



| Research Article / Araştırma Makalesi |

## The Effect of Parent's Family Life Quality Levels on Children's Parent-Child Relationship in Children with Developmental Disability

### Gelişimsel Yetersizliği Olan Çocukların Ebeveynlerinin Aile Yaşam Kalitesi Düzeyinin Çocuk Anne-Baba İlişkisi Üzerine Etkisinin İncelenmesi<sup>1</sup>

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#### Keywords

1. developmental disability
2. family life quality
3. parent-child relationship
4. special education
5. child

#### Anahtar Kelimeler

1. gelişimsel yetersizlik
2. aile yaşam kalitesi
3. anne-baba-çocuk ilişkisi
4. özel eğitim
5. çocuk

Received/Başvuru Tarihi  
08.11.2020

Accepted / Kabul Tarihi  
06.05.2021

#### Abstract

*Purpose:* The aim of this study is to analyze the impact of quality of family life on parent-child relationship.

*Design/Methodology/Approach:* The sample of this study was consisted of 382 parents with 48-72 months old children with developmental deficiency who continues to receive support from special education services for at least one year. Relational scanning method, which is one of the quantitative research methods, was used in the study. In the study, "Family Information Form" was used to get demographic information of parents and their children, "Beach Center Family Quality of Life Scale (BCFQLS)" to determine parents 'quality of family life, and "Child-Parent Relationship Scale (CPRS)" to determine parents' child relationship.

*Findings:* In the study, it was indicated that as the quality of family life levels of the parents of children with developmental deficiencies decrease, parent-child relationships were affected negatively. In addition, it was found that the education levels of the parents and the state of providing self-care of the child without support differ significantly in both the child-parent relationship and the quality of family life level.

*Highlights:* Many factors affect the quality of family life of parents. One of these factors is that the parents have children with developmental disabilities. If the necessary financial and moral support is provided to these parents, the quality of family life of the parents will be positively affected.

#### Öz

*Çalışmanın Amacı:* Bu araştırmanın amacı, gelişimsel yetersizliği olan 48-72 aylık çocukların ebeveynlerinin aile yaşam kalitesi düzeyinin çocuk anne-baba ilişkisi üzerine etkisini incelemektir.

*Materyal ve Yöntem:* Araştırmanın örneklemini; İstanbul ilinde yaşayan 48-72 aylık en az bir yıldır özel eğitim destek hizmetinden yararlanmayı sürdüren çocuğu olan 382 ebeveyn oluşturmaktadır. Araştırmada nicel araştırma yöntemlerinden ilişkisel tarama yöntemi kullanılmıştır. Ebeveynlerin ve çocuklarının demografik bilgilerine ulaşabilmek amacıyla "Aile Bilgi Formu", ebeveynlerin aile yaşam kalitesi düzeylerini belirlemek için "Beach Center Aile Yaşam Kalitesi Ölçeği (BCAYKÖ)" ve ebeveynlerin çocuk ilişkisini tespit etmek için "Çocuk-Anababa İlişki Ölçeği (ÇAİÖ)" kullanılmıştır.

*Bulgular:* Araştırma sonucunda, gelişimsel yetersizliği olan çocukların ebeveynlerinin aile yaşam kalitesi düzeyleri azaldıkça, çocuk-ana baba ilişkisinin de olumsuz yönde etkilendiği tespit edilmiştir. Ayrıca ebeveynlerin öğrenim düzeyleri ile çocuğun öz bakımını desteksiz sağlama durumu, hem çocuk-ana baba ilişkisinde hem de aile yaşam kalitesi düzeyinde anlamlı farklılaştığı saptanmıştır.

*Önemli Vurgular:* Ebeveynlerin aile yaşam kalitesini birçok faktör etki etmektedir. Bu faktörlerden birisi de ebeveynlerin gelişimsel yetersizliği olan çocuğu olmasıdır. Eğer bu ebeveynlere gerekli olan maddi ve manevi destekler sağlanırsa, ebeveynlerin aile yaşam kalitesi olumlu yönde etkilenebilir.

<sup>1</sup> This paper was derived from a part of first author's dissertation at Okan University, Institute of Health Sciences.

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## INTRODUCTION

Throughout the world, family is seen as a structure where personality and general development form also a construction to spend time first and the most (Aldersey, 2012). Parents take on new responsibilities with the arrival of a new member of the family. Parents ensure the individual some basic skills such as to love and be loved, respect and sharing, taking part and social adaptation. Parents want to have a healthy child to teach the mentioned skills. However, their wishes might not always come true as planned (Yıldız, 2009). It is common to observe one or more family members to have a temporary or permanent illness or disability. In case of encountering such a situation, family members are not only influenced financially and morally but also it might influence the family relationship in a negative way (Bartan, 2010). As a deficiency is recognized in child, family members regard the situation as a new process to cope with (Aysan & Özben, 2007). Developmentally disabled child might cause a new role for the relationship between family members and creates an additional source of stress (Küçüker, 2001). For example, in his study Aldersey (2012), found out the fact that parents who take care of a developmentally disabled child face with more stress and less morale level compared to parents in general community. Meanwhile such families get into more problems for family matters. One of the greatest concerns of families is also about the way of a child to continue his/her life after parent's death. At this stage it appears that parents have expectations and requirements. The mentioned families are observed to have such kind of problems more than healthy children's parents (Tunç, 2011).

Developmental deficiency is a condition that continues for a long time, is difficult to change and is in a state of continuity. (Görgü, 2005). Developmental disability is defined as the condition of having different levels in mental, physical, emotional, social, and communicational areas. When analyzed the definition of developmental disability, the content includes mental deficiency, autism spectrum disorder, down syndrome, Cerebral palsy, Fragil X Syndrome, Fetal Alcohol Syndrome, and other diseases generated from genetic and chromosome abnormalities. In this research four most commonly observed development disabilities are based. These are Mental Deficiency, Autism Spectrum Disorder, Down Syndrome and Cerebral Palsy. Mental deficiency is a case emerging in developmental period and influencing developmental areas as well as cognitive skills. Recent studies confirmed the mental deficiency prevalence is 18,3/1000 (Bourke et al., 2016; Kara, 2016). Although the reasons are not known exactly, according to the description defined by American Psychiatric Association (APA) Autism Spectrum Disorder (ASD) is a kind of developmental disability exhibiting recurring and restricted behavior patterns, perniciousness in sameness, permanent inabilities in communication and over sensitiveness that could be barely visible after 24 months old (APA, 2013). It is determined it has increased dramatically and raised at the ratio of 1/68 as ASD prevalence is examined (Wintage et al., 2014). Down Syndrome is a chromosomal abnormality emerging with three pieces of twenty-first chromosomes. Among individuals with additional chromosome, mental deficiencies, dysmorphic body types, epilepsy, hearing, and visual disorders are confronted. It could be observed in one child over 700-800 babies born alive (Koçak-Eker et al., 2010). Cerebral Palsy is an illness manifests itself at ninth week of pregnancy as well as beginning in infancy and resulting from retardation in motor skills, nonprogressive brain abnormalities or poor posture. Its ill's common to observe CP between 2-2,5/1000 (Park, 2017; Shikako-Thomas et al, 2012). The patient with mentioned disabilities lacks at least three deficiencies in learning basic life skills, self-care abilities, using recipient and expressive language, motion skills, managing themselves, living independently and economic inadequacy (Meral, 2011). Therefore, the family who take care of the child is affected negatively.

An individual's physical, psychological, social relationship, faith and aims within the scope of society's cultural values, interests, and expectations together with life perception have been called "life quality" (Balkanlı, 2008). Considering the life quality, research which study personal life qualities are more common than the ones for family life qualities. Family life quality is defined as meeting the needs of family members living together and having common goals as well as trying to reach them. Among the criteria of family life quality, income status, educational background, employment status, the working conditions, areas to spend income, the sheltering and transport facilities, recreational and entertainment activities are all included (Canarşlan & Ahmetoğlu, 2015). Family interaction, financial and physical status, parents' responsibilities, and emotional welfare of members also affect family life quality. Benefiting from health services adequately, working at a particular job and material wellbeing also play important role in family life quality. In case of a difference in social economic variants, certain impacts on family life qualities are estimated (Deveci-Şirin, 2014). Several studies in literature evaluated family life qualities over families showing typical development through different variables. However, studies on families with developmentally disabled children are quite limited. For instance, at the research studied by Özyurt (2011), families with mild mental disabled children are included and finds out that mother's sense of family life quality is affected by family income, social economic status, age of disabled child and inefficacy type, leastwise. In other words, apart from family income, working conditions and residence, child's developmental state might also affect family life quality.

0-8 years old, known as the most crucial learning age for children plays an important role in parent-child relationship and child's perception of neighborhood It can be clearly seen that quality of family environment where a child is given birth and various positive social stimuli promotes children's development (Akgün, 2008). Parents' social, psychological, cultural qualities as well as the life quality determine the levels of stimuli supportive and coherent with stage of development (Özyurt, 2011). Communicative skills of children in early childhood mostly consist of behaviors such as following parents' actions, examining the consequences and shaping new manners. Parents are required to give direct and clear messages to have a healthy relationship with their children as well as knowledge of the methods and the rules of communication for the messages be effective and straight (Kirman & Doğan, 2017).

While the literature is examined, it is possible to encounter much research about family life quality. Studies for typically developed children's families do outweigh when study samples and study groups are analyzed. However, levels of developmentally disabled children also influence family life qualities as mentioned earlier in literature. Also, among rare studies for families with developmentally disabled children, developmentally disabled children's families with an only single disability group are included. There could not be found any studies about the comparison of families having different developmentally disabled children. This study is essential in determination the level of life qualities for developmentally disabled children's families as well as the matters possible to be faced in relationships between parents and the children.

Parents with developmentally disabled children are supposed to be very important in determining the factors influencing the relationship between parents and the children as well as the areas where they encounter the problems mostly. Therefore, answers for the following questions are searched in the study:

1. Is there a meaningful differentiation between the total score of child-parent relationship for developmentally disabled children's parents, sub-dimension scores and total score of Beach Center Family Life Quality Scale together with sub-dimension scores as well as social-demographical variants?
2. Is there a meaningful relationship between Parent-Child relationship scale levels and Beach Center Family Life Quality Scale?

## METHOD/MATERIALS

### Research Design

This is a relational browsing research among quantitative research methods made in order to set forth whether family life quality differentiates the parent relationship with developmentally disabled children according to demographical variants. Within quantitative research, correlational survey model is portrayal of a past or present case plainly on the other hand relational browsing is the study which aims to determine whether at least two different variants show alteration together (Karasar, 2011). This study is in correlational survey model as it evaluates the parent-child relationship and family life quality mutually.

### Participants

Examples of the study consist of 382 children's parents who keep going to governmental and non-governmental rehabilitation and tutoring centers in Istanbul connected to Ministry of National Education for at least one year being 48-72 months' old developmentally disabled children (Autism Spectrum Disorder (ASD), Mental Disability (MD), Down Syndrome (DS), Cerebral Palsy (CP). Preacher and MacCallum (2002) indicates that total number of examples need to be between 100-250 at least. Accordingly, at least 250 parents are aimed to be approached within the scope of this study.

**Table 1. Demographical features of parents' children included in study group.**

Demographic Information	Groups	n	%
Age of Child	48-60 Months	182	47,6
	61-72 Months	200	52,4
Sex of Child	Girl	134	35,1
	Boy	248	64,9
Diagnosis	Down Syndrome	42	11,0
	Cerebral Palsy	64	42,1
	Mental Disability	115	16,8
	Autism Spectrum Disorder	161	30,1
Additional Diagnosis	Yes	144	37,7
	No	238	62,3
Birth Order	First	178	46,6
	Second	112	29,3
	Third and later	92	24,1
Duration of Continuing Special Education	One Year	103	27,0
	Two Years	113	29,5
	Tree Years and Above	166	43,5
Can he/she Take Care of Him/Herself?	Yes	121	31,7
	No	261	68,3
	Total	382	100

According to Table-1, 52,4% of 61–72-month-old children and 47,6% of 48–60-month-old children are included in study group when the age variant is analyzed. The children are determined to be boys with 64,9%, and the girls with 35,1%. Examined diagnosis of the children it is seen that 42,1% of children are with Cerebral Palsy, 30,1% of Autism Spectrum Disorder, 16,8% of Mental Disability and 11% of Down Syndrome. Researched the situation of having another diagnosis there could not be found any additional diagnosis for 62,3% but found a comorbidity for 37,7%. When the birth order is examined, it makes sense that the children included in research are the firstborn with 46,6%, second born with 29,3% and third or subsequent born with 24,1%.

When analyzed the tutorial conditions all the children are tutored and 43,5% of children have been tutored for three or more years, 29,5% for 2 years while 27% for one or six years benefited from tutorials. Finally, it is reached out that 31,7% of children provide self-care by themselves while 68,3% is not sufficient with the point.

**Table 2. Demographical features of parents included in study group.**

Demographic Information	Groups	n	%
Number of children	Only child	94	24,6
	2 children	169	44,2
	3 or more children	119	31,2
Parent Sex	Women	302	79,06
	Men	80	20,94
Do you have other disabled children in your family?	Yes	37	9,7
	No	345	90,3
Mother's Education Status	Illiterate	31	8,1
	Primary school	149	39,0
	Middle school	77	20,2
	High school	80	20,9
	University and above	45	11,8
Father's Education Status	Primary school	146	38,2
	Middle school	80	20,9
	High school	100	26,2
	University and above	56	14,7
Mother Working Status	Working	40	10,5
	Unemployed	342	89,5
Father Working Status	Unemployed	13	3,4
	Self-Employment	139	36,4
	Private sector	163	42,7
	Officer	28	7,3
	Other	39	10,2
Mother Age	Age 30 and under	114	29,8
	Between the ages of 31-35	116	30,4
	Between the ages of 36-40	100	26,2
	Age 41 and over	52	13,6
Father Age	Age 30 and under	46	12,0
	Between the ages of 31-35	96	25,2
	Between the ages of 36-40	130	34,0
	Age 41 and over	110	28,8
Family Income Level	Less than 1500 TL	99	25,9
	Between 1501-3000 TL	228	59,7
	Between 3001-4500 TL	38	9,9
	4501 TL and Above	17	4,5
	Total	382	100

When the Table-2 is analyzed, parents included in the study are determined to be women with 79,06%, men with 20,94%, having 2 children with 44,2%, 3 or more children with 31,2% and only child with 24,6%. Asked if there are any other developmentally disabled children to be taken care in the family, it is determined that there are no other developmentally disabled children with 90,3% but there exist children with other developmental disabilities with 9,7%. Mothers are determined to be primary school graduates and the fathers are secondary school graduates at most. %89,5 of mothers isn't employed while %42,7 of fathers is employed in private sector. Only 3,4% of fathers are not employed. As parent age variables are studied it is probable to find out that 30,4% of mothers belong to an age group between 31-35, 29,8% to be under 30 years old mostly while 34% of fathers belong to an age group 36-40 and 28,8% to be over 41 years old. When income level is analyzed, 59,7% of families are seen to earn about 1501-3000 TL and %29,5 of them have an income under 1.500 TL.

### Data Collection Tools

Family information form, created to get information belonging to parent and child, is formed by the researchers. Beach Centre Family Life Quality Scale (BCFLQS) is used for parents' life quality levels and Child-Parent Relationship Scale (CPRS) for the connection between parent and child.

### Family Information Form

The form prepared by the researcher is created in order to find out the qualities such as the gender and the age of the developmentally disabled child as well as the parent's, together with the present status of diagnosis and possibility of an additional diagnosis, period of tutorial, self-care ability, existence of another child with a deficiency in the family, parent's educational and

employment condition, number of children, birth order of the child together with family income status. Information form consists of 16 questions.

### Beach Centre Family Life Quality Scale (BCFLQS)

With the aim of survey on family life qualities of developmentally disabled child, Beach Centre Family Life Quality Scale is used which is prepared by Beach Family and Deficiency Centre in Kansas University (Beach Center on Family and Disability, 2006). Adaptation to Turkish language, validity and credibility studies are realized by Meral and Cavkaytar (2013). It consists of 25 articles and 5 sub-dimensions (1-family interaction, 2- parentage, 3- emotional competence, 4-physical/financial/material competence, 5-support regarding incompetence) with 5-point Likert scale. High score means high family life quality. The total amount of BCFLQS is  $=.94$  Cronbach Alpha Value. However, in sub-dimensions, "family interaction is Cronbach Alpha= $0.92$ , parentage Cronbach Alpha= $0.88$ , emotional competence Cronbach Alpha= $0.80$ , physical/financial/material competence Cronbach Alpha Value= $0.88$  and support regarding incompetence Cronbach Alpha= $0.92$ ".

In the research, subdimension and credibility scores of BCFLQS is found as "family interaction Cronbach Alpha Score  $=.85$ , parentage Cronbach Alpha value= $0.83$ , emotional competence Cronbach Alpha value  $=.67$ , physical/financial/material competence Cronbach Alpha value= $0.78$ , support regarding incompetence  $=.83$  and total BCFLQS Cronbach Alpha Value  $=.93$ " According to Kılıç (2016), if reliability co-efficient is between  $0.7 \leq \alpha < 0.9$  reliability is in a good level while if it is between  $0.6 \leq \alpha < 0.7$ , it is in an acceptable level. When reliability co-efficient is examined, it is possible to allege that the scope scale of the study has a middle and high-level reliability.

### Child-Parent Relationship Scale (CPRS)

It is prepared by Robert C. Pianta (1922) to determine the relationship levels of child and parents with each other. In Turkish adaptation by Akgün and Yeşilyaprak (2010), it consists of 24 articles and 2 sub-dimensions (conflict and positive relationship). The scale has been applied to mothers having child between 48–72-month-old and it is 5-point Likert scale version which is calculated by turning the positive statements into negative ones. As the score increases, it is concluded that the relationship between parent and child is influenced negatively. The total amount of CPRS is Cronbach Alpha Value  $=.73$ . Though it is formed like; conflict Cronbach Alpha value  $=.85$  and positive relationship Cronbach Alpha value  $=.73$  in subdimensions.

In the research, the reliability of sub-dimension and total scores for "conflict" is found as Cronbach Alpha Value= $0.75$  and Cronbach Alpha value= $0.78$  for "positive relationship" sub-dimension. Due to the values major than  $0.70$ , it is possible to claim Child-Parent relationship scale is highly reliable (Kılıç, 2016).

### Data Collection Process

48–72-month-old developmentally disabled 382 children and their parents are reached who keep going to governmental and non-governmental rehabilitation and tutoring centers in Istanbul connected to Ministry of National Education for at least one year. Parents are reached through the Governor's permit (date 19.06.2017 and number 59090411-20 E.9383902) and permissions by hospital ethics committee (2017 date and 767 protocol number) during the application to hospital and by means of the institutions visited by the children.

### Data Analysis and Explication

In data analysis, scales and data gathered from parents at the end of the survey were saved in SPSS 22.0 data analysis program. In two group variables Independent Groups T test was applied while in more than two group variables One -Way Variance (Anova) Test was used. Tukey Test and Duncan Test was applied in order to determine the group that reason difference. Acquired verities were evaluated through  $95\%$  of confidence rage and  $5\%$  of significance level.

**Table 3. Kurtosis and Skew Value of Scales used in the research**

Dimensions	n	Min	Max	sd	$\bar{x}$	Variance	Skewness	Kurtosis
Conflict Dimension	382	16,00	61,00	9,337	38,335	87,184	-,075	-,512
Positive Relationship Dimension	382	10,00	46,00	7,338	23,036	53,857	,674	,455
Total Score	382	30,00	93,00	12,824	61,371	164,460	-,194	-,445
Family Interaction	382	10,00	30,00	4,436	24,031	19,679	-,756	,525
Parentage	382	6,00	30,00	4,708	22,816	22,166	-,706	,537
Emotional Competence	382	4,00	20,00	3,576	13,222	12,793	-,374	-,102
Physical/Financial/Material Competence	382	5,00	25,00	4,688	16,966	21,986	-,211	-,637
Support Regarding to Incompetence	382	4,00	20,00	3,634	14,623	13,212	-,428	-,118
Total Score	382	29,00	125,00	17,256	91,659	297,789	-,434	,318

In table 3, when kurtosis and skew coefficient evaluation is between "kurtosis and skewness value  $-1$  and  $+1$ ", it ranges normally, and parametric tests can be used as a result (Büyüköztürk, 2011). In the research, parametric tests were used due to the fact that results of the normality tests usually range.

## FINDINGS

In this part verities acquired via statistical data examination obtained from scales and questionnaires, which were applied for the research purpose, are present.

**Table 4. Demographic features of Study Group and comparison of BCFQLS and CPRS scores-1**

Groups	Dimensions		n	$\bar{x}$	ss	t	p
Independent Self-care	Conflict Dimension	Yes	121	35,760	9,766	-3,731	,000*
		No	261	39,528	8,900		
	Positive Relationship	Yes	121	19,247	6,552	-7,330	,000*
		No	261	24,793	7,023		
	Total Score	Yes	121	55,008	12,876	-6,766	,000*
		No	261	64,321	11,699		
Independent Self-care	Family Interaction	Yes	121	25,256	4,440	3,736	,000*
		No	261	23,463	4,343		
	Parentage	Yes	121	24,239	4,492	4,105	,000*
		No	261	22,157	4,667		
	Emotional Competence	Yes	121	14,198	3,510	3,690	,000*
		No	261	12,770	3,522		
	Physical/Financial/Material Competence	Yes	121	18,603	4,539	4,778	,000*
		No	261	16,206	4,569		
	Support Regarding to Incompetence	Yes	121	15,537	3,371	3,393	,001*
		No	261	14,199	3,680		
Total Score	Yes	121	97,834	16,553	4,904	,000*	
	No	261	88,796	16,850			
Additional Diagnosis	Emotional Competence	Yes	144	12,750	3,550	,832	,044*
		No	238	13,508	3,569		
Physical/Financial/Material Competence	Yes	144	16,354	4,603	,980	,047*	
	No	238	17,336	4,710			
Do you have other disabled children in your family?	Physical/Financial/Material Competence	Yes	37	15,405	4,336	-2,140	,033*
		No	345	17,133	4,700		
Mother Working Status	Emotional Competence	Working	40	14,425	2,994	-2,259	,024*
		Unemployed	342	13,081	3,616		
	Physical/Financial/Material Competence	Working	40	18,975	3,661	-3,543	,001*
		Unemployed	342	16,731	4,743		

\*p<,05

In table 4, a meaningful differentiation in independent variable of developmentally disabled children's self-care skills and CPRS-BCFLQS is observed. In other words, family life quality and communication of parents whose children are competent in self-care is meaningfully at a high level. There is also a meaningful differentiation between the sub-dimension of emotional, physical/financial/material competence, an additional diagnosis case and employment of mothers. Parents of comorbidity children are at high levels of emotional and physical/financial/material competence. There exists a meaningful differentiation between the presence of another disabled child and physical/financial/material competence. Stated in other words, parents with another disabled member in their families have physical/financial/material lower competence meaningfully. Mother employment also influence /physical/financial/material competence sub-dimension. In other words, unemployment of mother results in emotional and financial incompetence.

In table 5, Tukey Test was applied to determine the meaningful differentiation between the conflict sub-dimension of CPRS sub-dimension and parent education level with developmentally disabled children. The differentiation is between undergraduate and postgraduate parents and the ones with lower education levels. In other words, it is claimed that undergraduate and post graduate parents face with less conflict situations compared to parents with other education levels. Tukey Test was applied to find out the certain groups which have a meaningful differentiation between diagnosis variable of developmentally disabled children and the positive relationship sub dimension from CPRS sub dimension. That kind of a differentiation is seen among groups with Down Syndrome and Cerebral Palsy, also in Mental Disability and Cerebral Palsy. In other words, the relationship between a Down Syndrome or Mental Disability child and the parent is more positive than Cerebral Palsy children.

Table 5. Demographic features of study group and Comparison of CPRS and BCFLQS scores-2

Groups	Dimensions	n	$\bar{x}$	ss	F	p	
Positive Relationship	Diagnosis	Down Syndrome	42	21,404	5,517	4,132	,007*
		Cerebral Palsy	64	25,234	7,729		
		Mental Disability	115	21,739	7,242		
		Autism Spectrum Disorder	161	23,515	7,448		
Conflict Dimension	Father's Education Status	Primary school	146	39,472	9,577	3,550	,015*
		Middle school	80	39,487	9,726		
		High school	100	37,500	8,725		
		University and above	56	35,214	8,523		
	Mother's Education Status	Illiterate	31	41,322	7,993	2,836	,024*
		Primary school	149	39,288	9,574		
		Middle school	77	38,324	9,789		
		High school	80	37,200	8,757		
	University and above	45	35,155	8,818			

\*p&lt;,05

Table 6. Demographic features of study group and Comparison of CPRS and BCFLQS scores-3

Groups	Dimensions	n	$\bar{x}$	ss	F	p	
Number of Children	Parentage	Only child	94	22,266	4,470	3,432	,033*
		2 children	169	23,520	4,831		
		3 or more children	119	22,252	4,616		
	Physical/Financial/Material Competence	Only child	94	17,308	4,738	3,164	,043*
		2 children	169	17,402	4,661		
		3 or more children	119	16,075	4,603		
Birth Order	Physical/Financial/Material Competence	First	178	17,303	4,872	4,089	,018*
		Second	112	17,419	4,303		
		Third and later	92	15,760	4,620		
Father Working Status	Emotional Competence	Unemployed	13	10,538	3,098	2,639	,034*
		Self-Employment	139	13,316	3,472		
		Private Sector	163	13,380	3,769		
		Officer	28	14,000	3,590		
		Other	39	12,546	2,863		
	Physical/Financial/Material Competence	Unemployed	13	13,461	5,141	7,198	,000*
		Self-Employment	139	16,266	4,668		
		Private sector	163	17,858	4,615		
		Officer	28	19,142	4,142		
		Other	39	15,333	,778		
	Total Score	Unemployed	13	82,538	20,056	2,815	,025*
		Self-Employment	139	91,014	17,555		
Private sector		163	93,858	17,636			
Officer		2	94,035	14,487			
	Other	39	86,102	13,331			

\*p&lt;,05

In table 6, there is a meaningful differentiation in parents' number of child variable, parentage, and physical/financial/material competence dimension. Duncan Test was applied to determine certain groups in differentiation about parentage dimension. The differentiation is among the parents with two children and a child: three or more children. In other words, parentage scores of families with two children are meaningfully higher. Tukey Test was applied to find out the certain groups which have a physical/financial/material competence level. The differentiation is between the families with two and three or more children; also, parents with two children have higher physical/financial/material competence dimension. Tukey Test was applied to determine the certain groups of meaningful differentiation about the birth order of child variable and physical/financial/material competence dimension. The differentiation is between parents who have developmentally disabled children with the third or subsequent and first or second as birth order. It is claimed that there is a lower physical/financial/material competence of parents with the third or subsequent born children. A meaningful differentiation is determined between the fathers' employment status variable and emotional/physical/financial/material competence along with family life quality scores. Tukey Test was applied to determine groups of meaningful differentiation in emotional competence and physical/financial/material competence. That differentiation is seen among the unemployed and employed fathers and the ones who work in public or private sectors. It can be claimed that emotional/physical/financial/material competence levels of unemployed fathers are meaningfully lower. Besides, there is a meaningful differentiation between freelance and officer fathers while officers have higher scores. Duncan Test was used to determine the groups with a meaningful differentiation. The differentiation is seen between the unemployed fathers and

fathers working in public and private sectors. As it is seen through the verity, unemployed fathers with developmentally disabled child have lower family life quality compared to employed fathers at different sectors.

**Table 7. Demographic features of study group and Comparison of CPRS and BCFLQS scores-4**

Groups	Dimensions	n	$\bar{x}$	ss	F	p	
Mother Education	Emotional Competence	Illiterate	31	11,548	3,604	3,890	,004*
		Primary school	149	13,060	3,476		
		Middle school	77	12,870	3,887		
		High school	80	13,862	3,355		
		University and above	45	14,377	3,249		
	Physical/Financial/Material Competence	Illiterate	31	14,935	4,234	9,874	,000**
		Primary school	149	15,771	4,885		
		Middle school	77	17,103	4,266		
		High school	80	18,450	4,112		
		University and above	45	19,444	4,245		
	Support Regarding to Incompetence	Illiterate	31	14,774	3,333	2,877	,023*
		Primary school	149	14,006	3,980		
		Middle school	77	14,610	3,422		
		High school	80	14,962	3,440		
		University and above	45	15,977	2,942		
Total Score	Illiterate	31	87,806	17,529	2,885	,022*	
	Primary school	149	89,751	17,569			
	Middle school	77	90,610	18,131			
	High school	80	94,187	15,995			
	University and above	45	97,933	15,065			
Father Education	Emotional Competence	İlkokul ve Altı	146	12,616	3,597	4,297	,005*
		Ortaokul	80	12,850	3,497		
		Lise	100	13,830	3,615		
		Üniversite ve Üstü	56	14,250	3,237		
	Physical/Financial/Material Competence	İlkokul ve Altı	146	15,678	4,665	9,817	,000**
		Ortaokul	80	16,937	4,335		
		Lise	100	17,500	4,787		
		Üniversite ve Üstü	56	19,410	3,957		
	Total Score	İlkokul ve Altı	146	89,328	18,024	3,615	,013*
		Ortaokul	80	90,937	16,675		
Lise		100	92,040	17,685			
Üniversite ve Üstü		56	98,089	13,653			

\*p<,05

In table 7, there exists a meaningful differentiation between mother education levels, support regarding to emotional/physical/financial/material competence and the total score. Tukey Test was applied to determine certain groups with dimensions of meaningful differentiation. Emotional differentiation is high for mothers who are illiterate and undergraduate or postgraduate mothers while differentiation score is meaningfully high among high school graduate and undergraduate or post graduate mothers. In terms of physical/financial/material competence dimension there seems a differentiation between illiterate or primary school graduate mothers and high school graduate or undergraduate/post graduate mothers. In other words, physical/financial/material competence of high school graduate and undergraduate/post graduate mothers is higher. There also exists another meaningful differentiation between secondary-school graduate and undergraduate/post graduate mothers. Undergraduate or post graduate mothers are determined to get higher scores. The differentiation about the support related to disability is between primary school graduate and undergraduate/ postgraduate mothers and undergraduate/post graduate mothers have higher scores. Analyzed the total family life quality score, it is possible to see it takes place among illiterate mothers and undergraduate/post graduate mothers.

In table 7, a meaningful differentiation in father education levels and physical/financial/material competence as well as family life quality score. Tukey Test was applied to find out the groups who own a meaningful differentiation. In emotional competence dimension, the differentiation is between primary school or lower educated fathers and secondary school graduates with undergraduate/post graduate fathers. Emotional competence levels of undergraduate /postgraduate fathers are meaningfully high. In terms of physical/financial/material competence dimension, it is observed between primary school or lower educated fathers and high school or undergraduate/postgraduate fathers. High school graduate or undergraduate/postgraduate fathers have higher physical/financial/material competence score than primary school graduate of lower educated fathers. Also, a meaningful differentiation is determined between secondary school graduate father and undergraduate or postgraduate. It is seen that undergraduate or postgraduate fathers have higher scores. Analyzing the total family life quality score, differentiation is between primary school or lower educated fathers and secondary school graduates with undergraduate or postgraduate fathers. It is concluded that undergraduate/postgraduate fathers have a meaningfully high total family life quality score.

**Table 8. Correlation Analysis between CPRS and BCFLQS**

n=382	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Positive Relationship Dimension	1								
2. Conflict Dimension	,171**	1							
3. Total Score	,697**	,826**	1						
4. Family Interaction	-,439**	-,220**	-,411**	1					
5. Parentage	-,417**	-,197**	-,382**	-,796**	1				
6. Emotional Competence	-,306**	-,223**	-,337**	,631**	,653**	1			
7. Physical/Financial/Material Competence	-,255**	-,282**	-,351**	,490**	,517**	,590**	1		
8. Support Regarding to Incompetence	-,267**	-,101*	-,226**	,558**	,577**	,481**	,570**	1	
9. Total Score	-,415**	-,254**	-,423**	,856**	,875**	,809**	,781**	,766**	1

\*\* p<.01, \*p<.05 significant, r= 0.000-0.300 low correlation, r= 0.301- 0.700 moderate relationship, r= 0.701-1.00 strong relationship

In table 8 there is a negative way medium level meaningful relationship between “positive relationship dimension” and “family interaction” (r: -,439) of CPRS subdimension, emotional competence (r: -,306) and total score (r: -,415) values. A negative way low level meaningful relationship is determined between “positive relationship” of CPRS subdimension together with “physical/financial/material competence (r: -,255) and support regarding to incompetence (r: -,267)” The outcome demonstrated that two subdimension show an alteration simultaneously. In other words, as parents’ family interaction, emotional and physical/financial/material competence, support regarding to incompetence and total score values increase, positive relationship scores decrease. There is a negative low level meaningful relationship between “conflict dimension” of CPRS subdimension together with “family interaction (r: -,220), parentage (r: -,197), emotional competence (r: -,223), physical/financial/material competence (r: -,282), support regarding to incompetence (r: -,191) and total score (r: -,254)” values. The result points out two subdimensions show an alteration all together. In other words, as parents’ family interaction, parentage, emotional incompetence, physical/financial/material competence, support regarding to incompetence and total score values increase, conflict dimension decrease. There is a negative middle level meaningful relationship between total CPRS score and family interaction (r: -,411), parentage (r: -,382), emotional competence (r: -,337), physical/financial/material competence (r: -,351) and total score (r: -,423) values. There is determined a negative low level meaningful relationship between total CPRS score and support regarding to incompetence (r: -,226) In other words, as parents’ family interaction, parentage, emotional competence, physical/financial/material competence, support regarding to incompetence and total score values increase, child-parent relationship scores decrease.

**Table 9. Regression Analysis between CPRS and BCFLQS scores**

Variables	Conflict Dimension				Positive Relationship				Total			
	B	t	R <sup>2</sup>	p	B	t	R <sup>2</sup>	p	B	t	R <sup>2</sup>	p
<b>Family Interaction</b>	49,460 -,463	19,216 -4,395	,048	,000**	40,484 -,726	21,726 -9,521	,193	,000**	89,944 -1,189	27,229 -8,796	,169	,000**
<b>Parentage</b>	47,231 -,390	20,324 -3,908	,039	,000**	37,857 -,650	22,356 -8,936	,174	,000**	85,088 -1,039	28,279 -8,048	,146	,000**
<b>Emotional Competence</b>	46,027 -,582	25,741 -4,456	,050	,000**	31,327 -,627	22,822 -6,256	,093	,000**	77,355 -1,209	32,615 -6,980	,114	,000**
<b>Physical/Financial/Material Competence</b>	47,848 -,561	27,734 -5,720	,079	,000**	29,813 -,399	21,819 -5,145	,065	,000**	77,660 -,960	33,587 -7,308	,123	,000**
<b>Support Regarding to Incompetence</b>	42,111 -,258	21,317 -1,969	,010	,050*	30,911 -,539	20,553 -5,395	,071	,000**	73,022 -,797	27,488 -4,519	,051	,000**
<b>Total Score</b>	50,934 -,137	20,342 -5,120	,065	,000**	39,227 -,177	21,194 -8,901	,173	,000**	90,162 -,314	27,980 -9,091	,179	,000**

In table 9, it is clear that positive relationship which is a CPRS sub-dimension influences “family relationship” to 19,3%, parentage to 17,4%, “emotional competence” 9,3%, “physical/financial/material competence” to 6,5%, support regarding to incompetence to 7,1% and total family life quality level to 17,3%. Conflict sub-dimension which is a CPRS sub-dimension influences “family interaction” to 4,8%, parentage to 3,9%, emotional competence to %5,0, physical/financial/material competence to 7,9%, support regarding to incompetence to 1,0% and total family life quality level to 6,5%. Total CPRS score influences “family interaction” to 16,9%, parentage to 14,6%, emotional competence to 11,4%, physical/financial/material competence to 12,3%, support regarding to incompetence to 5,1% and total family life quality level to 17,9%. According to conclusion, “family interaction” influences the positive relationship at the highest level, “physical/financial/material competence” to conflict dimension; “total family life quality level score” to CPRS total score.

## RESULTS, DISCUSSION AND RECOMMENDATIONS

Aim of the research is investigating impact of parent’s family life quality with developmentally disabled children on child-parent relationship. The verities in accordance with the study is compared with the studies in this literature.

In the study, a meaningful differentiation between the children's diagnosis variable and positive relationship sub-dimension as a result of the mentioned differentiation, there seems the relationship between parents and the children with DS and MD is more positive than the ones with CP. Due to the fact that the CP children are disabled physically/ bodily, their movement skills are weak, and they are in less connection and interaction with their environment. As the CP children need more care, they are thought to have weaker social relations with their parents. The fact that CP children's parents have less communication with them because of their movement limitation can be interpreted as they have weaker positive relationship. Analyzed the literature, in the studies of Piştav – Akmeşe et al. (2007), CP children's low motor skills are influential factors which determine mother's anxiety level. The difficulties of having a CP child brings family anxieties about the possibility of child can get sick at any time and the need for nursing for all his/her life are of the reasons that trigger high anxiety scores. Barfoot et al. (2017) study that research the interaction between CP children and their families, 20 mins' video recordings were taken except the scales and these videos were analyzed. At the end of the study, parent-child interaction was found at low level. In İlhan's study (2014) it is visible that 57,6% of mentally disabled children's parents is hopeful for the future while 34,9% of physically disabled children's parents is hopeless for the future. At the conclusion part of the study, forward thoughts of families and developmentally disabled children's diagnosis have a meaningful differentiation. In Rentinck et al. (2007) study which aims examination of adaptation process of CP children's families shows that CP children's parents are more stressed than parents with other developmentally disabled children. There is a parallelism between many other verities aside from this study (Zuurmond et al., 2018; Mei et al., 2015; Cunha et al., 2017).

There is a meaningful differentiation between independent self-care skills and CPRS and BCFLQS and total scores. Parents of the children who provide their own self-care independently have more positive scores. These children's first caregivers are generally their parents. The fact that child can provide their own self-care by themselves is thought to influence their family relationship positively. Parents might feel physically and emotionally better as the children provide their own self-care. It can be interpreted as the relationship between parents and the children who cannot maintain self-care is to be weaker and more conflicts are possible. It can be also alleged that less scores in life qualities are to be seen as parents spend more energy and money on self-care maintenance of their children, spare additional time and own extra responsibilities. Analyzing the literature, Tsai and Wang (2009) stated that %38,4 of mothers with developmentally disabled children experiences stress and tension generating from their children's inability in realizing basic life skills. Kırıcı (2010) stated developmentally disabled children's mothers who are responsible from taking care are in less interaction with their environment and therefore isolated from social circle as a result of diagnosis their children get.

In the study it is apparent that as parents' education level increase, conflict scores decrease. It is thought that as parents' education levels increase so does the efforts to research problems, thinking and finding common solutions. As education level increases, parents are thought to avoid from conflicts in order to communicate healthily and be more solution orientated in their behaviors and relationship with their children. Sarıhan (2007) stated in his study that as mothers' education level increase, their interest in family members and apprehension increase, they react accordingly, there happen positive changes in their treatment and communication with the help of education. Özyürek and Tezel-Şahin (2005) demonstrated that while the education level of parents who have 5-6 years old children increase, they avoid from firm-harsh position and behave positive.

It is detected that parents' education levels influence family life quality. It is found out that as parents' education levels increase, they have higher scores. It can be interpreted as highly trained parents reach the information quicker and have opportunity to implement what they learn within family life compared to poorly trained parents. It can be said that through increasing education level of parents they have more potential for their children's nursing and solving their basic problems. In his research, Arslantürk (2009) determined that as parents' education level increase, there emerges a healthier structure in family functions. In his research, Özyurt (2011) obtained that there is a meaningful differentiation between mother's education level and family functions. Accordingly, as mothers' education level increase, so does the score get from physical-monetary wellness sub-dimensions. Parallel with mothers' increasing education levels, there has been found family life functions and life qualities get more positive, so education is an important factor in family perception. In the study of Akandere et al. (2009), it is detected that education level of mentally and physically disabled children contribute meaningfully according to life satisfaction. University or high school graduate fathers' children get higher scores compared to primary or secondary school graduate father's children in terms of life satisfaction. In Mannan's research (2005), as education level increase them happens a positive way progress in life quality perception of families while there does not seem a differentiation between parents' employment status and life quality perception. Similar study results support the verities of this study (Dolanay, 2016; Çetin, 2018).

Children's status of having an extra diagnosis seems to affect the family life quality in a negative way. Parents might face with an extra difficulty when the children with a deficiency have any other inability. Child's having another extra diagnosis might weaken the communication and interaction with parents and influence the parents' approach to their children. The fact that child might own an additional diagnosis may result in increasing incompetence level therefore developmentally disabled children's responsibility might fall upon the parents. This situation might be interpreted as the parents might have more difficulties emotionally and financially. Aydın (2016) determined that mothers with physically and mentally disabled children show more depressive indications compared to just mentally disabled children's mothers and have higher depression scores. Cho and Hong (2013) allege that average expents of family, parents' life qualities and indirectly stress factor is affected by a single or extra diagnosed child. Senerman (2019) pointed out that ASD children's possession of having an extra diagnosis might cause extra problems.

Parents with other developmentally disabled children in the family also get lower scores. While presence of a single disabled child leaves the family in the lurch, having more than one child with disability might cause the parents get more affected by the situation. It is a well-known fact that presence of a developmentally disabled child costs much. While nursing costs individually it multiplies for each disabled child in these families. Tunç (2011) stated that presence of more than one disabled child in the family influence environmental life quality negatively. Mothers at those conditions have more medical problems, presence of more than one disabled child in the family leads increase in expenses; the situation causes less scores in terms of life qualities. There are some similar research propping the verity (Balkanlı, 2008; Ceylan, 2004; Durualp et al., 2014).

In the study, differentiation in number of children is on behalf of two-child parents. The situation can be expressed like as the child number increases in the family, an additional expense and outgoing occur. With increasing child number parents might feel financially inadequate. Ayvaz-Kızılgöl (2012) indicate that expenses increase as family member's mount. Durgun (2011) detects that when he examines household type, poverty risk increases as family member number increase. While the line is minimum for childless families, poverty line increases through the number of family members.

Two-child families can be alleged to have more experience and treat fair. Three or more children might reason a decrease in parentage score, less time to take care, inadequate energy and less patience compared to the past. Three or more children also cause the parent to be less patient and have more responsibility (Özyürek & Tezel-Şahin, 2005; Er-Gazeloğlu, 2000). Arabacı and Ömeroğlu (2013) demonstrate communication of multi-child parents with their children is weaker compared to families with less children number.

Having a developmentally disabled child after first or second born as well as getting an older age might result in emotional and financial difficulty. In the study, a meaningful differentiation is seen between birth-order of children and physical/financial/material competence dimension. Through the arrival of a newborn to family as well as an increase in number of children can be explained by multiple expenses and additional cost for a developmentally disabled child. Altuğ-Öztürk et al. (2006), conclude that treatment and expenditure on education of a developmentally disabled child bring an extra charge to family. In the study %83,6 of parents stated developmentally disabled children place burden on families. Akarsu (2014) detects 58,2% of families have difficulty in meeting the expenses. Koçak-Uyaroğlu and Bodur (2009) explore the degree of impact of mentally disabled children on parents regarding anxiety level and how much briefing method affects the anxiety level. One of the worries of mothers with a mentally disabled last child is the anxiety as they will not be able to provide material or moral nursing as they get older.

Employed families have better family life quality scores compared to unemployed parents. Employment of mothers can be thought as it financially helps home economics. Thanks to the bond established by employed parents with their environment, they can be thought to have more emotional dealings. This situation can be seen as a raise in emotional competence scores. Arpacı and Ersoy (2007) point out the fact that working mothers contribute to family budget, help to lighten the father economically and strengthen unity of family. Akarsu (2014) states employed mothers got higher scores in Mothers' Life Satisfaction Scale score compared to unemployed mothers with mentally disabled children.

Taken a look at the general situation in society, father figure is seen as breadwinner of family. Unemployment of fathers, feeling responsible for duties at home and bringing family an inadequate income is some of conditions determining unpeaceful atmosphere within family. The uneasiness and conflict might result in a low perception in life qualities of fathers first and then other family members. İcmeli et al. (2008) demonstrate that unemployment of fathers affects their problem-solving skills negatively. Financial ones among unemployed father's problems take place in problematic issues.

A negative way relationship between CPRS and BCFLQS sub-dimensions. Life quality score of families diminish so does the child-parent relationship while as the score increase, positive relationship between child and parent rise. Parents' perception of high family life quality is thought to impress their interaction. In his study Özmete (2010) finds out that as long as the relationship between individual's importance level with satisfaction level, which is perceived as life quality, family interaction being a sub-dimension of family life quality, placing an emphasis on emotional wellness and physical/material welfare improve so does the satisfaction levels. Meral and Cavkaytar (2014), state that in the study aimed at measuring the life quality perceptions of parents with ASD children, family social support perception makes sense in the raise of family life quality.

In regression analysis conducted between CPRS subdimension and BCFLQS subdimension, "family interaction" is the most affective dimension, "physical/financial/material competence" subdimension is the most efficient dimension regarding in conflict dimension while "total family life quality level" is the most influential dimension for child-parent relationship. Interaction between family members and spending time together make a positive effect on their relationships. As the concerted activities rise, it is possible for the members to support each other more, solve the problems together and improve the positive relationship between them. Parents with developmentally disabled children are thought to face with more financial problems originating from the child's deficiency. Parents' insufficient income and children's steadily increasing expenses can be interpreted as it affects family relations negatively. When parents feel themselves financially insufficient, this situation reflects on family relationships and therefore the possibility of conflict also increase. Ansari et al. (2016) allege that parents get economical/emotional and socially affected in case of incompetence. This situation causes a mental and physical stress on parents. Deveci-Şirin (2014) conclude that as parents' social-economic-demographic statue (income level, education status, employment conditions) improve, all subdimensions of family life quality and total score raise.

Consequently, as family life quality of developmentally disabled children's parent diminish, child-parent relationship is affected negatively. There appears a negative way relationship between CPRS sub-dimensions and BCFLQS sub-dimensions. A meaningful differentiation is found in parents' education status, self-care maintenance without any support and child- family relationship as well as life quality level. There also seems a meaningful differentiation between child-parent relationship and child's diagnosis. Employment of parents is found to be a variable improving family life quality. Presence of more than one disabled child in the family, additional diagnosis of child, number of children in the family, birth order is all negatively influential in life quality level

Following issues can be suggested.

- Parents be supported regarding to self-care of child at home (education, caregiver staff on certain days)
- To give economical support to parents in financial and social areas
- Employment of parents and flexible working conditions
- Different exercises can be planned to use different age, diagnostic groups, research methods,
- Studies regarding parent-child relationship can be executed.

### Ethics Committee Approval Data

Within the study scope, ethics application was made to Istanbul Okan University and unanimously approved through 05.06.2017 date and 84 number ethics committee meeting. Also, clinical investigation is approved to conduct the research at Bakırköy Dr.Sadi Konuk Training And Research Hospital by 2017/67 protocol code 2017-04-14 decision number.

### Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

At all levels of the study, the authors did not receive any financial support for this research.

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