

## Validity and Reliability of the DeMoulin Self-Concept Developmental Scale for Turkish Preschoolers

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### Abstract

*Problem Statement:* "Self-concept" is a primary issue of emotional and social development. Though the most important stage in the formation of self-concept is childhood, measuring the development of the self in the preschool period is quite difficult, for the tools used to measure children's self-concept either require the child's knowing how to read and write or have been designed to measure the self-concepts of children with special developmental characteristics.

*Purpose of Study:* This study aimed to adapt the DeMoulin Self-Concept Developmental Scale (DSCDS) for 5- and 6-year-old Turkish children and to determine its validity and reliability for determining the self-perception of these children with normal development.

*Methods:* The study was conducted with 345 participants, roughly half of whom were Turkish children aged 5-6 years. The scale was investigated for its linguistic equivalence and applicability. Data was collected by using both the original DSCDS translated into Turkish and the Marmara Social-Emotional Adjustment Scale and the Marmara Readiness for School Scale. Ultimately, the validity and reliability of the Turkish DSCDS were analyzed.

*Findings and Results:* The maximum reliability produced according to Cronbach's alpha and Spearman's rank correlation coefficient was 0.88, and the lowest reliability calculated with the Guttman method was 0.88. It was determined that the DSCDS for these children composed of 29 items and two subdimensions applied to participants according to the Turkish Developmental Norms as a high-quality measurement tool.

*Conclusions and Recommendations:* With the validity and reliability studies of the DSCDS for children aged 5-6 years completed, a norm study can be arranged in order to expand the scale by applying it to groups of children

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with different characteristics, such as those with a low socioeconomic status, those residing in orphanages, and adopted children.

*Keywords:* Self-concept, validity, reliability, preschool, children aged 5–6 years

### Introduction

Interactions between developmental stages of the life cycle establish a necessary substructure to enable people to adapt to new situations. In this process, emotional and social factors play an important role, particularly the concept of self, an aspect of personality development in the psychosocial domain (Berk, 1997, p. 141). To define and describe the concept of the self, nearly all researchers refer to William James, whose approach holds that one's self-concept involves numerous basic comprehensions of how he or she interprets, arranges, and lives life (Bukato & Daehler, 1992, p. 457). By contrast, Carl Rogers explained that the concept of self involves perceptions regarding the characteristics of "I" and "me." Attaching importance to self-awareness, Rogers held that the self has two subdimensions: the real self, or a person's perceiving him or herself as he or she is, and the ideal self, or what a person desires to be (Cüceloğlu, 1993, p. 427–429).

The approach adopted by DeMoulin (1999), another researcher who studies self-concept, resembles the one put forward by James. DeMoulin has examined the concept of self under two dimensions and generally includes all the experiences that we attach to these dimensions: self-efficacy and self-esteem (DeMoulin, 1999, p. 12). Self-efficacy refers to one's awareness of whether his or her behavior overlaps his or her capacity. It is based on our sensitivity and motivation toward works to be performed and self-confidence. By contrast, self-esteem refers to one's perception of his or her standing among other people (Fan & Chen, 2001, p. 10).

The development of the self is a slow process that continues throughout life and changes with age. It is not only a person's ability to describe, but also to know and perceive him- or herself as a distinct social entity. It also involves other factors to describe a person as unique, such as values, desires, and attitudes (Zigler & Stevenson, 1987, p. 416).

In the formation of self-concept, the most important stage is childhood. Events lived during this period constitute a person's judgments and values about him- or herself. A childhood without support for the healthy development of self-concept can cause significant problems for self-concept, beginning with adolescence (DeMoulin, 2000a, p. 145). During infancy, the most important development of self in terms of "I" and "me" is learning the self as a whole and determining and revealing its relationships with an independent self (Phillips, 1983, p. 120). The development of the self starts in the second year of life with self-understanding and self-awareness. In childhood and adolescence, the self gradually develops the ability to evaluate personality characteristics and capacity in a rich, multifaceted way (Berk, 1997, p. 54).

As children develop an interpretation about their inner mental worlds, they start to think about themselves more carefully. During preschool, the concept of self involves more than a person's physical appearance. A preschool child's self-

perceptions include pieces of information acquired for years regarding his or her personal and physical characteristics, preferred activities, activities at which he or she excels, and things which she or he has and knows about others (Bukato & Daehler, 1992, p. 122).

However, measuring the development of this concept, which is crucial during childhood, is rather difficult for two reasons. First, self-awareness emerges during this period. Second, many factors discussed regarding self-concept are intertwined and difficult to not only elucidate but, for the children, describe. These children's inability to read and write, as well as various highly influential factors—family, environment, and teachers—on self-concept, the self's inherent abstractedness, and the trouble preschoolers have describing the self are other factors that complicate the evaluation process.

The Coopersmith Self-Esteem Inventory (1967), Piers-Harris Self-Concept Scale for Children (1959), and the Efficacy and Social Acceptance Scale for Children are among the most frequently used tools to measure children's self-concepts (Dai, 2002, p. 32; Önder, 1997, pp. 443-448). One of these—the Piers-Harris Self-Concept Scale for Children—has been translated into Turkish. It is a paper-and-pencil test composed of 80 items with six subtests that aims to determine children's self-confidence, self-concept, self-perception, and self-evaluation. It applies to people aged 9 to 20 years only.

Another self-concept scale adapted for the Turkish context is the Efficacy Perception Scale for Children, first adapted by Önder (1997) into Turkish and with the name Self-Concept Scale for Small Children. The scale aims to collect information about different dimensions of self-concepts of 4 to 6-year-old preschool children with different characteristics, including developmental differences and premature birth. This scale was developed specifically for children with abnormal development and/or needing special education, hence its inappropriateness for measuring the self-concept levels of 5 to 6-year-old children with normal development. To measure the self-concept of this latter group, the DeMoulin Self-Concept Developmental Scale (DSCDS) is more suitable. This more recent scale is a measurement tool that affords the opportunity to perform systematic and comparative analyses of children's individual self-concepts for diagnostic purposes (DeMoulin, 1998a, p. 33; DeMoulin, 1998b, p. 16). The DSCDS was developed by DeMoulin at the University of Tennessee in a program aiming to support the self-concept called "I Like Me!" used in four different studies of roughly 950 preschool students from schools in West Tennessee, Kentucky, and Kansas (DeMoulin, 2000a, p. 144).

More specifically, the DSCDS is a tool affording the opportunity to make a very comprehensive and systematic analysis of children's self-concepts. With 30 questions, the DSCDS includes two subscales: self-efficacy and self-esteem. In the scale, information obtained by asking three sources—the child, the child's teacher, and the child's family interrelated questions. For primary and secondary measurements in which the reliability coefficient, gender, age, or any other role-determining conditions did not make any important difference, the self-efficacy and self-esteem Cronbach's alphas both fell between 0.79 and 0.91 (DeMoulin, 2000a, p.

145). To assess the potential of using the DSCDS in the Turkish context, this study aimed to adapt DeMoulin's (2000a) for Turkish children aged 5–6 years with normal development and to examine its validity and reliability.

## Method

### *Research Sample*

To obtain qualitative data, this study was conducted with 345 participants, 170 of whom were 5- or 6-year-old students of middling socioeconomic status at four different preschools in Istanbul, all of whom were randomized into groups. Additionally, 90 other participants— 30 children, 30 mothers, and 30 teachers—were administered the method of test-retest for reliability twice with an interval of 7 days. Mothers were chosen for participation because mothers also participated in the original scale's development and, compared to fathers, they are closer to and spend more time with their children, which enables them to form a better understanding of their children's development. Since the scale requires individual administration, one-on-one administrations with each participant were performed by the researcher at four different schools.

### *Research Instruments*

*The DeMoulin Self-Concept Developmental Scale.* The DSCDS for 5- and 6-year-old Turkish children scale includes 30 items and two subscales— one of self-efficacy (i.e., the child's self-perception of him- or herself as a singular entity) and the other for self-esteem (i.e., the child's perception of him- or herself within a social group). Each subscale entails 15 items, each of which begins with "I feel," after which the child is asked to paint the facial expression that he or she believes best reflects his or her feelings about the statement. The child and administrator sit facing each other at a table and the child is given the answer form with various facial expressions and colored pencils. The administration held with each participant lasted about 20 minutes. For each item, the facial expressions include scores ranging from 1 to 3. The child is given the score value of the facial expression that he or she chooses, and later, these answers are compared to assess whether they agree with one another. In the statistical procedures of the original DSCDS involving 950 children, the primary and secondary measurements—gender, age, and other role-determining conditions—made no significant differences. Thus, the reliability coefficients were found to vary from 0.79 and 0.91 (DeMoulin, 2000a, p. 143; DeMoulin, 2001, p. 118).

*The Marmara Social-Emotional Adjustment Scale (MSEAS).* The MSEAS was developed by nine specialists on the faculty of Marmara University (Güven et al., 2004, p. 145) and aims to measure the social-emotional adjustment of children aged 60–72 months. The internal reliability coefficients of the scale and its subdimensions after being administered to 490 people revealed a high Cronbach's alpha of 0.83 ( $p < 0.01$ ). Moreover, as a result of test-retest of the scale, the correlation value was also quite high ( $r = 0.89$ ,  $p < 0.01$ ). According to the results of item total and item discrimination analysis, correlation values of all dimensions, save Factor 7, amounted to 0.01. (Güven et al., 2004, p. 146).

*Marmara Readiness for Elementary School Scale (MRESS)*. The MRESS was prepared by Unutkan and Oktay (2004) to determine the readiness of children aged 5–6 years old (60–72 months old) to transition from preschool to elementary education. The study involved 1,002 children and five subscales to measure their abilities with mathematics, science, language use, drawing, and escaping from a labyrinth for 74 questions total. For the reliability study, the maintainability coefficients of the development and administration forms were calculated to be 0.90 for the development form and 0.93 for the administration form, while the internal consistency coefficients (i.e., Cronbach's alpha) were 0.98 for the development form and 0.93 for the administration form (Unutkan, 2003, p. 88, Unutkan & Oktay, 2004, p. 150). Since no test exists with the same scope available to determine the self-concept levels of children in this age group, the MSEAS and MRESS were administered to evaluate criteria validity and examine correlations.

#### *Procedure*

The studies related to the DSCDS for children aged 5–6 years entailed three types: linguistic equivalency studies, validity studies, and reliability studies. Within this scope, a study to evaluate criteria validity was also performed.

*Linguistic equivalency-related studies.* After necessary permissions were granted by DeMoulin et al. concerning the use and the validity and reliability studies of DSCDS for children aged 5–6 years, the linguistic equivalency study of the scale was performed. Aimed to assess the linguistic equivalency of the scale, five specialists in either preschool education and/or psychology whose native language is Turkish and who were fluent in English were first asked to translate the scale into Turkish. Ultimately, five different Turkish versions were obtained. To translate the scale into Turkish, careful attention was paid to select statements, including elements of Turkish preschool education system, that would be understood by children. The five Turkish versions formed and with this understanding were consolidated into a single form with the guidance of Dr. Ayla Oktay and Dr. Rengin Zembat. Secondly, the five specialists in preschool education and whose native language is English and who were fluent in Turkish were asked to translate the composite Turkish version into English. Once obtained, the English version was compared to the original version of the scale. The adaptation level was very high according to the specialists. Ultimately, the scale was administered to the children in the sample group twice with an interval of 7 days.

*Reliability-related studies.* The validity and reliability of the Turkish DSCDS for children aged 5–6 years were evaluated by both item analysis and distinctiveness analysis. For the administration results of 170 children, the Cronbach's alpha and both the Spearman and Guttman internal consistency coefficients were used. Maximum reliability was obtained according to Cronbach's alpha and the Spearman method (0.88), while minimum reliability was obtained according to the Guttman method (0.88).

*Validity-related studies.* To test distinctiveness, correlations were examined between the children's, teachers', and mothers' results for the Turkish DSCDS both in

total and in the subdimensions of self-efficacy and self-esteem. To examine criteria validity, since tests to determine self-concept levels of children in this age group with the same scope were unavailable, the MSEAS and MRESS were administered and their correlations examined. Comparative results revealed that the criteria validity of the DSCDS for children aged 5-6 years was very high.

### Results

The results of arithmetic means and standard deviation of the test and test items are give in Table 1.

Table 1  
*Arithmetic Means and Standard Deviation of The Test And Test Items.*

Questions	n	M	Sd
S2	170	2,4294	,8414
S3	170	2,6353	,6315
S4	170	2,4647	,7469
S5	170	2,2059	,8898
S6	170	2,8000	,5056
S7	170	2,6000	,7249
S8	170	2,7000	,5843
S9	170	2,6235	,6876
S10	170	2,6000	,6563
S11	170	2,5471	,7999
S12	170	2,7176	,6637
S13	170	2,4294	,8272
S14	170	1,2412	,5391
S15	170	2,5471	,7303
S16	170	2,5235	,7474
S17	170	1,2176	,4415
S18	170	2,9000	,3713
S19	170	2,7765	,4835
S20	170	2,7882	,5238
S21	170	2,8118	,4984
S22	170	2,4471	,8286
S23	170	1,8294	,9296
S24	170	2,6588	,6353
S25	170	2,4412	,8210
S26	170	2,6941	,5963
S27	170	2,8824	,4045
S28	170	2,7235	,6154
S29	170	2,4824	,7396
S30	170	2,7647	,5136
	170	2,6588	,6259
TOTAL	170	75,14	9,64

*n: Number in Subsample M: Arithmetic Mean, Sd: Standard Deviation*

Table 1 shows the arithmetic means and standard deviation values of the general test in total and its items. When the mean values of the test items were compared, it was found that Item 17 had the highest means, while Item 16 had the lowest.

The results of the Turkish DeMoulin Self-Concept Developmental Scale (for children aged 5–6 years) in an administration with an interval of 7 days, give in Table 2.

Table 2  
The Child–Teacher–Mother Total and Subscales

<b>CHILD</b>	<i>M</i>	<i>N</i>	<i>Sd</i>	<i>Std. E.</i>	<i>r</i>	<i>p</i>
Pre-Test Total	75,6000	30	6,0663	1,1075	,607	,000*
Post-Test Total	78,0000	30	7,1293	1,3016		
Pre-Test Self Efficacy	36,9333	30	3,3211	,6064	,615	,000*
Post-Test Self Efficacy	38,4333	30	3,8299	,6992		
Pre-Test Self Esteem	38,6667	30	3,5848	,6545	,516	,003*
Post-Test Self Esteem	39,5667	30	4,0742	,7438		
<b>TEACHER</b>						
Pre Tests Total	81,9333	30	2,8640	,5229	,439	,015**
Post Tests Total	83,7667	30	1,3309	,2000		
Self Esteem Pre-Test	40,8333	30	2,2141	,3083	,341	,065
Self Esteem Post-Test	42,2000	30	1,0954	,1899		
Self Efficacy Pre-Test	41,1000	30	1,6887	,4042	,379	,039**
Self Efficacy Post-Test	41,5667	30	1,0400	,2430		
<b>MOTHER</b>						
Pre Tests Total	80,1667	30	4,0093	,7320,	,594	,001*
Post Tests Total	80,6667	30	3,3665	,6146		
Self Esteem Pre-Test	40,0000	30	3,0057	,5488	,440	,015**
Self Esteem Post-Test	40,3000	30	2,3216	,4239		
Self Efficacy Pre-Test	40,1667	30	1,8399	,3359	,521	,003*
Self Efficacy Post-Test	40,3667	30	1,7317	,3162		

*M*: Arithmetic Mean, *N*: Total Number Sampel, *Sd*: Standard Deviation, *Std. Error*: Std.E ; *r*:Multiple correlation, \* $p < ,01$  \*\* $p < ,05$

As shown in Table 2, the results obtained for the test's general total were 0.607, and the total was statistically significant at 0.01. The results obtained in the self-efficacy subscale increased to 0.61. The correlation coefficient for the self-esteem subscale was the lowest (0.51), yet statistically significant at 0.01 as well.

The results of test-retest reliability coefficient for the general total of the DeMoulin Self-Concept Developmental Scale (for children aged 5–6 years) are give in Table 3.

Table 3

*Test-Retest Reliability Coefficient for The General Total of the Demoulin Self-Concept Developmental Scale (for children aged 5–6 years).*

	N	R
<b>Test-retest correlation</b>	170	,607*

\* $p < ,01$

As shown in Table 3, for the results of the tests administered to the children, the test-retest reliability coefficient was 0.607 and was significant at 0.01.

The results of the internal consistency coefficients for the general totals of the Demoulin Self-Concept Developmental Scale (for children aged 5–6 years) are give in Table 4.

Table 4

*The Internal Consistency Coefficients for The General Totals Of The DeMoulin Self-Concept Developmental Scale (for children aged 5–6 years).*

<b>Internal Consistency Technique</b>	<b>n</b>	<b>R</b>
Cronbach's alpha	170	,8851*
Spearman	170	,8851*
Guttman	170	,8805*

\* $p < ,01$

As shown in Table 4, the maximum reliability was obtained by Cronbach's alpha and the Spearman method (0.88), while the minimum reliability was obtained by the Guttman method (0.88).

The item analysis results for the DeMoulin Self-Concept Developmental Scale (for children aged 5–6 years) are give in Table 5.



Table 5  
 Item Analysis Results for The DeMoulin Self-Concept Developmental Scale (for children aged 5–6 years).

Item Number	N	Item Total		Item Remaining		Distinctiveness		
		r	p	r	p	t	sd	p
S1	170	,699	,000*	,6505	,00*	12,461	90	,000*
S2	170	,289	,000*	,2276	,05*	4,352	90	,000*
S3	170	,509	,000*	,4481	,01*	8,289	90	,000*
S4	170	,588	,000*	,5225	,01*	9,164	90	,000*
S5	170	,153	,000*	,1009	,01*	1,575	90	,019*
S6	170	,570	,000*	,5158	,01*	7,526	90	,000*
S7	170	,369	,000*	,3145	,01*	3,702	90	,000*
S8	170	,609	,000*	,5613	,01*	7,512	90	,000*
S9	170	,600	,000*	,5541	,01*	8,906	90	,000*
S10	170	,507	,005*	,4419	,05*	7,270	90	,000*
S11	170	,088	,256	,0189	,387	1,318	90	,191
S12	170	,785	,000*	,7482	,01*	16,810	90	,000*
S13	170	,158	,039*	,1032	,07*	2,236	90	,028*
S14	170	,442	,000*	,3785	,01*	7,317	90	,000*
S15	170	,635	,000*	,5856	,01*	9,581	90	,000*
S16	170	,265	,008*	,2217	,01*	3,851	90	,000*
S17	170	,385	,006*	,3520	,01*	3,696	90	,000*
S18	170	,608	,000*	,5749	,01*	7,515	90	,000*
S19	170	,500	,000*	,4575	,01*	5,112	90	,000*
S20	170	,408	,000*	,3635	,01*	4,693	90	,000*
S21	170	,496	,000*	,4271	,01*	6,299	90	,000*
S22	170	,523	,000*	,4478	,01*	11,055	90	,000*
S23	170	,602	,000*	,5580	,01*	7,652	90	,000*
S24	170	,652	,000*	,5992	,01*	11,242	90	,000*
S25	170	,460	,000*	,4092	,01*	5,550	90	,001*
S26	170	,306	,000*	,2673	,01*	3,308	90	,000*
S27	170	,531	,000*	,4825	,01*	5,832	90	,000*
S28	170	,433	,000*	,3678	,01*	6,547	90	,000*
S29	170	,414	,000*	,3683	,01*	5,152	90	,000*
S30	170	,588	,000*	,5431	,01*	7,814	90	,000*

N: Total number sampel, Sd: Standard deviation, \* $p < ,01$  \*\* $p < ,05$

Three types of item analyses—item total, item remainder, and distinctiveness—were employed. Excepting Item 11, all scores are arranged in order, beginning with the child who earned the highest total score. Findings related to validity and validity criteria for the DSCDS, MRESS, and MSEAS totals, subscales, and total scores are shown in Tables 6 and 7. Here, significant relationships were found between the DSCDS and MRESS and the subscales of the labyrinth and line at a significance of 0.05, and between all other subdimensions at a significance of 0.01.

The results of relationships between totals and subscales for the Marmara Readiness for School Scale and the DeMoulin Self-Concept Developmental Scale (for children aged 5–6 years) are give in Table 6.

Table 6

*Relationships Between Totals And Subscales for The Marmara Readiness For School Scale and The Demoulin Self-Concept Developmental Scale (for children aged 5–6 years). Scales and Sub-Dimensions between which Relations were Examined*

	N	r
D. Self Concept Scale (Total) & Readiness for School- Mathematics	40	*,737
D. Self Concept Scale (Total) & Readiness for School- Science	40	*,612
D. Self Concept Scale (Total) & Readiness for School- Voice	40	*,719
D. Self Concept Scale (Total) & Readiness for School- Line	40	** ,020
D. Self Concept Scale (Total) & Readiness for School- Mathematics- Labyrinth	40	** ,115
D. Self Concept Scale (Total) & Readiness for School- Mathematics- Total	40	*,782

\* $p < ,01$  \*\* $p < ,05$

As seen in Table 6, significant relationships were found between DSCDS and MRESS and the sub-scales of labyrinth and line at the level of .05 and between all the other sub-dimensions at the level of .01.

The results of relationships the totals and subscales between the DeMoulin Self-Concept Developmental Scale (for children aged 5–6 years) and Marmara Social-Emotional Adjustment Scale are give in Table 7.

**Table 7**

*Relationships The Totals And Subscales Between The Demoulin Self-Concept Developmental Scale (For Children Aged 5–6 Years) And Marmara Social–Emotional Adjustment Scale. Scales and Sub-Dimensions in which Relationships were Examined*

	N	r
D.S.C. Scale (Total) & MSEA - Communications with Peers	40	**,.379
D.S.C. Scale (Total) & MSEA - Reacting in accordance with Social Situation	40	*,612
D.S.C. Scale (Total) & MSEA - Delaying Personal Satisfaction	40	**,.273
D.S.C. Scale (Total) & MSEA - Behaving in accordance with the Requirements of Social Life	40	*,665
D.S.C. Scale (Total) & MSEA - Positive Approach to Social Environment	40	*,664
D.S.C. Scale (Total) & MSEA - Reacting to Negative Social Situations	40	*,671
D.S.C. Scale (Total) & MSEA - Total	40	*,765

\* $p < ,01$  \*\* $p < ,05$

As shown in Table 7, significant relationships were found between the DSCS and MSEAS regarding the subdimensions of ‘communication with peers’ and ‘delaying personal satisfaction’ at a significance of 0.05 and between all other subdimensions at 0.01.

*Reliability of the DSCDS for children aged 5–6 years.* According to the arithmetic means and standard deviations of the DSCDS’s self-esteem subscale and test items, the highest score possible is 45. The mean of the study group was 38.07, meaning that a mean close to the highest possible score was obtained. While the means of all items exceeded 2.0, the means of Items 16 and 22 were below 2. The mean of means of all items was 2.53 (see Table 1). For the results of the tests administered to the children, the test–retest reliability coefficient was 0.607 and significant at 0.01 (see Table 3). When the characteristics of preschool children were considered, including their relative inability to read and write and the abstractedness of the topic of self-concept, this result was observed to be rather high.

According to the item analysis procedure results for the child’s total, except for Item 11, all items yielded statistically significant results and proved to be valid and reliable (see Table 5). According to the arithmetic means and standard deviation values of the self-efficacy subscale of DSCDS for children aged 5–6 years and the test items, the highest score possible was 45. The mean of the study group was 37.064. While the means of all items exceeded 2, only the mean of the Item 13 was below 2 (1.24). However, the total score correlation confidence of the item total was high. As such, it was included within the scope of the test. When these results and the

aforementioned characteristics of preschool children are considered, the reliability of DSCDS for children aged 5–6 years was quite high (0.166)

*Validity of the DSCDS for children aged 5–6 years.* For the validity of the scale, the self-concept test was first administered to the children in the study group, and the same test was administered to the children's mothers and teachers in order to determine the children's perceptions of their self-concept. The correlations between the administration results were examined, after which criteria validity was applied. Since a test to determine self-concept levels of children in this age group with the same scope was unavailable, the MSEAS and MRESS were administered for criteria validity and the correlations examined.

According to the DSCDS for children aged 5–6 years in terms of child-mother-teacher administration correlations, the highest correlation was obtained among the DSCDS teacher-child total scores (0.86). In the teacher-mother administrations, the lowest correlation was obtained from the self-esteem subscale perception (0.46). According to the relationships between the DSCDS's self-efficacy and self-esteem subscales and MRESS's total and subscales, no significant relationship was found except between the line and labyrinth subscales, though significant relationships were found between all the scales and their subdimensions at 0.01 (see Table 6).

According to the relationships between the DSCDS's self-efficacy and self-esteem subscales and the MSEAS's total and subscales, significant relationships were found between the DSCDS self-efficacy subscale and the MSEAS, namely for the subdimension of 'delaying personal satisfaction' subdimension, between the self-esteem subscale and the subdimension of 'communication with peers' at a significance of 0.05, and between all the other scales and their subdimensions at a significance of 0.01 (see Table 7). When these results were examined together, the criteria validity for the DSCDS for children aged from 5–6 years was deemed quite high. The results obtained in this study suggest that the DSCDS for children aged 5–6 years is a valid and reliable tool in determining self-concept levels of 5- and 6-year-old children.

As a result of the Turkish linguistic equivalency and the validity and reliability studies of the DSCDS, some items were modified, while others remained the same. Accordingly, in its original version, the scale consisting of 30 items and two subdimensions (i.e., self-esteem and self-efficacy) was reduced to 29 items, given the insufficiency of the validity and reliability level of Item 11 determined as a result of the validity and reliability studies, though the subdimensions remained the same. The self-efficacy subdimension provides analysis for sensitivity to school, while the self-esteem subdimension provides analysis for sensitivity to oneself; the sum of two subdimensions points to the self-concept level. Though the scale did not originally specify an age group, it was limited to 5- and 6-year-old children for the validity and reliability studies.

### Discussion and Conclusion

In the adaptation process of the DSCDS for Turkish children aged 5–6 years, internal consistency coefficients for the general total maximum reliability was found with Cronbach's alpha and Spearman methods (0.88), while the lowest reliability rate

was found with the Guttman method (0.88). According to the internal consistency coefficients for the self-sufficiency subscale, the highest internal consistency rate of children's self-sufficiency was obtained with the Spearman method (0.83), and the lowest rate with Cronbach's alpha (0.79). The test-retest reliability coefficients for the self-sufficiency subscale were 0.516 among the implementation results performed on children and were determined to be significant at 0.01. According to the internal consistency coefficients for the self-esteem subscale, the highest internal consistency rate was obtained with the Spearman method (0.83), and the lowest rate from Cronbach's alpha (0.80).

In the statistical procedures made with 950 children for the original scale, the primary and secondary measurements—gender, age, and other role-determining conditions—did not make any significant difference, and the reliability coefficients were found to vary between 0.79 and 0.91 (DeMoulin, 2000b, p. 35). As shown, the results of the present study are very similar to the results of the original. Considering the relative inability of children aged 5–6 years to read and write and the abstractedness of the topic of self-concept, these results are quite high. Furthermore, the criteria-related validity of the scale appears to be high. However, a comparison seems impossible, since no criteria-related validity can be gauged in the English version. Factors such as gender and socioeconomic status had an important impact on measurements. For the original form of the scale, there was no significant difference between means for 359 girls and 294 boys (DeMoulin, 2000b, p. 36).

There are different scales in Turkey to measure children's self-concepts. However, these scales generally necessitate literacy or are designed to measure the self-concepts of children with different developmental characteristics. On this point, the Coopersmith Self-Esteem Inventory (1967), the Piers-Harris Self-Concept Scale for Children (1959), and the Efficacy and Social Acceptance Scale for Children (Harter & Pike, 1984) can be counted among the most frequently used measurement tools in the world for measuring children's self-concepts (Öner, 1997, p. 443).

One of these tools—the Piers-Harris Self-Concept Scale for Children—was translated into Turkish. The test-retest reliability coefficients calculated with data obtained from 447 students in the study of the adapted scale by Çatakılı (1985) were 0.72 for primary schoolers, yet varied between 0.72 and 0.91 for secondary schoolers. The internal consistency coefficients, on the other hand, were 0.87 for primary schoolers and 0.86 for secondary schoolers (Öner, 1997, pp. 443–448).

As can be seen, the validity and reliability coefficients of the Piers-Harris Self-Concept Scale for Children are similar to the results of this study. Two important details are that the scale is intended for primary- and secondary-school students and the consistency coefficients rise as the age groups become older. Once again, the problems encountered while measuring the abstractedness of the topic of self-concept in preschoolers emerge here.

Another self-concept scale translated into Turkish is the Efficacy Perception for Children, which was completed by Önder (1997) with the name Self-Concept Scale for Small Children. The scale aims to collect information about different dimensions of self-concepts of preschoolers aged 4–6 years with different characteristics, including developmental differences and premature birth. In the validity and

reliability study that Önder (1997) performed on 146 children from a middling socioeconomic level, the internal reliability coefficient was calculated to be 0.88 for whole scale (Önder, 1997, p. 47).

The present study, which involved adapting a self-concept scale into Turkish and gauging its validity and reliability, revealed results similar to the reliability coefficient of DSCDS for children. Similarly, relations between preschoolers' self-concept and overall time of attendance at school and gender were investigated. As a result, it was determined that the overall time of attendance at school can influence self-concept, though gender does not play any role in this equation. This result aligns with other research findings.

Regarding this study's findings, future research could seek to conduct a norm study of DSCDS for children aged 5-6 years, given that the validity and reliability of the scale are now complete. In this way, it would be possible to study a larger sample of children. At the same time, testing the workgroups of the DSCDS with different characteristics (e.g., children from low socio-economic levels, children from nurseries, and children residing at orphanages, among others) by performing applications of the scale can extend the scope of application, as well as obtain further data regarding the validity and reliability of the scale.

### References

- Benninga, J. S. & Meredith R. (1987). Enhancing young children's moral judgments: the piagetian connection. *Journal of Elementary and Early Childhood Education*, 2, 10-13.
- Berk, L. E. (1997). *Child development*. U.S.A: Allyn and Bacon.
- Bukato, D., & Daehler, M. (1992). *Child Development*. New York: Houghton Mifflin Company.
- Cüceloğlu, D. (1993). *İnsan ve davranışı: Psikolojinin temel kavramları*. [Human And Behavior: Basic Concepts of Psychology]. İstanbul, Turkey: Remzi Kitapevi.
- Çataklı, M. (1985). *Piers-Harris çocuklar için benlik algısı ölçeğinin dilsel eşitlik ve güvenilirlik çalışması*, [Transliteration Equivalence And Reliability Of The Piers- Harris Children's Self Concept Scale]. İstanbul: Boğaziçi University, Education Faculty, Education Science Department
- Dai, D. Y. (2002). Incorporating parent perceptions: A replication and extension study of the internal-external frame of reference model of *self-concept development*. *Journal of Adolescent Research*, 6, 17-45.
- Demoulin, D.F. (1998a). Addressing self-concept and reading needs of elementary children. *Journal of At Risk*, 42, 34-41.
- Demoulin, D.F. (1998b). Reading empowers self-concept. *Kappa Delta Pi Record*, 35, 31-36.
- Demoulin, D.F. (1999). A personalized development of self-concept for beginning readers. *Journal of Education*, 120, 14-18.

- Demoulin, D.F. (2000a). I like me! enhancing self concept in kindergarten-age children through active school/business partnerships. *NASP Communiqué*, 27(8), 141-146.
- Demoulin, D.F.(2000b). *Complete summary of a four-partresearch project for the I like me program*. Department of Educational Studies University of Tennessee Martin, Tn U.S.A.
- Demoulin, D.F.(2001). The hidden value of personalization and rhyme in reading. *Reading Improvement*, 38,116-121.
- Fan, X., & Chen M.(2001).Parental involvement and students academic achievement: A Meta-Analysis. *Educational Psychology Review*, 13, 1-15.
- Güven, Y., Önder A., Sevinç M., Aydın O., Balat G.U., Palut B., ...Dibek E. (2004). MASDU Sosyal Duygusal Uyum Ölçeği'nin geçerlilik ve güvenilirlik çalışması. [MASDU Social Emotional Adjustment Scale Validity and Reliability Study] 1. Uluslararası Arası Okul Öncesi Eğitim Kongresi Bildiri Kitabı, İstanbul: Ya-PaYayımları.
- Öner, N. (1997). *Türkiye'de kullanılan psikolojik testler: Bir başvuru kaynağı*, [Psychological tests used in Turkey: A Reference Resource], 3. Basım, İstanbul: Boğaziçi Üniversitesi Yayınları.
- Önder, A. (1997). "Küçük çocuklar için kendilik algısı ölçeğinin türkçe'ye uyarlanması ve okul öncesi çocuklarında kendilik algısının yaş cinsiyet premature doğma ve okula devam etme süresine ilişkin olarak incelenmesi". [Self-Perception Scale for Young Children Turkish Adaptation of the and the Self-Perception of Preschool Children Age Sex Premature Born and Investigation Relating To School Attendance Time] İstanbul: Marmara University Institute of Social Sciences.
- Phillips, S. (1983). Self-concept self-esteem: Infancy to Adolecence. A conitive developmental outline with some reference to behaviorand health effects. *Journal of ElementaryandEarlyChildhoodEducation*, 27, 45-48.
- Unutkan, P. Ö. (2003). Marmara ilköğretime Hazır Oluş Ölçeğın Geliştirilmesi ve Standardizasyonu" [Marmara Ready to Elementary School Scale Development and Standardization]. İstanbul: Marmara University Institute of Social Sciences.
- Oktay, A.,& Unutkan, P.Ö. (2004). ilköğretime Hazır Oluş ve İlköğretimle Okul Öncesi Eğitimin Karşılaştırılması. [Primary School Readiness and Comparasion of Preschool Education with Primary Education]. M.Sevinç (Ed). *Erken Çocuklukta Gelişim ve Eğitimde Yeni Yaklaşımlar*, (pp.145-156), İstanbul: Morpa.
- Zigler, E.F, & Stevenson, M. F. (1987). *Children development and social issues*, U.S.A: D.C. Heathand Company.

## Demoulin Çocuklar İçin Benlik Algısı Ölçeği (5-6 yaş )'nin Geçerlik Güvenirlik Çalışması

### Atıf:

Turaşlı, N. K. (2014). Validity and reliability of the DeMoulin Self-Concept Developmental Scale for Turkish preschoolers. *Eurasian Journal of Education Research*, 55, 55-72. <http://dx.doi.org/10.14689/ejer.2014.55.4>

### Özet

*Problem Durumu:* Okul öncesi eğitimi döneminin kendine has özellikleri; tüm gelişim alanlarında gerçekleşen iç içe ve birbirine bağlı karmaşık süreçleri desteklemeyi, ihtiyaçları anlamayı ve onlara uygun eğitsel ortamı düzenleyebilmeyi gerektirmektedir. Tüm gelişim alanları birileri ile ilişki içindedir. "Benlik Algısı" duygusal ve sosyal gelişimin öncelikli konularından biridir. Benlik algısı kişinin başkalarından aldığı geri bildirimler sonucu kendi hakkında edindiği değerlendirmelerdir. Bu sebeple benlik algısı insan davranışının en önemli ve merkezi konusudur. Benlik algısının oluşumunda en önemli devre çocukluktur. Bu dönemde yaşanan olaylar kişinin kendi hakkındaki yargı ve değerlerini oluşturur. Son günlerde okul öncesi dönemde benlik algısının gelişimi, gelişimi etkileyen faktörler ile diğer gelişim alanları ve okul olgunluğu üzerindeki etkisi konuları sıklıkla ele alınmaktadır. Ancak, okul öncesi dönemde benlik algısı konusunda önemli sıkıntılardan biri, benliğin gelişiminin ölçülmesinin gerçekten oldukça zor olmasıdır. Bu zorluğun başlıca nedeni olarak bu dönemde benlik ile ilgili farkındalığın henüz ortaya çıkmaya başlaması ve benlik kavramı içinde ele alınabilecek bir çok faktörün iç içe girmiş olması düşünülebilir. Bununla beraber çocukların okul öncesi dönemde çocukların henüz okuma yazma bilmiyor olmaları, aile, yakın çevre ve öğretmen gibi farklı unsurların benlik algısı üzerindeki etkilerinin yüksek olması, benlik algısının oldukça soyut bir konu benliğin ölçme sürecini zorlaştıran diğer faktörler arasında sayılabilir. Dünyada çocukların benlik algısının ölçülmesinde en çok kullanılan ölçme araçları arasında Coopersmith Kendilik Değeri Ölçeği (1967), Piers-Harris Çocuklar için Kendilik Kavramı Ölçeği (1959) ve Çocuklar için yeterli ve Sosyal Kabul Edilme Ölçeği sıralanabilir. Söz konusu bu ölçekler ülkemizde de kullanılmaktadır. Ancak ya okuma yazma gerektirmekte ya da özel gelişim özellikleri gösteren çocukların benlik algılarını ölçmek üzere tasarlanmış bulunmaktadırlar. Türkiye'de normal gelişim gösteren 6 yaş çocuklarında benlik algısı düzeyi ölçen bir ölçek bulunmamaktadır. Bu çalışmada normal gelişim gösteren okul öncesi çocukların benlik algısı düzeylerini belirlemeye yönelik "Demoulin Çocuklar İçin Benlik Algısı Testi" (5-6yaş) 'nin geçerlik güvenilirlik çalışması yapılarak alanda söz konusu ihtiyacın karşılanmasına katkıda bulunulmaya çalışılmıştır.

*Araştırmanın Amacı:* Bu araştırmanın amacı Demoulin (2000a) tarafından geliştirilen Demoulin Çocuklar İçin Benlik Algısı Ölçeği (DSCDS)'yi Türkçeye uyarlamak ve ölçeğin normal gelişim seyri izleyen 5-6 yaş grubu Türk çocukların benlik algısı düzeylerini belirlemeye yönelik kullanılabilmesine ilişkin geçerlik ve güvenilirlik



kanıtları elde etmektir. *Araştırmanın Yöntemi:* Araştırma İstanbul'da bulunan dört ayrı resmi ilköğretim okullarının hazırlık sınıflarına devam eden ve orta-sosyo ekonomik düzeyden gelen 5-6 yaş grubunda 170 çocuk ile gerçekleştirilmiştir. Ayrıca 30 çocuk ve 30 anne ile de güvenilirlik için tekrar test yöntemi çalışılmış ve çocukların öğretmenleri, anneleri ve kendilerine ölçek bir hafta ara ile iki kez uygulanmıştır. Demoulin Çocuklar İçin Benlik Algısı Ölçeği (DSCDS)'nin kullanımı ve geçerlik güvenilirlik çalışması ile ilgili olarak öncelikle ölçeğin dilsel eşdeğerlik çalışması yapılmıştır. Ardından uygulama ve analiz çalışmalarına başlanmıştır. Araştırmanın verileri, (DSCDS) nin Türkçeye çevrilmiş özgün formunun yanı sıra *Marmara Sosyal ve Duygusal Uyum Ölçeği (MASDU)* ve *Marmara İlköğretime Hazır Oluş Ölçekleri (MİHOÖ)* kullanılarak elde edilmiştir. Verilerin çözümlenmesinde betimleyici istatistiklerin yanı sıra açımlayıcı, doğrulayıcı faktör analizi ile İlişkili/ İlişkisiz Grup T Testi, Pearson Moment Korelasyon Katsayısı kullanılmıştır. Ölçeğin toplamı ile iki alt ölçeğinin iç tutarlılık katsayılarını belirlemek üzere ise, Cronbach alfa, Spearman, Guttman tekniklerine bakılmıştır. Elde edilen veriler SPSS 10 programı kullanılarak analiz edilmiştir.

*Araştırmanın Bulguları:* Demoulin Çocuklar İçin Benlik Algısı Ölçeği (DSCDS)'nin kullanımı ve geçerlik güvenilirlik çalışması ile ilgili olarak gerekli izinler alındıktan sonra öncelikle ölçeğin dilsel eşdeğerlik çalışması yapılmıştır. Ardından, DSCDS'nin oluşturulan Türkçe formu üzerinden geçerlik güvenilirlik çalışması yapılmıştır. Bu aşamada madde analizi ve ayırt ediciliği işlemleri yapılmıştır. Buna göre 30 maddelik ölçeğin sadece bir istatistiksel açıdan özellikli olmadığı tespit edilmiştir. Bunun dışında tüm maddeler istatistiksel açıdan anlamlı sonuç vermiştir. Güvenirlik katsayısını bulmak üzere, 170 çocuğun uygulama sonuçları üzerinde Cronbach alfa, Spearman, Guttman teknikleri iç tutarlılık katsayıları uygulanmıştır. Maksimum güvenilirlik Cronbach Alfa, Spearman tekniklerinde (0.88), en düşük güvenilirlik Guttman tekniğinde (0.88) elde edilmiştir. Ayırt ediciliği sınamak için yapılan çalışmalarda, ölçeğin, çocuk, öğretmen ve anne uygulama sonuçlarının hem toplam hem de öz yeterlilik öz saygı alt boyutlarındaki korelasyonlara bakılmıştır. Ardından kriter geçerliliği yapılmıştır. Ancak alanda bu yaş grubu çocukların benlik algısı düzeylerini belirlemeye yönelik aynı kapsamda bir test bulunmadığından, Marmara Sosyal Duygusal Uyum Ölçeği ve Marmara İlköğretime Hazır Oluş Ölçeği kriter geçerliliği amacı ile uygulanmış ve korelasyonlara bakılmıştır. Sonuçlar toplu olarak değerlendirildiğinde Demoulin Çocuklar İçin Benlik Algısı Ölçeği (6 yaş)'nin tüm ölçekler ve alt boyutları arasında ise .01 düzeyinde anlamlı ilişkiler bulunmuştur. Demoulin Çocuklar İçin Benlik Algısı Ölçeği (6 yaş)'nin öğrencilere bir hafta ara ile iki kez yapılan uygulama sonuçları arasında test-tekrar test güvenilirlik katsayısı .607 olarak bulunmuştur ve bu sonuç .01 düzeyinde anlamlıdır.

*Araştırmanın Sonuç ve Önerileri:* 5-6 yaş hazırlık grubuna devam eden ve Türk Gelişim Normlarına uygun normal gelişim seyri içinde olan çocuklara uygulanan, 29 madde ve iki alt ölçekten oluşan Demoulin Çocuklar İçin Benlik Algısı Ölçeği (DSCDS)'nin yüksek nitelikli bir ölçme aracı olduğu belirlenmiştir. Çocuklara yapılan uygulama sonuçları arasında test-tekrar test güvenilirlik katsayısı .607 olarak bulunmuştur ve .01 düzeyinde anlamlıdır. Demoulin Benlik Algısı testi'nin kriter geçerliliğinin de

oldukça yksek olduęu bulunmuřtur. Bu sonucun okul ncesi çocukların zellikleri gz nne alındıęında ve henz okuma yazma bilinmeyen bir dnemde olmaları, lçeęin benlik algısı gibi oldukça soyut bir konu ile ilgili olduęu gibi faktrler de dřnldęnde oldukça yksek olduęu grlmektedir.

Geçerlik ve gvenirlik çalıřması yapılan Demoulin Çocuklar İin Benlik Algısı lçeęi'nin norm çalıřması yapılabilir, farklı zellięi olan çalıřma gruplarına (dřk sosyo-ekonomik dzeyde yařayan çocuklar, yetiřtirme yurdunda kalan çocuklar, evlat edilmiř çocuklar vb.) Uygulama yapılarak sınanması lçeęin uygulama alanını geniřletebilir.

*Anahtar Kelimeler:* Benlik algısı, geerlik, gvenirlik, okul ncesi, 5-6 yař çocuklar