VALIDITY AND RELIABILITY STUDY OF THE SOCIAL SUPPORT SCALE FOR PRESCHOOL CHILDREN

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ABSTRACT

This study was designed in order to assess the validity and reliability of "Child and Adolescent Social Support Scale", which was adapted for Turkish by Gökler (2007), for preschool children. 414 children between 48-72 months old and their parents and also their teachers participated in this study. Since they do not know how to read and write, their parents and teachers responded to the Social Support Scale on behalf of the preschool children. Both exploratory and confirmatory factor analysis were applied for the scale items. According to the results of the study, it was found out that Social Support Scale for Preschool Children (SSSFPS) assessed four dimensions of social support: Exposure to negative behavior, Support from Friends, Support from School and Support from Family. The reliability coefficients were .84 for factor 1, .80 for factor 2, .79 for factor 3, .70 for factor 4 and the reliability coefficient for the whole scale was found .89. As for the results of the study, it can be said that the Social Support Scale for Preschool Children (SSSFPS) is a valid and reliable instrument for determining the social support sources of 48-72 months old preschool children.

Keywords: Social support, child, preschool, social support scale

INTRODUCTION

Social support is a multidimensional structure including the physical, instrumental and emotional support that individual receives from his/her family, school, close friend and the social environment he/she interacts with as well as information sharing. It has been stated that the social support is a significant predictor of traumas experienced in psychological and physical terms social support in the long term. Moreover, the studies conducted indicate that the social support that children receive from the environment has a place in the development of children to gain abilities such as social abilities, dealing with difficulties, developing self-confidence and peer acceptance (Gordon,2011: 1; Franco & Levitt, 2006, 294; Pierce,1996:145).

With the increasing adoption of ecological approach, to examine the social support webs that child is connected in social and emotional terms, became attractive (Burnett, 2010:2). In the ecological system approach, there are five separate systems in society which are independent but related to each other. In the micro system, the smallest of this system, the quality of the relations in family, school and friend environment shapes the behaviour of children. That children can show a healthy development in social and emotional terms is closely related to the quality of their relationships in the aforementioned micro system they live (Gulay, 2010:19; Staples New & Cochran, 2006:86). Together with the quality of the social support given to child, the social support that his/her inner circle receives has also an important influence on the behaviour of child. Özbey (2012) detected that there becomes a decrease in the problematic behaviour of children as the social support family receives, increases. Slykerman et al. (2005) achieved the

finding in his study that the social support received has a significant influence on the development of child's intelligence.

Nolten (1994:2) defines the social support as follows; *prosocial behaviour and attitudes directed from various sources to individual in order to improve the interpersonal relations.* Many different definitions were made related to the structure of social support. For that purpose, Tardy (1985) presented a model explaining the significant structure of the social support and including important definitions related to the social support. In this model, Tardy (1985) revealed five dimensions of related to the social support concept including the direction, tendency, content, description/evaluation of the social support and the social support sources. It is mentioned about the social support *received and provided* under the title of the direction of social support in the first dimension of the model. The social support provided by others to individual and the social support that individual receives from others was explained within this scope.

It was explained as *the social support achieved and adopted* under the title of *the tendency of social support in the second dimension of the model. The social support adopted* contains the real use of social support sources, *the social support achieved* includes the quality and quantity of the social support individual achieves. It was explained as *emotional, instrumental, informational and evaluated social support* under the title of *the content of the social support in the third dimension of the model. The emotional support* indicates the support received on the subjects such as love, empathy and trust. *The instrumental support* covers the support behaviour including finance, time and help given by others. While *the informational support* contains the advice given to individual, *the assessment support* involves feedback oriented to individual. The definition and assessment of social support was given *under the title of definition/assessment in the fourth dimension of the model.* While *the definition* indicates the quality of the social support, *the assessment* shows the satisfaction of social support individually. It was explained as the social support received from *family, close friend, professionals, neighbours, workfellows and society* or given to them under the title of *the social support sources in the fifth dimension of the model* (Nolten, 1995:2).

Many different measuring tools were developed to measure the social support perceived by children, teens and adults that includes the definitions of the social support or the social support sources provided to individuals. The aforementioned measuring tools measure both the source of the social support (school, family, friend, special person, close friend, sibling etc.) and the type of the social support (emotional, instrumental, informational etc.) (Yardimci, 2009; Kaner, 2003; Malecki, & Demaray, 2002; Eker, Arkar & Yaldiz, 2001; Yildirim, 1997). The scales developed were prepared both as child form and parent form in some studies. In other words, by evaluating the data obtained from both the parents of the children at the ages of 9-18 and from the children themselves, it was tried to draw the framework of the social support given to children, which they can perceive and assess (Nolten, 1995). Bronfenbrenner (2005), Epstein (2001) state that the information to be obtained from teacher and parent who closely communicate with child is instructive to determine the social support sources that children receive from family, school and inner circle, and the quality of these sources (Burnett, 2010:2). Burnett (2010) conducted a study measuring the social support sources of preschool children with the information obtained from teacher, family and child. In the studies, the importance of the information from the social support sources of children was emphasized. In parallel with these views, Gordon (2011) made a validity reliability study of social support scale for children at the ages of 8-18, in the study he tried to define the social support sources given to children through the information received from

both children and their parents, and the quality of the social support. Franco and Levitt (2006) conducted a study to determine the quality of social support sources of children through the interviews they made both with the preschool children and their mothers. With the questions asked mothers (*From whom does your child tell that he/she likes at most? Are there anyone who likes to play with your child? Who takes care of your child when he/she becomes ill? Who makes your child feel bad/good? Who tells your child what to do when he/she doesn't know what to do on any subject?*), it was tried to measure the social sources that child received social support and the social sources such as friend, sibling, relative, teacher etc. that the child could not receive social support despite they are still important for the child, and the quality of social support provided by these sources. Similarly, it was tried to determine the social support sources and the quality of the support given by these sources to child. The questions asked children were prepared to measure the five support aspects as in the mothers' case. When all of the studies conducted were assessed, the importance of multiple assessments to determine the social support sources of children especially in preschool period emerges.

However, it was detected that there was no measuring tool developed to collect information in order to determine the social support sources of preschool children. Therefore, this study was planned for preschool children (48–72 months old) to fulfill the validity reliability of *Social Support Assessment Scale for Children and Teens* whose validity reliability was made by Gokler (2007) for the ages 9–17. It is considered that the study will fill an important gap about the data collection related to social support sources of preschool children.

METHOD

Universe and Sample

The sample of the study is comprised by 414 children in total who are 48–60 and 60–72 months old and continue nursery school of elementary schools and independent preschool educational institutions in the provinces of Ankara, Antalya, Kirikkale, Duzce, Adana, Maras, Aydin, Izmir, Manisa, Istanbul and are chosen from the universe through random sampling method, and their parents and teachers. The voluntary parents (N=177) and teachers (N=237) in the schools that could be reached by regarding the willingness principle, participated in the study. The teachers and parents fill in the scale forms for the children.

Data Collection Tool

41-item-*Social Support Assessment Scale for Children and Teens* and 5 point Likert scale developed by Dubow and Ullman (1989) as a data collection tool and whose adaptation was made by Gokler (2007) for children and teens in Turkey was used. The scale measures the social support that children receive from their *family, school and friends*.

FINDINGS

Findings about the Demographic Qualities of the Sample

%54,1 of the children participating in the study are 48–60 months old (N=224), %45,9 of them 60–72 (N=190) months old. %45.4 of the children are girls (n=188), %54.6 of them are boys (N=226). %25.8 of the children (N=107) continue the nursery school of public schools, % 70,3 of them (N=291) continue in the independent kindergartens, %3.9 of them (N=16) continue in

private preschool educational institutions. 237 teachers (%57,2) and 177 parents (%42.8) filled scaled for children.

Findings about Validity and Reliability of Social Support Scale for Preschool Children (SSSPC)

Validity Study

The opinions of 6 professors and 4 preschool teachers were obtained to assess the Social Support Scale for Preschool Children (SSSPC) in terms of the content of its items, its suitability for preschool children, observability and sentence structure. 7 items which were not considered by the specialists suitable for the scope of the scale, were omitted from the scale, the sentence structures were organized in the way to be answered by parents and teachers depending upon the results of the observations for preschool children, the final form of the 34 item-scale form which was ready to apply was made.

Table 1. SSSPC Exploratory Factor Analysis (Rotated Principal Components Analysis) Results

Old Item No	New Item No	Factor Common Variance	Load point after rotation			
			Factor 1	Factor 2	Factor 3	Factor 4
m25	M1	.564	.729			
m24	M2	,554	.701			
m22	M3	,538	.674			
m4	M4	.578	.670			
m3	M5	.511	.668			
m10	M6	,514	.652			
m18	M7	.462	.616			
m8	M8	.648		.736		
m7	M9	.547		.727		
m5	M10	.546		.677		
m2	M11	,459		.628		
m9	M12	.436		.626		
m6	M13	.469		.603		
m32	M14	.568			.727	
m30	M15	.529			.658	
m33	M16	.444			.644	
m23	M17	.553			.643	
m21	M18	.491			.613	
m26	M19	.429			.594	
m15	M20	.580				.755
m14	M21	.587				.736
m11	M22	.482				.665
m13	M23	.514				.657

1. Factor Variance: %15,620,   2. Factor Variance: % 13,838,   3. Factor Variance:% 12,948
4. Factor Variance:% 9,766,   Total Variance: %52,172

Structure Validity

KMO and Bartlett's test of sphericity were made to determine the suitability of data structure for factor analysis of Social Support Scale for Preschool Children (SSSPC). As a result of this study, the result of Social Ability Scale KMO test was .89, Barlett globosity test was found meaningful at the level of ($p<0.01$). The varimax technique out of rotating perpendicular techniques in order to find the items to give high relations with the factors and to interpret the factors more easily. In Table 1, the findings related to SSSPC exploratory factor analysis were given.

In the exploratory factor analysis, the level of acceptance for load points of the items in which they are located, was determined as .50. At the end of the analysis, 1 item which gave high load point in more than one factor, and 10 items which showed load point below 0.50, were omitted from the scale.
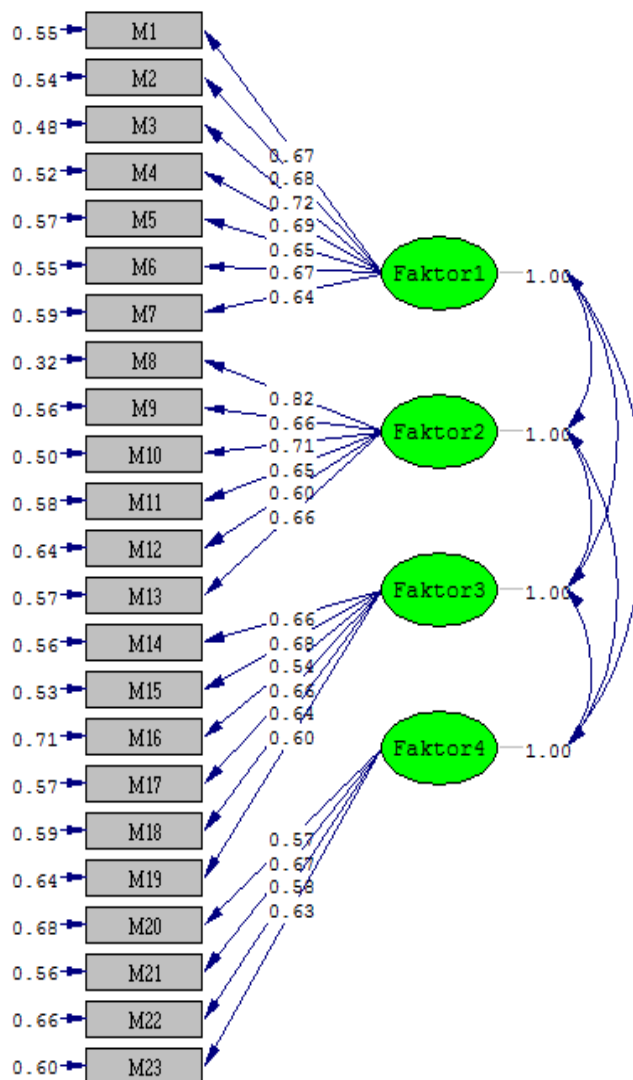
Chi-Square=543.99, df=224, P-value=0.00000, RMSEA=0.059

Figure 1. SSSPC Model of Confirmatory Factor Analysis

As a result of the factor rotating operation, in SSSPC it was detected that the 1st factor was comprised of 7 items (25,24,22,10,18,3,4) (new item no:1,2,3,4,5,6,7); the 2nd factor was formed of 6 items (7,8,5,2,9,6) (new item no=8,9,10,11,12,13); the 3rd factor was consisted of 6 items (32,30,33,23,21,26) (new item no=14,15,16,17,18,19) ;the 4th factor was made up of 4 items (15,14,13,11) (new item no=20,21,22,23). The lowest load point of the items in the scale is 0.60, the highest load point is 0.75.

As a result of the exploratory factor analysis, four factors were obtained. The first factor explains %15.62 of the total variance, the second one indicates %13.84, the third one points to %12,95, the fourth one shows %9.76. the total variance of the scale is %52.17. The items were renumbered after the operation.

In consequence of the exploratory factor analysis, the factors obtained were named by regarding their scopes. Accordingly, the 1st Factor was named as *"Exposure to Negative Behaviour by Friends"*; the 2nd Factor as *"Friend Support Outside School"*; the 3rd Factor as *"Support Received From School"*; the 4th Factor as *"Support Received From Family."*

Social Support Scale for Preschool Children (SSSPC) Confirmatory Factor Analysis

In SPSS program, the first order Confirmatory Factor Analysis of SSSPC whose Exloratory Factor Analysis was made and whose factor structures were revealed was conducted in Listrell 8.7. program. The model related to the confirmatory factor analysis was given in figure 1.

As a result of the first order confirmatory factor analysis, it was found as $X^2=543.99$ and sd =224 and the model was considered meaningful statistically. When these values are proportioned (543.99/224=2.42), it can be said that the cohesion is perfect. That the rate of X^2/df is below 3 indicates perfect cohesion, its being below 5 shows good cohesion (Cokluk, Sekercioglu and Buyukozturk,2010:324; Schermelleh-Engel and Moosbrugger, 2003: 23-74). The inform²ation related to the other cohesion measures of the scale was given in table 2.

Table 2. Cohesion Goodness Indexes Related to the Model Formed After the first order Confirmatory Factor Analysis of social support scale

Cohesion Measures	Good Cohesion	Acceptable Cohesion	Model Suggested
RMSEA	0<REMSEA<0,05	0,05 _ RMSEA _ 0,10	0.059
NFI	0,95 _ NFI _1	0,90_ NFI _ 0,95	0.96
CFI	0,97 _ CFI _1	0,95_ CFI _ 0,97	0.96
GFI	0,95 _ GFI _1	0,90_ GFI _ 0,95	0.90
AGFI	0,90 _ AGFI _1	0,85_ AGFI _ 0,9	0.87
SRMR	$0 \leq SRMR \leq .05$	$.05 < SRMR \leq .10$	0.051
X^2/df	0< X^2/df<3		543.99/224=2.42

Schermelleh-Engel and Moosbrugger, 2003: 23-74

When the other cohesion measures of the scale were checked, it was found as REMSEA=0.059; NFI=0.96; CFI=0.96;GFI=0.90;AGFI=0.87. When the values in the table were examined, it is possible to say that REMSEA and AGF have acceptable cohesion, and NFI, CFI and GFI have good cohesions.

When cohesion goodness indexes were examined further, it was seen that RMR had 0.041; the cohesion indexes of the standardized RMR was 0.051. That RMR and the standardized RMR are below 0.05, indicates the perfect cohesion, its being below 0.08 shows good cohesion (Cokluk et al.,2010:272; Schermelleh-Engel and Moosbrugger, 2003).

Table 3. Correlation Table of SSSPC Between Factors

		Factor 1	Factor 2	Factor 3	Factor 4	SSSPC Total
	r	1	.502**	.463**	.292**	.811**
Factor 1	p		.000	.000	.000	.000
	N	414	414	414	414	414
	r	.502**	1	.501**	.273**	.767**
Factor 2	p	.000		.000	.000	.000
	N	414	414	414	414	414
	r	.463**	.501**	1	.333**	.794**
Factor 3	p	.000	.000		.000	.000
	N	414	414	414	414	414
	r	.292**	.273**	.333**	1	.563**
Factor 4	p	.000	.000	.000		.000
	N	414	414	414	414	414
	r	.811**	.767**	.794**	.563**	1
SSSPC Total	p	.000	.000	.000	.000	
	N	414	414	414	414	414

** Correlation is significant at the 0.01 level (2-tailed)

Reliability Analysis

In order to test the reliability of the scale, Cronbach Alpha reliability analysis was made. The results of the analysis were given in the table 4, 5 and 6.

Table 4. SSSPC Cronbach Alpha Coefficients

Factors	Cronbach Alpha Value
Factor 1	.84
Factor 2	.80
Factor 3	.79
Factor 4	.70
SSSPC Total	.89

When Table 4 is examined, it is seen that the alpha reliability coefficient of the scale is .84 for the 1st factor, it is .80 for the 2nd factor, it is .79 for the 3rd factor, it is .70 for the 4th factor and it is .89 for the total of the scale.

Table 5. Cronbach Alpha Coefficients of SSSPC According to Childrens' Ages

Age	Cronbach Alpha Value
48–60 months	.88
60–72 months	.90

When Table 5 is examined, it is seen that the alpha reliability coefficient of the scale is .88 for the children of 48-60 months; it is .90 for the children of 60-72 months.

Table 6. Cronbach Alpha Coefficients of SSSPC According to Teacher/Family

	Cronbach Alpha value
Teacher	.91
Family	.85

When Table 6 is examined, it is seen that the alpha reliability coefficient of the scale is .91 for the teachers; it is .85 for the families.

RESULT AND DISCUSSION

To determine the social support that children receive in the preschool period in a healthy way, is possible with the assessment of the information obtained from teacher, parent and child. At this point, that there is no measuring tool to be used to assess social support systems of preschool children, forms the starting point of this study. In the study, the adaptation of the Social Support Scale for Children and Teens whose adaptation was made for Turkish children by Gokler (2007), was conducted for preschool children in order to collect data from teachers and parents on behalf of children. The scale can be used by both teachers and parents. It is asked that the items of the scale to be filled depending upon the observations of children during 2-3 months. The scale measures the quality of the social support that child receives from his/her family, school and friends.

Firstly, 41 items in the original SSSPC were transformed into a format that teachers and parents could reply for the content validity for preschool children. In the second phase, 5 experts' opinions were received related to these items. After the experts' opinions, 7 items which were not considered suitable for preschool children, were omitted from the scale and 34-item-test form of the scale was made. Moreover, related to the test form, the opinions of 4 preschool teachers were received and the final form of the scale was performed.

As a result of the validity reliability study conducted, it was detected that the scale had a 4-factor-structure. The original of the scale is 3-factor. The items in the factors were examined and the factor structures of the scale were renamed. In this content, SSSPC measures social support

the children receive from their environment in 4 different dimensions as *exposure to negative behaviour, friend, school and family support*.

In SPSS program, the factors of the scale whose exploratory factor analysis was made, were confirmed with the confirmatory factor analysis in Lisrell 8.7 program. The reliability coefficients of the scale is .84 for the 1st factor, .80 is the 2nd factor, .79 for the 3rd factor, .70 for the 4th factor and .89 for the total of the scale. When the aforementioned values were examined, it is possible to say that SSSPC is a valid and reliable measuring tool in order to determine the social support sources of children of 48-72 months.

REFERENCES

Bronfenbrenner, U. (2005*). Making human beings human: Bioecological perspectives on human development. Thousand Oaks*. CA: Sage Publications, Inc.

Burnett, L. (2010). Measurıng chıldren's socıal support networks: Eco-mappıng protocol, master theses, Louisiana State University.

Dubow E.F. and Ullman D.G. (1989). Assessing social support in elementary school children: The survey of children's social support. *J Clin Child Psychol*, 18(1), 52-64.

Eker, D., Arkar, H. and veYaldız, H. (2001). Factorial Structure, Validity, and Reliability of Revised Form of the Multidimensional Scale of Perceived Social Support. *Turkish Journal of Psychiatry*, 12(1), 17-25.

Epstein, J. (2001). School, family, and community partnerships. Boulder, CO: Westview Press.

Franco, N. and Levitt, M.J. (2006). The social ecology of early childhood: preschool social support networks and social acceptance. *Social Development*, 6(3), 292-306

Gülay, H. (2010). *Peer relationships in preschool years*. Ankara: Pegem Academy.

Gordon, A.T. (2011). Assessıng socıal support in children: development and ınıtıal valıdatıon of the socıal support questionnaire for chıldren. Dissertation Theses, Louisiana State University

Gökler, I. (2007). The Turkish Adaptation Study of Social Support Appraisals Scale To Be Used With Children And Adolescents: Factor Structure, Validity and *Turkish Journal of Child and Adolescent Mental Health*, 14(2), 90-98.

Kaner, S. (2003). Family support scale: factor structure, reliability and validity studies. *Journal of Ankara university faculty of education special education,* 4(1), 57–72.

Kapıkıran, S. and Acun Kapıkıran, N. (2010). The Validity and Reliability of the Perceived Available Support Scale. *Ankara University, Journal of Faculty of Educational Sciences*, 43(2), 51–73.

Malecki C.K. and Demaray M.K. (2002). Measuring perceived social support: Development of the child and adolescent social support scale (CASSS). *Psychology in the schools*, 39(1), 1–18.

Nolten, P.W. (1994). Conceptualization and measurement of social support: The development of the student social support scale. Unpublished doctoral dissertation, University of Wisconsin–Madison

Ozbey, S. (2012). An ınvestıgatıon on the relatıonshıp between sıx-year-olds' children problem behavıors and marıtal adjustment ın the famıly and perceıved socıal support. *Kastamonu Education Journal* 20 (1) 43–62

Pierce, G.R. (1996). *Handbook of social support and the family*. New York: Plenum Pres.

Staples New, R.   and Cochran, M. (2006). *Early childhood education* [four volumes]:an international encyclopedia, Praeger Publishers

Schermelleh-Engel, K. and Moosbrugger, H. (2003). Evaluating the fit of structural equation models: tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online,* 8(2), 23-74.

Tardy, C. (1985). Social support measurement. *Amerikan journal of community psychology*, 13 (2), 187-202.

Yardımcı, F. and Basbakkal, Z. (2009). Reliability and Validity Study of the Child- Adolescent Social Support Scale, *Journal of anatolıa nursıng and health scıence*s, 12(2), 41–50.

Yildırım, I. (1997). The Validity and Reliability of the Perceived Support Scale. *Journal of* Hacettepe *university faculty of education*, (13), 81–87.