	2	3	4	5
4.	Kendime daha fazla güvenmeye başladım	0	1	2	3	4	5
5.	Manevi konuları daha iyi anlamaya başladım	0	1	2	3	4	5
6.	Zor zamanlarda insanlara güvenebileceğimi anladım	0	1	2	3	4	5
7.	Hayatıma yeni bir yön verdim	0	1	2	3	4	5
8.	Başkaları ile daha yakın olma isteğim arttı	0	1	2	3	4	5
9.	Duygularımı ifade etme isteğim arttı	0	1	2	3	4	5
10.	Zorluklarla başa çıkabileceğimi anladım	0	1	2	3	4	5
11.	Hayatta daha iyi şeyler yapabileceğimi anladım	0	1	2	3	4	5
12.	Olayların gidişatını kabullenmeyi öğrendim	0	1	2	3	4	5
13.	Yaşadığım her güne değer vermeyi öğrendim	0	1	2	3	4	5
14.	Önüme daha önce karşılaşmadığım fırsatlar çıktı	0	1	2	3	4	5
15.	Başkalarına karşı şefkatli olmayı öğrendim	0	1	2	3	4	5
16.	İlişkilerimde gayret göstermeyi öğrendim	0	1	2	3	4	5
17.	Değiştirilmesi gerekenleri değiştirmek için daha çok gayret göstermeyi öğrendim.	0	1	2	3	4	5
18.	Dini inancım daha güçlendi.	0	1	2	3	4	5
19.	Zannettiğimden daha güçlü olduğumu farkettim.	0	1	2	3	4	5
20.	İnsanların ne kadar iyi olduklarını öğrendim.	0	1	2	3	4	5
21.	Başkalarına ihtiyacım olduğunu kabul ettim.	0	1	2	3	4	5

Appendix-D

Ways of Coping Inventory Başa Çıkma Yöntemleri Envanteri

Aşağıda insanların sıkıntılarını gidermek için kullanabilecekleri bazı yollar belirtilmektedir. Cümlelerin her birini dikkatlice okuduktan sonra, Kendi sıkıntılarınızı düşünerek, bu yolları hiç kullanmıyorsanız **hiçbir zaman**, yani **1'i**, kimi zaman kullanıyorsanız **bazen**, yani **2'yi**, çok sık kullanıyorsanız **her zaman**, yani **3** seçeneğini işaretleyiniz. Katkılarınız için teşekkür ederiz.

	Hiç Bir Zamar	Bazen	Her Zaman
1. Aklımı kurcalayan şeylerden kurtulmak için değişik işlerle uğraşırım.	1	2	3
2. Bir mucize olmasını beklerim.	1	2	3
3. İyimser olmaya çalışırım.	1	2	3
4. Çevremdeki insanlardan sorunlarımı çözmemde bana yardımcı olmalarını beklerim.	1	2	3
Bazı şeyleri büyütmeyip üzerinde durmamaya çalışırım.	1	2	3
6. Sakin kafayla düşünmeye ve öfkelenmemeye çalışırım.	1	2	3
Durum değerlendirmesini yaparak en iyi kararı vermeye çalışırım.	1	2	3
8. Ne olursa olsun direnme ve mücadele etme gücünü kendimde hissederim.	1	2	3
9. Olanları unutmaya çalışırım.	1	2	3
10. Başa gelen çekilir diye düşünürüm.	1	2	3
11. Durumun ciddiyetini anlamaya çalışırım.	1	2	3
12. Kendimi kapana sıkışmış gibi hissederim.	1	2	3
13. Duygularımı paylaştığım kişilerin bana hak vermesini isterim.	1	2	3
14. Her işte bir hayır var diye düşünürüm.	1	2	3
15. Dua ederek Allah tan yardım dilerim.	1	2	3
16. Elimde olanla yetinmeye çalışırım.	1	2	3
17. Olanları kafama takıp sürekli düşünmekten kendimi alamam.	1	2	3
18. Sıkıntıları içimde tutmaktansa paylaşmayı tercih ederim.	1	2	3
19. Mutlaka bir çözüm yolu bulabileceğime inanıp bu yolda uğraşırım.	1	2	3
20. İş olacağına varır diye düşünürüm.	1	2	3
21. Ne yapacağıma karar vermeden önce arkadaşlarımın fikrini alırım	1	2	3
22. Kendimde her şeye başlayacak gücü bulurum	1	2	3
23. Olanlardan olumlu bir şey çıkarmaya çalışırım.	1	2	3
24. Bunun alın yazım olduğunu ve değişmeyeceğini düşünürüm	1	2	3
25. Sorunlarıma farklı çözüm yolu ararım.	1	2	3
26. "Olanları keşke değiştirebilseydim" diye düşünürüm	1	2	3
27. Hayatla ilgili yeni bir bakış açısı geliştirmeye çalışırdım.	1	2	3
28. Sorunlarımı adım adım çözmeye çalışırdım.	1	2	3
29. Her şeyin istediğim gibi olamayacağını düşünürüm.	1	2	3
30. Dertlerimden kurtulayım diye fakir fukaraya sadaka veririm.	1	2	3

Appendix-D (continued)

Ways of Coping Inventory Başa Çıkma Yöntemleri Envanteri

	Hiç Bir Zamar	Bazen	Her Zamar
31. Ne yapacağımı planlayıp ona göre davranırım.	1	2	3
32. Mücadele etmekten vazgeçerim.	1	2	3
33. Sıkıntılarımın kendimden kaynaklandığını düşünürüm.			
34. Olanlar karşısında "kaderim buymuş" derim.	1	2	3
35. "Keşke daha güçlü bir insan olsaydım" diye düşünürüm.	1	2	3
36. "Benim suçum ne" diye düşünürüm.	1	2	3
37. "Allah' ın taktiri buymuş" deyip kendimi teselli etmeye çalışırdım.	1	2	3
38. Temkinli olmaya ve yanlış yapmamaya çalışırım.	1	2	3
39. Çözüm için kendim bir şeyler yapmak isterim.	1	2	3
40. Hep benim yüzümden oldu diye düşünürüm.	1	2	3
41. Hakkımı savunmaya çalışırım.	1	2	3
42. Bir kişi olarak olgulaştığımı ve iyi yönde geliştiğimi hissederim.	1	2	3

Appendix-E

The Multidimensional Scale of Perceived Social Support Algılanan Çok Yönlü Sosyal DestekÖlçeği

Aşağıda 12 cümle ve her birinde de cevaplarınızı işaretlemeniz için 1 den 7ye kadar rakamlar verilmiştir. Her cümlede söyleneni sizin için ne kadar çok doğru olduğunu veya olmadığını belirtmek için o cümle altındaki rakamlardan yalnız bir tanesini daire içine alarak işaretleyiniz. Bu şekilde 12 cümlenin her birinde bir işaret koyarak cevaplarınızı veriniz. Teşekkür ederim.

1. İhtiyacım olduğu	nda ya	nımd	a olar	ı özel	bir in	san va	ar.	
Kesinlikle hayır 1 2 3 4 5 6 7 Kesinlikle evet								
2. Sevinç ve kederimi paylaşabileceğim özel bir insan var.								
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
3. Ailem bana gerçe	kten y	ardın	ıcı olr	naya	çalışır	•		
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
4. İhtiyacım olan du	ygusa	l yard	lımı v	e dest	eği ail	emde	n alır	ım.
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
5. Beni gerçekten ra	hatlat	an bii	r insa	n var	•			
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
6. Arkadaşlarım ba	na ger	çekte	n yaro	lımcı	olmay	a çalı	şırlaı	·.
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
7. İşler kötü gittiğin	de ark	kadaşl	arıma	ı güve	enebili	rim.		
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
8. Sorunlarımı ailen	nle ko	nuşab	ilirim	•				
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
9. Sevinç ve kederle	rimi p	aylaşa	abilec	eğim	arkad	aşları	m va	r.
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
10. Yaşamımda duyg	10. Yaşamımda duygularıma önem veren özel bir insanım.							
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
11. Kararlarımı vermede ailem bana yardımcı olmaya isteklidir.								
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet
12. Sorunlarımı arka	daşlar	ımla l	konuş	abilir	rim.			
Kesinlikle hayır	1	2	3	4	5	6	7	Kesinlikle evet

Appendix-F

Questionnaire on Resources and Stres Stres Kaynakları Ölçeği

Bu ölçek, sizin çocuğunuza ilişkin duygu ve düşüncelerinizle ilgilidir. Maddelere lütfen içten ve gerçek duygularınızı, düşüncelerinizi ifade etmeye çalışın. Her madde tamamen sizin durumunuza uygun olmayabilir. Yinede her maddeyi cevaplamaya çalışın. Eğer bir madde sizin durumunuza göre **doğru veya çoğu zaman doğru ise D** harfinin altına rastlayan aralığa (\mathbf{x}) işareti koyunuz . Maddenin cevabı sizin durumunuza göre **yanlış veya genel olarak doğru değil ise Y** harfinin altına rastlayan aralığa (\mathbf{x}) işareti koyunuz. Bazı maddeler sizin aile ferdiniz için uygun gözükmese de bütün maddeleri cevaplamaya çalışınız. Katılımınız için teşekkürler.

		D	Y
1.	Çocuğum, başkalarının kendisine gerçekte ihtiyaç duyduğundan daha	()	()
	fazla yardım etmesini ister.		()
2.	Eğer çocuğum ile birlikte yaşamak daha hoş olsaydı, ona bakmak daha		
	kolay olurdu.	()	()
3.	Çocuğumla birlikte yaşamak kolaydır.	()	()
4.	Çocuğum kendi kendine yapabileceği şeyleri yapmaz.	()	()
5.	Çocuğumu oyalamak (hoşça vakit geçirmek) kolaydır.	()	()
6.	Çocuğum insanı çileden çıkarır.	()	()
7.	Çocuğum eğer evin yada bahçenin dışına çıkarsa başına bir iş gelebilir.	()	()
8.	Çocuğumu birkaç saat evin içinde yalnız bırakabilirim.	()	()
9.	Çocuğum evimizin adresini bilir.	()	()
10.	Çocuğum kim olduğunun farkındadır.	()	()
11.	Çocuğum yakın çevrede (mahallede) rahatlıkla dolaşabilir.	()	()
12.	Çocuğum kendisi hakkında bilgi verebilir.	()	()
13.	Ailemizin bütün üyeleri, çocuğum için bazı şeylerden vazgeçmek	()	()
	zorunda kalmaktadır.	()	()
14.	Çocuğuma bakmak için gereken sürekli ilgi yüzünden ailemizden başka	()	()
	bir kişinin gelişimi sınırlanmaktadır.		()
15.	Çocuğuma bakabilmek için yapmayı çok istediğim bazı şeylerden	()	()
	vazgeçmek zorunda kalmışımdır.		()
16.	Çocuğuma bakmak, ailemiz için maddi bir yük olmaktadır.	()	()
17.	Çocuğuma evde sürekli olarak bakmak zorunda olan kişi dışarıda bir işte	()	()
	çalışma imkanından yoksun kalmaktadır.		
18.	Çocuğum olmasaydı, ev dışındaki işlerimiz daha kolaylaşabilrdi.	()	()
19.	Çocuğuma bakamayacak duruma geldiğimde ona ne olacak diye	()	()
	kaygılanıyorum.	()	()
	Çocuğumun hayatını kazanmak için yapabileceği işler sınırlıdır.	()	()
21.	Çocuğum bir özel eğitim okuluna/merkezine veya bir okulun özel alt	()	()
	sınıfına gidiyor.	()	()
22.	Beni en çok kaygılandıran, çocuğumun gelecekte yalnız başına kaldığı	()	()
	zaman hayatını nasıl kazanacağıdır.	()	()
23.	Yaşlandığı zaman, çocuğumun başına neler geleceği konusunda	()	()
	kaygılıyım.	()	
24.	Çocuğumun hep böyle kalacağı fikri beni endişelendiriyor.	()	()

Appendix-F (Continued)

Questionnaire on Resources and Stres/ Stres Kaynakları Ölçeği

	D	Y
25. Ailemizde herkes birbirilerinin yaptıklarını takdir eder.	()	()
26. Ailemiz önemli konularda ortak karar alır.	()	()
27. Ailemizde herkes çocuğumu kabul etmiştir.	()	()
28. Ailemizde kızgınlık ve küskünlük duyguları yoğundur.	()	()
29. Ailemde herkes benim sorunlarımı anlayışla karşılar.	()	()
30. Ailemin üyeleri, kişisel sorunlarını açıkça tartışabilirler.	()	()
31. Bizim gibi sorunları olmayan ailelere göre küçük şeylerden mutlu olmayı daha çok biliyoruz.	()	()
32. Çocuğumdan artık bir kişi olarak daha çok zevk alıyoruz.	()	()
33. Çocuğuma bakmak hayatımızı zenginleştirdi.	()	()
34. Çocuğuma bakmak insana değerli olduğu duygusunu veriyor.	()	()
35. Çocuğumun böyle olması, benim kişiler arası ilişkilerimde daha anlayışlı olmama sebep oldu	()	()
36. Çocuğuma bakmam, başkaları tarafından takdir edildikçe mutlu oluyorum.	()	()
37. Çocuğumun sağlığı için çok fazla endişeleniyorum.	()	()
38. Çocuğuma bakmak, zaman geçtikçe daha çok vakit alacak.	()	()
39. Çocuğum artık bizim aramızda olmadığında ailemizin bu duruma nasıl alışacağı konusunda endişeliyim.	()	()
40. Çocuğum gelecekte kendisine daha iyi bakacaktır.	()	()
41. Çocuğum hiç iyileşemeyecek.	()	()
42. Çocuğum kendi kendine yemek yiyebilir.	()	()
43. Çocuğum özürü nedeniyle özel araçlar kullanır.	()	()
44. Evimizde tekerlekli sandalye ve yürütücü kullanılır.	()	()
45. Çocuğumun bir yürütücüye ya da tekerlekli sandalyeye ihtiyaç duymaktadır.	()	()
46. Çocuğum yardımsız yürüyebilir	()	()
47. Çocuğum özel araçlar ve gereçler kullandığı için onu dışarı çıkarmak zor oluyor	()	()
48. Çocuğumun ihtiyaç duyduğu bakım için gerekli olan parayı ödeyebiliyoruz.	()	()
49. Maddi yardıma ihtiyacımız var.	()	()
50. Aile gelirimiz ortalamanın üzerindedir.	()	()
51. Ailemiz yatırım ve tasarruf yapabiliyor.	()	()
52. Kendi evimiz var veya almak üzereyiz.	()	()
53. Zar zor geçiniyoruz.	()	()
54. Doktor, çocuğumu ayda en az bir kez görür.	()	()
55. Ailemin çocuğumu evde bırakıp tatile gitmesini istemem.	()	()
56. Çocuğuma evde bakabilmemize imkan yok.	()	()
57. Dışarı çıktığımızda çocuğumu beraber götürürüz.	()	()
58. Çocuğum başka bir yerde yaşarsa alıştığı ilgiyi sevgiyi ve bakımı bulamayacağından korkuyorum.	()	()
59. Çocuğumun evimizde olması başka bir yerde olmasından dahaiyidir.	()	()

Appendix-F (Continued)

Questionnaire on Resources and Stres

Stres Kaynakları Ölçeği

	D	Y
60. Ailemizin tüm üyeleri çocuğum ile aynı derecede ilgilenir.	()	()
61. Doktor, çocuğumu yılda en az bir kez görür.	()	()
62. Bazen evden uzaklaşma ihtiyacı duyarım.	()	()
63. Çocuğumun bakımın büyük bir kısmı bana düşer.	()	()
64. Benim için rahatlamak çok kolaydır.	()	()
65. Kendimi nadiren karamsar hissederim.	()	()