

Examination of hope, intolerance of uncertainty and resilience levels in parents having disabled children

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Abstract

The main purpose of this study is to examine the relationship between hope, intolerance of uncertainty and resilience levels in parents having disability children, and also to make a comparison of the levels of hope, intolerance of uncertainty and resilience between parents having disability children and parents having normal children. With ease of accessibility sampling, parents having disability children ($N_{dis}=174$) and parents having normal children ($N_{nor}=99$) from Kütahya were selected to gather data. 220 participants were female, while 53 were male ($N_{total}=273$). In this research, the Integrative Hope Scale, Intolerance of Uncertainty Scale and Resilience Appraisal Scale were applied in order to determine the levels of hope, intolerance of uncertainty and resilience of the parents. As a result, the parents having disability children were observed to have higher levels of intolerance of uncertainty and lower levels of hope and resilience than parents having normal children. Moreover, there are statistically significant relationships between hope, intolerance of uncertainty and resilience. Finally, having disability children and disability types are the important factors for high intolerance of uncertainty and low hope and resilience levels.

Keywords: Hope, intolerance of uncertainty, resilience, disability children.

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1. Introduction

It is known that in the process which starts with the diagnosis of a disability in the child or having a disabled child, each family with disabled children has different experiences and tries to cope with various issues. It is indicated that families believing that their child would be better with a hopeful and optimistic approach about the future contribute positively to the fulfilment of their roles in the family and to the communication within the family, that persons who are optimistic and hopeful about themselves and their families are healthy in all aspects, that their welfare is positively influenced by the situation (Esfahan & Rostami, 2016) and that their satisfaction in life is improved in this difficult process (Hutz, Midgett, Pacico, Bastianello & Zanon, 2014).

Uljarevic, Carrington and Leekam (2016) indicated that when families felt that the situation in which they were in was uncertain, the level of intolerance to uncertainty was high in family members, resulting in increased anxiety. When the family successfully adapt themselves to this adverse situation and stress this adaptation, it signifies 'psychological resilience' (McConnell & Savage, 2015). Psychological resilience equips the family with the strength to cope with stressful events. The individual characteristics of family members (belief, attitude, hope and emotional strength), positive interaction within the family and being socially supported are important factors in the family acquiring psychological resilience (Muir & Strnadova, 2014). Based on the strength that it provides to the individuals and the family, with the thought that hope and psychological resilience could be an alternative in decreasing the intolerance to uncertainty, an effort was made to explain these concepts, which have become important in the recent years.

1.1. Hope

One of the factors which gives us strength and enables us to keep fighting many problems throughout our lives is the hope that we shall overcome the issues and shall be feeling better in the future. In the body of literature, hope is defined as positive feelings that a person has about the future (Shenaar-Golan, 2017), a 'healing factor' (Konukbay & Arslan, 2015) which provides strength to the person coping with difficulties and overcoming distress, and a protective factor in the face of risky situations (Oktan, 2012). Horton and Wallander (2001) stated that although the feeling of hope is personal, it would strengthen when nurtured with social support.

Individuals with high levels of hope have expectations of success and good health for the future (Cho & Kahng, 2015; Vinayak, Dhanoa & Vinayak, 2016). Tarhan and Bacanli (2016) revealed in their study that persons with high levels of hope define themselves as 'responsible, open to development, calm, decided, planned, rational, joyful, social, agreeable, patient, determined, charitable, complacent, entrepreneurial persons who think that every problem has a solution'. These people become aware of the problem they are experiencing and work for a solution and adapt themselves to the conditions that they are subject to (Esfahan & Rostami, 2016) and achieve positive results in several domains in life. These people motivate themselves in achieving their goals and this brings success to them (Aydin, Odaci & Kahveci, 2017). The goals may be as concrete as wanting to buy an outfit or as indefinite as wanting a better life, and attaining these goals may require a longer or shorter time (Ozcan-Ceran, 2013). According to Snyder, Feldman, Taylor, Schroeder, and Adams (2000), when individuals who have high hopes are faced with any problem in attaining their goals, without being overcome by negative feelings, they find different goals that would meet their needs; hopeful people have many goals that make them happy. According to the hope theory, a hopeful thought is defined as a person having a goal for the future and finding pathways to reach that goal by taking the one which is the most suitable and the capability which is acquired by generating these pathways. Hope is the motivation tool in attaining goals and it reflects the attitude of the persons in attaining their goals (Ekas, Pruitt & McKay, 2016; Snyder, 2002).

1.2. Intolerance of uncertainty

'Uncertainty appears in the case of a person who is in a decision-making position, is unable to determine a value for the objects and events and/or when the person fails to estimate the consequences due to lack of sufficient clues' (Bailey et al., 2009). 'An uncertain situation may be new, complex or conflicting and unsolvable' and the person seeing such situations as a threat or assuming that they are unchangeable either 'obeys' or denies the real situation. If the obedience and denial occur in complex situations that the person cannot cope with, it can be said in that case that the person is intolerant of uncertainty (Koc, Iskender, Colak & Dusunceli, 2016). Intolerance of uncertainty is defined as the tendency to take into account the likelihood of the incidence of negative events that the person considers as 'unacceptable and threatening' (Carleton, Collimore & Asmundson, 2010); it is an individual characteristic arising from uncertainty and the corresponding negative beliefs, affecting the behaviour of a person and is an important component of 'anxiety and depression' (Carleton et al., 2012). Studies also indicate that intolerance of uncertainty causes anxiety, increases stress and apprehension (Jensen, Cohen, Mennin, Frescove & Heimberg, 2016; Zlomke & Jeter 2014), that it is a 'risk factor related to personal traits' affecting the behaviours in the development of anxiety (Boulter, Freeston, South & Rodgers, 2014), and that events become uncertain and even more difficult in individuals with high sensitivity, causing anxiety (Uljarevic, Carrington & Leekam, 2016). Whereas Saricam (2014) states that persons who are highly intolerant of uncertainty become unhappy with the increase in their anxiety levels, and that as intolerance of uncertainty increased, their level of happiness decreased.

1.3. Psychological resilience

The concept of psychological resilience is defined as the 'capacity of an individual to adapt and continue to develop when confronted with negative experiences' (Aslan, 2015), the strength to recover by coping with negative events such as stress, illness and psychological issues, the ability to 'successfully cope with negative conditions and to adapt to new situations' (Dogan, 2015). It is stated that 'psychological resilience' is considered as a 'personal trait which decreases the negative effects of stress' (Celik, Sanberk & Deveci, 2017).

In the studies conducted in Turkey, the words, such as psikolojik saglamlık, kendini toparlama gucu, yilmazlik, psikolojik dayaniklilik and psikolojik guclendirme, in Turkish corresponding to psychological strength, ability to collect oneself, dauntlessness, psychological endurance and psychological reinforcement are observed to be used as the equivalent of the concept of 'resilience'. The two important factors which complete the concept of 'resilience' are stated as experiencing difficulties and being able to overcome this difficult situation and to collect oneself (Isik, 2016). Variables explaining psychological resilience are gathered under the captions of existence of risk factors linked to the characteristics of the environment and the individual; the internal and external protective factors that make the person stand against difficulties and competency acquired by one coping with risk factors are gathered under the caption of display of positive results/positive adaptation which is a competency acquired by one coping with risk factors (Gizir, 2007; Tumlu & Recepoglu, 2013).

In psychological resilience, risk factors and protective factors are indicated as key points, and psychological resilience increases when individual, familial or environmental characteristics are positive and it decreases or disappears when these factors became negative (Oz, Yilmaz, 2009). Psychological resilience affects the satisfaction with life positively (Tumlu & Recepoglu, 2013; Celik, Sanberk & Deveci, 2017).

1.4. Present study

It is known that families of the disabled are negatively affected psychologically by the child's disability; however, studies are conducted with the aim to shed light on all the aspects of the family's

living conditions and strive to develop solutions. When studies on families with disabled children are examined, it is observed that those families have not only psychological but also social and economic difficulties (Karadag, 2014). Studies concerning anxiety and stress levels of families indicate that they need social support (Karpas & Girli, 2012), education and care support (Tarsuslu-Simsek, Tasci & Karabulut, 2015), and when families are unable to receive the support they need, their stress levels (Sivrikaya & Tekinarslan, 2013) and mourning reactions (Karpas & Girli, 2012) increase, such that maintaining family harmony was tiring and stressful while trying to meet the needs of the child (Sarvan-Cengiz, Bas & Elaltunkara, 2016) and that families felt anxiety for their children's future (Heiman, 2001; Cigerli, Topsever, Alvur & Gorpelioglu, 2014).

The satisfaction with life of parents with children requiring special education (Saricam, Kanpolat, Ilbay & Ozaslan, 2013) and their psychological well-being (Saricam, Akayildiz, Kanpolat, Ozaslan & Turan, 2014) are indicated as low. Supporting the family is important from the perspective of decreasing the stress they experience, and finding ways to cope with adversities in order to protect mental health is also important. There are certain studies advocating that hope and psychological wellness are requirements for psychological wellness and satisfaction with life (Malkoc & Yalcin, 2015; Sagone & De Caroli, 2014, Saricam, 2015a; 2015b). Therefore, determining the resilience and hope levels of parents with disabled children is important in support programmes that are created. According to McConnell, Savage, and Breitreuz (2014), social support for the family is a protective factor which increases psychological resilience. The study conducted by Cooke (2010) concluded that, 'thanks to social support, the level of hope increased in mothers and fathers with disabled children and their psychological resilience strengthened'. Furthermore, Canarslan and Ahmetoglu (2015) stated that families with disabled children that are socially supported have a higher quality of life in comparison to families unable to obtain this support.

Although we found studies separately examining the psychological situation, such as anxiety, stress, depression levels of families with disabled children, as well as the families' intolerance of uncertainty, hope and psychological resilience (Cooke, 2010; Ekas, Pruitt & McKay, 2016; Horton & Wallander, 2001; McConnell & Savage 2015; Palanci, 2018; Shenaar-Golan, 2017; Uljarevic, Carrington & Leekam, 2016), no studies could be found in which hope, intolerance to uncertainty and psychological resilience of the family were studied together.

It is considered that determining hope, intolerance of uncertainty and psychological resilience levels of parents in this research shall clarify the process that the families go through and shall lead the way in creating family education, psychological and social support programmes. The support extended to the parents is expected to contribute to the intrafamilial communication and thus the disabled child shall also benefit from it. Therefore, the main purpose of this study is to compare the intolerance of uncertainty, hope and psychological resilience of parents with disabled children with those who have normally developing children. Another purpose of this study is to determine the levels of hope, intolerance of uncertainty and psychological resilience of parents with disabled children and to examine the likelihood of correlation between the concepts. Certain hypotheses are put forth as follows to attain these goals:

H1: The intolerance of uncertainty levels in parents with disabled children is higher than the intolerance levels in parents with normally developing children.

H2: Hope levels in parents with disabled children are lower than the hope levels in parents with normally developing children.

H3: Psychological resilience levels in parents with disabled children are lower than the psychological resilience levels in parents with normally developing children.

H4: There is a statistically positive significant correlation between hope and psychological resilience levels in parents with disabled children.

H5: There is a statistically negative significant relationship between the intolerance of uncertainty and the levels of hope and psychological resilience in parents with disabled children.

2. Method

2.1. Participants

The work group comprised 273 parents in total, with 174 having children with special needs and 99 having with normally developing children, selected from the province of Kütahya by purposive availability sampling. 220 of the participants were female and 53 were male. The ages of the parents with normally developing children ranged between 26 and 47, and the ages of the parents with children with special needs ranged between 24 and 62; the general age average was 35.55.

2.2. Instruments

2.2.1. Integrative hope scale (IHS)

Schrank, Woppmann, Sibitz and Lauber (2011) developed the IHS to evaluate hope levels of adults. It is a 23-item scale involving a 6-point scale, ranging from 1 (strongly disagree) to 6 (strongly agree). IHS was adapted to Turkish by Saricam and Akin (2013). Confirmatory factor analyses (CFA) demonstrated that 23 items yielded four factors (Trust and confidence, Lack of perspective, Positive future orientation and Social relations and personal value) as original form and that the four-dimensional model was well fit ($\chi^2=610.67$, $df=222$, $RMSEA= 0.062$, $CFI= 0.94$, $IFI= 0.94$, $NFI= 0.90$ and $SRMR= 0.063$). Factor loadings ranged from 0.25 to 0.67. In the concurrent validity, significant relationships ($r=-0.53$) were found between the IHS and The Beck Hopelessness Scale. Cronbach's α internal consistency coefficients were 0.76 for the overall scale and as 0.80, 0.71, 0.68, and 0.65, for the four subscales, respectively. Moreover, test-retest reliability coefficient was 0.89 and the corrected item-total correlations ranged from 0.24 to 0.57. In this study, Cronbach's α internal consistency coefficient was 0.72 for the overall scale.

2.2.2. Short version of the intolerance of uncertainty scale (IUS-12)

This scale determines the level of an individual's anxiety about the future, and it was developed by Carleton, Norton and Asmundson (2007). The scale is a 12-item tool and participants responded to items on a 5-point Likert scale. In psychometric properties of the Turkish version, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.85 and a significant result on Bartlett's test of sphericity was $\chi^2= 5,052.53$ ($p<0.001$, $df= 66$). Results of the CFA demonstrated that 12 items yielded two factor as original form and that the two-dimensional model was well fit ($\chi^2= 147.20$, $df= 48$, $RMSEA= 0.073$, $CFI= 0.95$, $IFI= 0.95$, $GFI= 0.94$ and $SRMR= 0.046$). Factor loadings ranged from 0.55 to 0.87. Cronbach's α internal consistency coefficients were 0.88 for the overall scale, 0.84 for prospective anxiety subscale and 0.77 for inhibitory anxiety subscale. In the concurrent validity, significant relationships were found between IUS-12, Coping Flexibility Scale and Educational Stress Scale ($r= -0.43$, 0.41, respectively). Test-retest reliability coefficient was 0.74. Corrected item-total correlations ranged from 0.42 to 0.68 (Saricam, Erguvan, Akin & Akca, 2014). In this study, Cronbach's α internal consistency coefficients were 0.84 for the overall scale, 0.81 for prospective anxiety subscale and 0.76 for inhibitory anxiety subscale.

2.2.3. Short form of resilience appraisal scale (SF-RAS)

The original scale was developed by Johnson, Gooding, Wood & Tarrier (2010). The 12 items are appraisals of an individual's ability to cope with emotions, solve problems and gain social support. Responses were rated on a 5-point scale from 'strongly disagree' to 'strongly agree'. SF-RAS was adapted to Turkish by Saricam, Ilbay, Uysal, Cardak and Akin (2012). CFA demonstrated that the 12 items loaded on three factors (social support, emotional coping and situational coping) and the three-dimensional model was well fit ($\chi^2=117.28$, $df=47$, $p=0.00000$, $RMSEA= 0.060$, $CFI= 0.97$, $NFI= 0.95$,

RFI= 0.95, IFI= 0.97, GFI= 0.96 and SRMR= 0.049). Factor loadings ranged from 0.38 to 0.70. The internal consistency coefficients of the scale were 0.66, 0.73 and 0.71 for three subscales, respectively, and 0.81 for overall scale. The corrected item-total correlations ranged from 0.38 to 0.57. In this study, Cronbach’s alpha internal consistency coefficient was 0.86 for the overall scale.

2.3. Procedure

In this study, which used the causal-comparative technique, attention was paid to primarily create the variables and the work group. The assessment instruments and personal information forms that would evaluate the psychological resilience, intolerance of uncertainty and hope levels were combined together and the application form was obtained. Then, these forms were sent to the parents through the intermediary teachers who worked in the (Special Education Professional Training Centre) Ozel Egitim Mesleki Egitim Merkezi, (Special Education Primary School) Ozel Egitim Ilkokulu, (Special Education High School) Ozel Egitim Ortaokulu, (Special Education Work Application Centre) Ozel Egitim Is Uygulama Merkezi, (Special Education Application Centre 1st and 2nd Level) Ozel Egitim Uygulama Merkezi I. ve II.Kademe, (Primary School for the Hearing Impaired) Isitme Engelliler Ilkokulu, (Secondary School for the Hearing Impaired) Isitme Engelliler Ortaokulu, Preschool, Secondary School, Vocational and Technical Anatolian High School. Within 1 week, the forms were transferred to the computer environment after being collected from the schools. Normal distribution was observed in the statistical analysis, and parametric tests were used. Unpaired *t*-test was used to compare the psychological resilience, intolerance to uncertainty and hope levels of parents of children with special needs and children who progressed normally, Pearson’s product-moment correlation analysis and part correlation analysis were used to compare the correlation between variables. 95% ($p < 0.05$) was taken as the basis for confidence interval.

3. Findings

3.1. Comparison findings

Independent samples *t*-test was used to compare the levels of psychological resilience, intolerance of uncertainty and hope levels of parents of children with special needs and of those with children who progressed normally. The results are shown in Table 1.

Table1. Results of *t*-test concerning the comparison of psychological resilience, intolerance of uncertainty and hope levels of parents

Variables	Children	N	X	SD	t	p
Social support	Disability	174	10.70	3.55	4.65	0.00
	Normal	99	12.74	3.45		
Emotion coping	Disability	174	11.01	3.35	4.05	0.00
	Normal	99	12.63	3.05		
Situation coping	Disability	174	10.44	3.77	5.48	0.00
	Normal	99	12.96	3.57		
Resilience (psychological)	Disability	174	32.15	9.55	5.37	0.00
	Normal	99	38.32	8.88		
Prospective anxiety	Disability	174	21.27	6.94	6.38	0.00
	Normal	99	16.02	6.29		
Inhibitory anxiety	Disability	174	15.44	5.71	6.55	0.00
	Normal	99	11.26	4.65		
Intolerance of uncertainty	Disability	174	36.71	12.25	6.70	0.00

	Normal	99	27.28	10.51		
Trust and confidence	Disability	174	19.61	7.19	5.05	0.00
	Normal	99	24.41	7.77		
Lack of perspective	Disability	174	13.97	4.75	3.42	0.00
	Normal	99	16.27	5.65		
Positive future orientation	Disability	174	8.87	3.77	4.80	0.00
	Normal	99	11.07	3.56		
Relations and personal value	Disability	174	9.27	3.18	2.77	0.00
	Normal	99	10.40	3.30		
HOPE	Disability	174	51.72	17.09	4.82	0.00
	Normal	99	62.16	17.25		

** $p < 0.01$.

When Table 1 is examined, the psychological resilience point averages ($\bar{x}=32.15$) of parents having children with special needs is statistically significantly lower than the psychological resilience point averages ($\bar{x}=38.32$) of parents having children who progressed normally ($t=5.37, p < 0.00$). In other words, it can be said that the psychological resilience levels of parents of children who progressed normally are better, wherein they obtained more social support, coped better with their feelings and are better in overcoming situational incidents. According to Table 1, the intolerance of uncertainty point averages ($\bar{x}=36.71$) of parents of children with special needs is statistically significantly higher than the intolerance of uncertainty point averages ($\bar{x}=27.28$) of parents of children who progressed normally ($t=6.70, p < 0.00$). In other words, it is possible to say that the prospective anxiety and inhibitory anxiety levels of parents of children with special needs are higher in comparison with the families of children who progressed normally. Additionally, hope point averages ($\bar{x}=51.72$) of parents of children with special needs is statistically significantly lower than the hope point averages ($\bar{x}=62.16$) of parents of children who progressed normally ($t=4.82, p < 0.00$). In other words, it can be said that the hope levels of parents who have children who progressed normally is better, wherein they have more feelings of trust, a better orientation for a positive future, they experience less perspective deprivation and have a better social relationship.

3.2. Correlation findings

Pearson's product-moment correlation coefficient analysis was used to determine whether a correlation exists between the psychological resilience, intolerance of uncertainty and hope levels of parents of children with special needs and those who progressed normally. The results are shown in Table 2.

Table2. Results of Pearson's product-moment correlation aimed at the relationship between the levels of psychological resilience, intolerance to uncertainty and hope levels of parents

Variables	1.R	2.IU	3.H
1.Resilience (psychological)	-	-0.47**	0.45**
2.Intolerance of uncertainty		-	-0.36**
3.Hope			-
\bar{x}	34.39	33.29	55.50
SD	9.76	12.48	17.84
Cronbach's α	0.86	0.84	0.72

** $p < 0.01$.

As shown in Table 2, there are statistically significant correlations at the $p < 0.001$ threshold between variables. There is a negative ($r = -0.47$) relationship between psychological resilience and positive direction relationship with hope ($r = 0.45$). There is a negative relationship ($r = -0.36$) between intolerance of uncertainty and hope. In other words, as psychological resilience increases, intolerance to uncertainty decreases and hope increases. On the other hand, as uncertainty decreases hope increases.

Due to the correlation coefficients in Table 2, having a disabled child and the types of disability in the children were controlled and partial correlation analysis was carried out. The findings are presented in Table 3.

Table3. Results of partial correlation between psychological resilience, intolerance of uncertainty and hope variables

Control variables	Variables	1.R	2.IU	3.H
Disability *	1.Resilience (psychological)	-	-0.36**	0.35**
Disability type	2. Intolerance of uncertainty		-	-0.23**
	3. Hope			-

** $p < 0.01$.

As seen in Table 3, when the fact of having a disabled child or not and the type of disability in the child is controlled, the partial correlation coefficient between psychological resilience and intolerance of uncertainty is $r = 0.36$, the partial correlation coefficient between psychological resilience and hope is $r = 0.35$ and the partial correlation coefficient between intolerance of uncertainty and hope is $r = 0.23$. Correlation coefficients between all variables were decreased. In other words, it is thought that having a disabled child and the type of disability of the child are affecting the psychological resilience, intolerance of uncertainty and hope.

4. Discussion

The main goal of this study was to compare the levels of intolerance of uncertainty, hope and psychological resilience of parents of disabled children with the intolerance of uncertainty, hope and psychological resilience levels of parents who have normally progressing children. To attain this goal, certain arguments were made at the start of the study.

According to the first argument, the intolerance of uncertainty levels in parents of disabled children should be higher than the intolerance of uncertainty levels in parents who have normally progressing children. According to the findings of the study, the intolerance of uncertainty levels of parents of disabled children were significantly higher than the intolerance of uncertainty levels of parents who have normally progressing children. Chamberlain et al. (2013), Hodgson, Freeston, Honey and Rodgers (2017), and Neil, Olsson, and Pellicano (2016) reported that the intolerance of uncertainty levels of parents of children with autistic spectrum disorder were because parents felt fear and anxiety caused by uncertainties and unknown things about their children. These findings are similar to the research findings. Furthermore, in a study carried out on the parents of autistic children, Akayildiz and Saricam (2015) found that the social anxiety levels of parents of autistic children were higher than the parents of normally progressing children. Buhr and Dugas (2012) and Carleton, Collimore and Asmundson (2010) reported that intolerance to the unknown, in other words to uncertainty, caused social stress and widespread stress disorders. It is proven by the studies (Cramm & Nieboer, 2011; Karadag, 2014; Karpas & Girli, 2012) that parents of disabled children are anxious and hopeless with high stress levels. Many studies have supported the fact that intolerance of uncertainty triggers anxiety (Buhr & Dugas, 2009; 2012; Carleton, Collimore, Asmundson, 2010; Carleton et al., 2012; Carleton, Norton & Asmundson, 2007; Carleton, Sharpe & Asmundson, 2007). Consequently, the findings of the study are of a nature that supports the finding of the research, and it is a probable case that intolerance of uncertainty, which is itself a negative structure (Atak, Syed, Cok & Tonga, 2016), brings about negative

sentiments, such as anxiety, depression, unhappiness, with a higher incidence in families with disabled children. Therefore, the first hypothesis of this research has been confirmed.

In the second hypothesis of this research, it was claimed that the levels of hope of disabled children's parents would be lower than the levels of hope of parents with normally progressing children. According to the finding of this research, the hope levels of families with disabled children were significantly lower than families with normally progressing children. In the families of disabled children, the levels of hope were found to be low by Kausar, Jevne and Sobsey (2003); however, they have claimed that hope is an important process for these families in rebuilding their lives. Hope is depicted as a positive feeling and is used for good expectations for the future. To have a low level of hope may be seen as an expected result for individuals who have high levels of negative feelings (anxiety, depression, anxiety, etc.). The studies show that disabled children's families experience anxiety for the future (Yazici, Okcu, & Sozbilir, 2009), that the self-sufficiency, perceived social support and personal traits of individuals affected their levels of hope (Yazici et al., 2009) and have parallels with this finding (Tarhan & Bacanlı, 2016). Therefore, the second hypothesis of this study has also been confirmed.

In the third hypothesis of this research, it was claimed that the psychological resilience of disabled children's parents was lower than the psychological resilience of parents of children who progressed normally. According to the findings of this study, the psychological resilience of parents of children with disabilities was significantly lower than other parents. Kucuk and Saricam (2015) found that the psychological resilience of parents of children with disabilities is lower than parents of normal children, whereas Zauszniewski, Bekhet and Suresky (2010) found that all the members of a family with children with grave mental retardation have low psychological resilience levels. Similarly, Kaner and Bayrakli (2009) reported that the mothers of mentally retarded children have lower levels of dauntlessness. Considering that the psychological resilience trait, which is defined as the ability to adapt to problems and to cope with adversities (Aslan, 2015; Dogan, 2015), is affected by the personal and environmental risk factors, the stress and care burden created in the family by the fact of having a mentally retarded child may be mentioned as a risk factor for psychological resilience. Therefore, it can be said that in the light of these findings the third hypothesis has also been confirmed.

For the fourth hypothesis of this study, the correlation between hope and psychological resilience levels of parents of children with disabilities was tested. According to the findings of this study, the level of hope increases as the level of psychological resilience level increases. In light of this finding, Lloyd and Hastings (2009) and Collins (2009) showed that there is a positive and significant correlation between psychological resilience and hope, which is in agreement with the study described by Cooke (2010), which indicates that individuals who have high psychological resilience also have high levels of hope.

In the final hypothesis of this research, statistically negative significant correlations were found between the levels of intolerance of uncertainty and hope and psychological resilience. According to the findings of this study, in families with children with disabilities, as intolerance of uncertainty increases, the levels of hope and psychological resilience decrease. One of the reasons for this situation may be interpreted as a stressful thinking style, which causes hopelessness. Esfahan and Rostami (2016) emphasised that a child with disabilities may have a negative influence on the family, that parents who are hopeful and optimistic about themselves and the world could be healthier mentally and physically and a positive emotional situation could improve mental, psychological and even physical states of the family members. Shenaar-Golan (2017), in her study, noted that in families with children with disabilities, mothers and fathers who had high levels of hope also had high levels of subjective well-being, and improvement in their subjective well-being increased their quality of life. Therefore, it can be said that the family and the individual with disabilities would be strengthened by strengthening parents as individuals and improving environmental conditions. Therefore, it is considered that the negative influences of stress on individuals decreases with the psychological

resilience trait, the individual's hopefulness and ability to cope with negative factors in such a situation causes a lower level of intolerance of uncertainty is in fact a consistent outcome.

5. Conclusion

Consequently, parents of children with disabilities experience intolerance and hopelessness independently from the type of disability of the child, and furthermore their psychological resilience is observed to be low. In light of the research findings and supporting studies, the parents of children with disabilities need social support, emotional coping and situational coping skills. In these families, feelings of anxiety for the future and pre-emptive anxiety are high. Furthermore, parents experience problems in the feeling of trust, in social relations, self-worth, interpretation and planning of the future. As the psychological resilience of the parents of a child with disability is low, they experience intolerance of uncertainty and this situation reduces their hope.

6. Recommendations

The following suggestions are made on the basis of this research's results:

Psycho-social support should be extended to parents of children with disabilities or social support systems should be developed. For example: social interaction groups should be created or practices should be implemented to develop their social relations.

Confidence-increasing activities, emotional and situational coping skills should be included in the social support programmes for families.

Their orientation to the future should be ensured by support systems created or by providing realistic information on their children and their future in their programmes.

Certain limitations were encountered in the research process. In certain parents, clear information about their children could not be obtained due to information pollution and deficiencies (for example, type of disability and its characteristics). The work group was limited to the province of Kutahya in Turkey. Certain important analyses could not be made due to the characteristics of the data. To eliminate these limitations, the following suggestions should be taken into account in future studies:

- Short explanations should be given, especially by writing the disability type on the application form. Or the child's medical or educational diagnosis report should be requested.
- The work group should be expanded with parents from different provinces. Selection of the parents should be proportional, especially the children's disability types should be taken into account.
- Data should be increased and it is more appropriate to use tests, such as MANCOVA and MANOVA, in determining the level and quality of impact (provided that necessary conditions are met for analysis).

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