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Berkeley parenting self- efficacy scale- second grade version: Reliability-validity studies among Turkish families

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Abstract

Self efficacy is defined as beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations (Bandura, 1997). In this study Berkeley Parenting Self-Efficacy Scale (second grade form) was adapted to Turkish families. General survey model was utilized in this study. The answers for the scale of parents having children attending second grade level of elementary schools were evaluated. 536 parents, whose children attending second grade level of elementary private and state schools in Istanbul, included to this study. Berkeley Parenting Self-Efficacy Scale (Second Grade Version) is developed by Susan Hollaway. The results showed that "Berkeley Self-Efficacy Scale" (for second grade) was reliable and valid instrument for Turkish families. The factor analyses indicated that the subscale of "Attainments to the Child" in which there are 10 items regarding the strength of own competency feelings of mothers explain 53,90% of total variance. The factor analyses in the second part of the scale is called "Motherhood Strategies" in which there are 10 items, the few factors were obtained. These factors explain 52,0% of total variance.

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1. Introduction

The construct of self-efficacy refers to "*beliefs in one's capabilities to organize and execute the courses of action required to produce given attainment*" (Bandura, 1997). Self-efficacy represents a judgment of personal capability and differs conceptually from, self esteem, which is a judgment of self-worth. And unlike locus of control, which pertains to expectancies about whether or not certain actions produce particular outcomes, self-efficacy refers to beliefs about whether one can actually produce certain actions (Bandura, 1997).

Bandura (1995) suggests that the sources of self-efficacy are; direct experiences, social models, verbal persuasion, individual's physical and emotional states. The direct experiences are the most influential factor in development of self-efficacy perception of individuals (Çoşkun & Ilgar, 2004). The self-efficacy concept is being evaluated in three levels: (1) global/general level that is related the situations except special duties and situations, (2) intermediate level that is regarded with the evolution of performances in a special areas, (3) specific level belongs to the

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evaluations of self-efficacy in specific duties and responsibilities regarding specialized situations (Sanders & Woolley, 2004). The self-efficacy regarding actions and responsibilities predicts the performance in related duties or functions (Bandura, 1997).

Parenting self-efficacy is defined as parents' self perceptions of their ability to influence the behavior and development of their children (Young and et al., 2006). Individuals with high self-efficacy in an area exert effort relative to that area, persevere in the face of difficulty, and respond resiliently to adversity; additionally, they are less prone to self defeating thought patterns, and experience less stress and depression than those with lower self efficacy. According to research conducted in the United States and Europe, individuals high in parenting self-efficacy are more optimistic, authoritative, and consistent in their interactions with their children than are those with less confidence (Bandura, et al.,1996; Hoover-Dempsey & Sandier,1997; Octtengen,1995; Ozer,1995; Teti & Gelfand,1991).

Parenting self-efficacy has been tied directly to parent involvement in children's education. Studies have shown that parenting self-efficacy beliefs influence whether mothers engage in home learning activities. Parents who view themselves as efficacious and having a "teaching role" tend to become more involved in cognitive activities with their children at home than those who do not see teaching as part of their role as a parent (Grolnick, Benjet, Kurowski, and Apostoleris, 1997; Machida, Taylor, and Kim, 2002). Hoover-Dempsey, Bassler, and Brissie (1992) found that high parent self-efficacy was associated with greater parent involvement in their children's classrooms, as well as in home learning activities.

In this study "Berkeley Parenting Self-Efficacy Scale (Second Grade Version)" that was developed by Susan Holloway was adopted into Turkish. Reliability and validity studies were also conducted.

2. Method

2.1. The design of research

This study was executed in general survey method. The parents who have children attending second grade level in primary schools were included in this study.

2.2. The sample

536 parents were randomly selected from 17 primary schools that were also randomly selected in Anatolian and European parts of Istanbul. Sample included 158 (29,5%) working mothers and 357 (66,6%) home makers who did not hold a job. We could not gather any information about 21(3,9%) mothers' work situations. 110 (20,5%) mothers have only one child, 276 (51,5%) of them have two children and 150 (28,0%) of them have three or more children. 196 (36,6%) mothers graduated from primary school, 148 (27,8%) of them graduated from high school and 150 (28,0%) of them graduated from university. We did not get information on education levels of 42 (7,8%) mothers. 177 (33,0%) fathers were primary schools graduates, 122 (22,8%) of them were high school graduates and 163 (30,4%) of them were university graduates. We did not have any information on education levels of 74 (13,8%) fathers. Socio economic levels of the parents were classified into high, middle and low according to of the types and situations of the selected schools, the teachers working in these schools and parents' income levels. 216 (40,3%) parents belonged to the high socio-economic level, 126 (23,5%) of them were accepted as middle socio-economic level and 194 (36,2%) of them represented low socio-economic level.

2.3. Instruments

Berkeley Parenting Self-Efficacy Scale- Second Grade Version and Demografic Information Form were used as instruments in this research.

2.3.1. Berkeley Parenting Self-Efficacy Scale-Second Grade Version

Berkeley Parenting Self-Efficacy Scale-Second Grade Version consists of two parts. In the first part there are 10 items that related the parenting self efficacy levels of mothers in teaching functions those are suitable for their children's age. This part of the scale was called "Attainments to the Child". There are 10 items in the second part of

the scale. The items in this part are directed towards the parenting self-efficacy levels of mothers in terms of behaviors towards their children. This part is titled as “Motherhood Strategies”. The items were scored in 1-6 points Likert type, 1 indicating “absolutely not adequate” and 6 indicating “absolutely adequate”. The Cronbach –Alfa reliability value of the scale is .80 (Holloway, Suzuki, Yamamoto and Behrens, 2005; Leivant, 2006; Petrie, 2006; Suzuki, 2005). The validity studies of this scale were conducted with American and Japanese mothers. In those studies for each item the high mean scores were obtained ($X= 5.22$ and $SD=.46$ for Japanese mothers, $X= 5.40$, $SD=.38$ for American mothers (Holloway, Suzuki, Yamamoto and Behrens, 2005; Leivant, 2006). In addition, the factor analyses were conducted in the studies in which the determinant factors of self-efficacy and the related results such as mothers’ psychological condition (Holloway, Suzuki, Yamamoto and Behrens, 2005; Leivant, 2006; Petrie, 2006; Suzuki, 2005). The positive correlations were obtained between Japanese mothers’ Berkeley Parenting Self Efficacy Scale scores and their concerning levels of their children’ educations (Holloway, Yamamoto, Suzuki and Mindnich, 2008) and mothers’ life satisfaction levels (Holloway, Suzuki, Yamamoto and Mindnich, 2006).

The scale was translated into Turkish by three experts in related field and two persons from other fields. The translated form of the scale was examined by the researchers and the final form was obtained. This form was questioned whether the items measure the parents’ self-efficacy by experts. They decided that parents’ self-efficacy level can be measured with this scale. The Turkish version of the scale was scored like the original form. 1 point indicates “absolutely not adequate” and 6 point indicates “absolutely adequate”. The higher score reflects higher levels of self- efficacy and the lower scores show lower level of self-efficacy.

2.3.2. Demographic Information Form

Demographic Information Form was prepared by researchers. There were some questions about children parents’ age, educational level, jobs, work status, socio-economic level, family positions and number of children in the families.

2. 4. Analysis of Data

The data which was gathered were analyzed with SPSS 13.0 package programme. Distributions of frequencies and percentages were calculated in order to analyze data obtained from demographic information form. Factor analyses of the Berkeley Parenting Self- Efficacy Scale- Second Grade Version was tested with the technique of Kaiser Mayer Olkin Validity Test and Barlett Globality Test. The test-retest reliability was calculated with Pearson correlational technique.

3. Findings

Tablo1. The Factor Analyses Results on Items of the Sub-scale of “Attainments to the Child” in “Berkeley Parenting Self-Efficacy Scale-Second Grade Version”

The factor	Item	Factor Loads	Predictive power of the factor	Reliability
Responsibility	To go to bed on time	.775	39,85	0,688
	To finish homework in a timely manner	.729		
	To tell parents when something significant happens at school	.679		
	To do things neatly and precisely	.581		
Self-management	To be an open and honest person	.803	14,05	0,681
	To complete whatever she/he has been working on even if it’s hard	.642		
	To have a strong will so that she/he is not easily swayed by friends	.636		
	To behave well without being told to do so by an adult	.610		
TOTAL				53,90
Kaiser Meyer Olkin Scale Validity				0,836
Barlett Globality Test Chi-Square				86 ,90
df				28
p				0,000

The factor analyses on items of the sub-scale of “Attainments to the Child” in “Berkeley Parenting Self-Efficacy Scale-Second Grade Version” revealed that the sub-scale has two factors (KMO value was 0,836, χ^2 Bartlett test (28)=863,90 and $p=0,000$). These factors explain %53, 90 of the total variance. The factors were called “responsibility” and “self-management” (See Table 1). The Cronbach α reliability values of these factors were 0,688 and 0681. The items, 8 and 9 were extracted from the analyses since the factor loadings of these items were so similar.

Table 2: The Factor Analyses Results on Items of the Sub-scale of “Motherhood Strategies” in “Berkeley Parenting Self-Efficacy Scale-Second Grade Version”

Factors		Factor Loads	Predictive power of the factor	Reliability	
Accepting child as an individual	Avoid over reacting when my child misbehaves	.785	38,20	0,77	
	Control my emotions in front of the my child	.754			
	Understand my child’s feelings	.659			
	Listen to my child	.601			
	Create a peacefull, happy home	.563			
	Set a good example by being polite and respectfull to others	.553			
Positive evaluation about child	Praise my child when he/she does well	.780	13,80	0,623	
	Let my child know I love him/her	.701			
	Explain things so that my child will understand	.697			
TOTAL			52,00		
Kaiser Meyer Olkin Reliability of Scale				0,810	
Bartlett Globality Test				Chi-square	1084,14
				df	36
				p	0,001

The factor analyses on “Motherhood Strategies” sub-scale of “Berkeley Parenting Self-efficacy Scale” in which the question of “how much I feel adequate” were answered, revealed two factors (KMO value was 0.810 and χ^2 Bartlett test (36)=1084,14 $p=0,000$). The factors which were titled as “Accepting child as an individual” and “Positive evaluation about child” explain %52.00 of the total variance (See Table 2). The Conbach Alfa reliability coefficient values for these two factors were 0.77 and 0.62. In these analyses item 9 in the original scale was extracted since it declined the reliability value of the scale.

Table 3: The Results of Test-Re-Test Analyses on “Berkeley Parenting Self-Efficacy Scale-Second Grade Version”

Attainments of Child		N	X	r	p
Responsibility	1. Application	65	5,36	0,573	0,000
	2. Application	65	5,37		
Self-management	1. Application	65	5,37	0,35	0,004
	2. Application	65	5,48		
Moterhood strategies					
Accepting child as an individual	1. Application	65	5,41	0,499	0,000
	2. Application	65	5,48		
Positive evaluation about child	1. Application	65	5,71	0,282	0,023
	2. Application	65	5,70		

“Berkeley Parenting Self-Efficacy Scale-Second Grade Version” was implemented to the participants two times within fifteen days. The correlation values between the scores of these two implementations were statistically significant ($p<.05$). In addition, the researcher showed that “Berkeley Parenting Self-Efficacy Scale-Preschool and Primary Grade Version” was a reliable and valid instrument so it can be utilized in related studies (Zembat and et.all., 2008; Uyanık Balat and et all., 2009).

4. Conclusion and Directions

In this study the factor analyses were conducted on “Berkeley Parenting Self-Efficacy Scale-Second Grade Version” and it was found out that this scale has 4 factors: “Responsibility”, “Self-management”, “Acceting child as an individual” and “Positive evaluations” about child. Furthermore it was obtained statistically significant correlation values ($p < .05$) in test-re-test reliability analyses.

Parenting self-efficacy refers to parents beliefs in their ability to effectively manage the varied tasks and situations of parenthood (Gross & Rocissano 1988). Parental self-efficacy has been shown to directly affect the quality of care provided to children. Previous research has shown that parents with higher self-efficacy are themselves more satisfied with parenting and have children who exhibit more positive outcomes. These findings suggest that parenting self-efficacy plays a role in the socioemotional processes and outcomes of parenting (Young et.all.2006). In addition to they showed that it is possible that parenting self-efficacy may relate more strongly to parenting behaviors and infant outcomes than to maternal well-being.

There are correlations between low parenting self efficacy level and parent depression, defensive and controlling parenting behaviors, high level of parenting stress, passive and negative defensive control mechanisms, desperate feeling regarding parenting and punitive discipline techniques (Coleman & Karraker, 1998; Jones, Prinz, 2005). Hudson, Elek ve Fleck (2001) showed that fathers’ parenting self-efficacy levels are lower than mothers. The mothers and fathers’ self efficacy levels and their parenting self-efficacy levels can be compared in the future studies. The parenting self-efficacy of separated parents can also be compared in similar studies.

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