

Reliability And Validity Study Of The Assessment Of 6 Year Old Children's Emotional Skills Test (Aces) In Trnc

Elif Ünal Bozcan [1], Müfit Kömleksiz [2]

[1] Department of
Preschool Teacher
Education

Cyprus International
University

ebozcan@ciu.edu.tr

[2] Department of
Classroom Teaching

mkomleksiz@eul.edu.tr

ABSTRACT

The main purpose of this research is to study the validity and reliability of the Turkish Republic of Northern Cyprus sample of the Assessment of 6-year-old Children's Emotional Skills Test based on the sample for Turkey developed by Schultz and Izard (1998) and adapted by Durmuşoğlu Saltalı, et al. (2009). In this context, the research is of descriptive nature. Samples for this study are 143 six year old children attending preschools in the Nicosia Municipality of the Turkish Republic of Northern Cyprus Ministry of National Education. 49.7 percent (71) are male and 50.3 percent (72) are female students. This test is composed of three sub-tests in emotional recognition, emotional comprehension and emotional expression. To test construct validity, "Principal Component Analysis" (PAC) method of factor analysis is conducted. Varimax rotation is used in factor analysis. By checking the factor load in the factor one item is a part of, and checking factor loadings in other factors, it was made sure that the factor load difference between each factor is at least 20.

In terms of item analysis, item sub-tests, item-test correlations, item averages (item difficulties) and item standard deviation are calculated. Test and sub-test correlation coefficients are calculated. For reliability, KR-20 internal consistency coefficients are calculated. Consequently, when viewed the context of this study data we can say that psychometric properties of Assessment of Children's Emotion Skills-ACES' which validity and reliability made by Durmuşoğlu Saltalı and friends were not suitable enough. . In this test the validity and reliability of the other samples may be appropriate as assessed in a sample of T.R.N.C. In this sense, development of a new test for suitable culture may be helpful to fill the space in recognition, understanding and expression of emotions.

Keywords: Emotional skills, emotional expression, emotional identification, emotional understanding.

INTRODUCTION

The Emotional Differentiation Theory (DET) of Izard defined in 1993 states that there are six fundamental emotions experienced by humans; interest, joy or happiness, rage, sadness, fear, and disgust. Such emotions start developing in the early years of life. The higher cognition develops in a child, "pure" fundamental emotional feedback is reduced. In early childhood development, "Emotion-Cognition" interactions show primary effect in the development of emotion Tables. Stability in the development of a child allows for the child to recognize and differentiate between emotions (Schultz, Izard, Stapleton, Buckingham and Bear, 2009).

In all cultures, people experience emotions. Emotions are universal. Between the years of 1890 and 1950, it was believed that children experienced only a few emotions. We now know that babies experience fundamental emotions (Min-Ju Tsai, 2008).

Recognition and comprehension of emotions occurs via messages by smiling, frowning, being surprised, and fluctuations in tone of voice. Children younger than 3 years of age learn to differentiate and name emotions such as sadness, happiness, and fear by observing adults' non-verbal hints such as gestures, mimics, facial expressions and tone of voice. Happiness, sadness, fear, surprise and anger are observable in a child right after birth. Even though evidence of pride, shame, guilt and humiliation are present after the sixth month, these emotions don't carry meaning before two years of age (Elksnin and Elksnin, 2003).

Research pertaining to the expression of emotion indicates a positive influence on the initiation and regulation of social changes. While positive influence has made friendship building and sharing easy, negative influence indicates a problematic effect on social exchange. According to the direct observational reports of parents and teachers, positive emotions such as friendship and self-confidence are at a higher ratio than negative emotions such as aggression and sadness. Also, positive emotions lead children to display positive social behavior in their interactions with their peers and in expressing their emotions (Denham, McKinley, Couchoud and Holt, 1990; Denham, 2006). Similarly, prior to formal education, children by virtue of emotional expression within their cognitive structure make reasons for such emotions evident. Children slowly start to differentiate between negative emotions such as anger as opposed to sadness and gradually start using the language of emotions. Toward the end of this phase, as they acquire more emotional experience, children start recognizing contradictory feelings with complex dimensions (Denham, 1998). Studies (Transfer, Morris, 2010) indicate that children with more appropriate social feedback prior to school age develop stronger emotional recognition and emotional control in peer to peer interactions. Observational reports by teachers indicate that lack of emotional recognition may be the reason for behavioral and comprehension related difficulties. It is important that preschool children recognize and understand their own emotions within interactive environments as well as comprehend the increase in their interactions with others and comprehend and express emotions in order to develop social-cognitive skills. Defined as such, emotional competency calls attention to the social interaction concept as an important component (Denham, 1998; Martin and Green, 2005).

School failure may become an addition to social skill issues of children with emotional or behavioral disturbances. They may exhibit such issues in many of their relationships with others including themselves, their classmates and teachers, in a multitude of ways. They may exhibit difficulty, violence, aggression and other destructive behaviors in expressing their physical and emotional needs. Social skill training is utilized in developing interpersonal skills in children with emotional and behavioral problems. Supportive social networks generate more positive results in and outside the classroom (Quinn, Kavale, Mathur, Rutherford and Forness, 1999).

Many studies show that during early childhood, it is highly probable to observe behavioral problems, especially right before school. Such studies indicate that behavioral problems are more concentrated within the years between the infant stage where the child is dependent on parents and the time he or she declares his or her independence in elementary school. Data indicate that 10 percent to 15 percent of problematic behavior is observed in preschool age children (Campbell, 1995). From this angle, it is possible to claim that a child's social and emotional development within the first years of their life is the foundation for social and emotional behavior in later years (Ainsworth, 1978).

Research in which effects of intelligence, genetics and social environment are studied, factors such as an individual's general state of health, emotional framework, parental educational level, environmental factors pertaining to the educational setting are observed to affect the level of use of their potential intelligence and skills. Furthermore, it is emphasized that social-emotional and cognitive support given during preschool years positively affects the child's perception of self, self-confidence, level of readiness and social-emotional adaptation. Children who happen to grow up in positive environments are observed to have an advantage when it comes to educational maturity (Oktay, 1983; Davaslıgil, 1985; Çataloluk, 1994; Turaşlı, 2006).

In a study where positive social influence on children's emotional education from preschool years until 8th grade is researched, Payton, Weissberg, Durlak, Dymnick, Taylor, Schellinger and Pachan (2008) summarized the results of three large scale evaluations of the effects of programs developed to boost the social and emotional skills of elementary and middle school-aged children. These studies pointed out how social-emotional development programs relate to students' social-emotional skills, their attitudes toward others, positive social behaviors and academic performance. In these programs, students' behavioral problems and emotional difficulties were alleviated. When compared to the results of other studies, it is exceptionally significant that findings indicate social-emotional development programs as the most successful among all youth development programs (Payton, Weissberg, Durlak, Dymnick, Taylor, Schellinger, Pachan, 2008).

In a study done by Durlak, Weissberg, Dymnick, Taylor, Schellinger (2011) on the effect of the development of social and emotional learning of students, findings from a meta-analysis based on 270,034 students from 213 schools are presented. Findings from the study indicate that attendants show significant (11 percent reflected on performance) success in social and emotional skill, attitude, behavior and academic performance points.

Based on studies, developing children's skills in socially relating to adults and peers, arranging their emotions to express them appropriately, with circumstantial considerations in mind, was proven to ease children into adapting to their families and their social environments while boosting their school success and predicting future social competency (Çorapçı, Aksan, Arslan, Yalçın, Yağmurlu, 2010).

Findings in educational literature emphasize the positive effects of emotional-social educational development programs that start in preschool years. In this context, it can be said that preschool years, the most important years of

life, and education given during these years play a major role in the social and emotional development of children. As a result, emotional skills gained during a child's development include skills such as noticing and recognizing emotions, comprehending and expressing emotions, understanding others' emotions, being able to differentiate positive emotions from negative ones, accepting and being able to control such emotions. Magnuson et al. (2007), point out that school based studies on social-emotional development are inadequate (Gormley, Phillips, Newmark, Perper, 2009). Thus, latest studies in literature and research on emotional facial expressions focus on the face and majority of these studies work with limited expression sets (Keltner and Ekman, 2003).

ACES (Assessment of 6-year-old Children's Emotional Skills Test) developed by Schultz and Izard (1998) who happen to have important studies in the field is adapted to Turkey by Durmuşoğlu Saltalı, et al. (2009) as there appears to be a lack of studies and gauges to evaluate the emotional skills of preschool aged children with the hopes that such tests contribute to studies on preschool aged children's emotional development in Turkey and may be utilized in such. Assessment of 6-year-old Children's Emotional Skills Test (ACES) aims to measure skills in recognition of emotions, comprehension of emotions and expression of emotions.

The population of Turkish Republic of Northern Cyprus (TRNC) possesses unique social and cultural traits dissimilar to those of the Turkish population on mainland Turkey. For this reason, it is speculated that the results of Assessment of 6-year-old Children's Emotional Skills Test (ACES) that was adapted to the Turkish example will be different in TRNC. It is possible to claim that finding out the skills of preschool aged children attending schools in TRNC would be important in predicting direct effects of preschool education on future years.

In this study, in light of above, results of the validity and reliability studies of Assessment of 6-year-old Children's Emotional Skills Test (ACES) in TRNC are put forth.

THE STUDY

The main purpose of this research is to study the validity and reliability of the Turkish Republic of Northern Cyprus sample of the Assessment of 6-year-old Children's Emotional Skills Test based on the sample for Turkey developed by Schultz and Izard (1998) and adapted by Durmuşoğlu Saltalı, et al. (2009). In this context, the research is of descriptive nature.

Samples for this study are 143 six year old children attending preschools in the Nicosia municipality of the Turkish Republic of Northern Cyprus' Ministry of National Education. 49.7 percent (71) are male and 50.3 percent (72) are female students. Samples are students from 8 preschools, as varied as possible when it comes to their socioeconomic standing. Level of socioeconomic standing is set forth based on information provided by the Ministry of National Education. Two schools out of 8 are attended by children of families of lower socioeconomic class. Three schools are attended by children of middle and upper middle socioeconomic class families whereas two schools are attended by children of middle and lower middle socioeconomic class families and one school serves children from families of upper socioeconomic class.

In this study, Assessment of 6-year-old Children's Emotional Skills Test developed by Schultz and Izard (1998) and adapted by Durmuşoğlu Saltalı, et al. (2009) is used as the data collection tool. This test is composed of three sub-tests in emotional recognition, emotional comprehension and emotional expression. Emotional recognition sub-test is composed of 12 pictures depicting facial expressions of happy, sad, angry and scared. Emotional comprehension test composes of 12 everyday emotional states children may come across and emotional expression sub-test composes of children's emotional responses to 12 incidents. Test scores are calculated by attributing the right answer 1 point and by attributing 0 (zero) to the wrong answer and 0 (zero) to the *I don't know* choice.

First, researchers studied the validity of language in Assessment of 6-year-old Children's Emotional Skills Test. Text of the test is first translated from English to Turkish by three experts in the field and then the translated text in Turkish is translated back to English by three linguists with expertise in the English language. Corrections on the example situations are made based on the assumption that some of the points in the text did not fit in with the Turkish cultural context.

Test is executed on 51 girls (45.9 percent) and 60 boys (54.1 percent) out of 111 six year old students attending private and government preschools in Konya. Factor analysis along with test and item analysis are conducted on data acquired from test results. As a result of factor analysis used to determine the construct validity, three factors (sub-test) comprised of recognizing emotion, comprehending emotion and expressing emotion and obtained 10 items of these sub-tests. It was stated that items out of each sub-test were removed as a result of item analysis. KR-20 reliability coefficients for sub-tests are as follows: .83 for recognizing emotion; .89 for comprehending emotion; .83 for expressing emotion. KR-20 reliability coefficient for the overall test is .81. Reliability coefficients acquired by the halving method are as follows: Sub-test for recognizing emotion, .82; sub-test for comprehending emotion, .87; sub-test for expressing emotion, .78 and for the overall test, .79. Also, item difficulties and item resolving powers are put

forth as appropriate as per the item analysis (Durmuşoğlu Saltalı, et al., 2009).

It was planned that the schools create appropriate space for individual meetings as the implementation of the test necessitate the research assistant and the child to meet in a quiet and comfortable room. Research assistants were selected from a pool of Cyprus International University Preschool Teaching Department students that volunteered and had field experience. Students who had previously taken or who were, then, taking the Scientific Research Methods Course were preferred and given priority over the rest. A meeting where students were introduced to the test and where informative materials were handed out ran approximately 60 minutes. These materials included sections discussing how best to conduct the test and what to pay attention during the process. To observe how to conduct the test, volunteer students were taken to one of the preschools on an agreed upon day. For approximately 120 minutes, students observed the researcher apply the scale. In a meeting after the completion of the test, students' observations were assessed and their questions were answered. As a result, students were given tools in order to aptly conduct the test on their own. Students arrived in pairs at schools they had designated with the researcher. Pairing students to conduct the test was an attempt at minimizing the risk and challenges that may arise during application.

Prior to jumping to data analysis, the author who conducted the validity and reliability study of the test for Turkey was contacted via e-mail. The author was asked to provide information about the method used for the factor analysis of the scale. The author stated that all details pertaining to the method can be found in an article he and a co-author published (Durmuşoğlu Saltalı, et al., 2009). But when the aforementioned article was examined, information on methodology was not found. Likewise, David Schultz, one of the scientists who developed the test was contacted via e-mail. Both authors were asked to provide more information in order to shed light on the validity and reliability of the study. The author in Turkey mentioned that he had lost all documentation pertaining to the validity and reliability test study. Also, Schultz stated that a test factor analysis was not conducted though when the results of the test were assessed, it was determined that the test is valid and reliable. In addition, Schultz also mentioned having lost the report he had prepared about the test. As a result, the following statistical techniques were used in data analysis.

To test construct validity, "Principal Component Analysis" (PAC) method of factor analysis is conducted. Varimax rotation is used in factor analysis. By checking the factor loadings in the factor one item is a part of, and checking factor loadings in other factors, it was made sure that the factor loadings difference between each factor is at least 20.

In terms of item analysis, item sub-tests, item-test correlations, item averages (item difficulties) and item standard deviation are calculated. Test and sub-test correlation coefficients are calculated. For reliability, KR-20 internal consistency coefficients are calculated.

FINDINGS

For construct validity, in the factor analysis conducted by using the "Principal Component Analysis" (PAC) method on the overall test (a total of 36 items) and varimax rotation, a 12 factor structure is obtained. In this structure, recognizing, comprehending and expressing emotions are confused. In other words, factors were not separated from one another to scale these other three dimensions. Also, by using the same method by forcing the factor analysis to three factors, recognizing, comprehending and expressing emotions were confused. Thereupon, factor analysis on individual sub-tests on recognizing, comprehending and expressing emotions were conducted. Data collected from the analysis is presented under the subtitles of "Recognizing Emotions Test, Comprehending Emotions Test, and Expressing Emotions Test".

Recognizing Emotions Test

Items pertaining to the "Recognizing Emotions Test" (12 items) were analyzed by factor analysis by using the Principal Component Analysis method and the varimax rotation.

The analysis showed that four different factors, whose eigenvalues related to the "Recognizing Emotions Test" are 1.73, 1.32, 1.14, 1.02 and whose variance percentage are 21.67, 16.60, 14.29, 12.80 were obtained (Table 1). These four factors explain 65.37 percent of the total variance. Factors are labeled in the sequence of, "scared, sad, happy, and angry" as they relate to emotions.

Table 1. Recognizing Emotions Test, Items’ Factor Loadings, Eigenvalues, Percentages of Variance Explained, Item Sub-Test Correlation Coefficients, Item-Test Correlation Coefficients, Item Average and Item Standard Deviation Values

Sub Tests and Items	Communalities	Factor Loadings				Item-Sub-Test <i>r</i>	Item-Test <i>r</i>	<i>M</i>	<i>SD</i>
		1	2	3	4				
1. Scared (KR20= .43)									
7	.65	,80				,80	,45	.63	,48
2	.60	,69		,19	,28	,78	,57	.67	,47
2. Sad (KR-20= 40)									
5	.71	-,27	,76	,22		,86	,39	.66	,47
3	.62	,29	,73			,66	,44	.82	,38
3. Happy (KR-20= .36)									
12	.65	,16		,77	-,12	,61	,41	.86	,34
6	.53			,70	,16	,88	,49	.69	,46
4. Angry (KR-20= .30)									
8	.74		-,31	,25	,76	,77	,38	.76	,42
1	.69	,18	,33	-,20	,71	,72	,43	.79	,40
Eigenvalue		1.73	1.32	1.14	1.02				
Variance Explained %		21.6	16.6	14.2	12.80				
		7	0	9					

Kaiser-Meyer-Olkin “Measure of Sampling Adequacy” value (.52) indicates an average compatibility value. Bartlett “Sphericity” test results are observed to be at ($\chi^2=77.748$) .0001 level of significance. As seen on Table 1, item communality values are over .50. When factor loadings pertaining to factors are studied, factor loadings fluctuate between .80 and .69. When item sub-test correlations are studied, correlation coefficient is observed to fluctuate between .61 and .86 while the item-test correlation coefficient fluctuates between .38 and .57. KR-20 internal consistency coefficients are calculated as follows: “scared” sub-test, .43; “sad” sub-test, .40; “happy” sub-test, .36; and “angry” sub-test, .30. KR-20 for the overall test is .46.

On Table 2, correlation coefficients for the total points for Recognizing Emotions Test and sub-test points are included. When the Table is observed, correlation between sub-test points and total test points appear quite high while the correlation between individual sub-tests appears quite low.

Table 2.Correlation Coefficients for Recognizing Emotion Test and its Sub-Tests

	Total	Scared	Sad	Happy
Scared	.65**			
Sad	.53**	.06		
Happy	.59**	.15	.17*	
Angry	.54**	.20*	.006	.09

** $p < .01$, * $p < .05$

Emotion Comprehension Test

Items pertaining to the “Emotion Comprehension Test” (12 items) were analyzed by factor analysis by using the “Principal Component Analysis” method (PAC) and the varimax rotation. The analysis showed that three different factors, whose eigenvalues related to the “Emotion Comprehension Test” are 1.69, 1.60, 1.33 and whose variance percentage are 21.21, 20.03, 16.71 were obtained (Table 3). These three factors explain 57.96 percent of the total variance. Factors are given labels “angry, happy, scared” as they relate to emotions. Items that relate to comprehending emotions did not come together during factor analysis.

Table 3.Emotion Comprehension Test, Items’ Factor Loadings, Eigenvalues, Percentages of Variance Explained, Item Sub-Test Correlation Coefficients, Item-Test Correlation Coefficients, Item Average and Item Standard Deviation Values

Sub-Tests & Items	Communalities	Factor Loadings			Item-Sub-Test <i>r</i>	Item-Test <i>r</i>	<i>M</i>	<i>SD</i>
		1	2	3				
1. Angry (KR-20 = .56)								
8	.61	,77	,12		,76	,59	.37	,48
11	.53	,72	,10		,68	,51	.28	,45
3	.50	,68	-,18		,71	,51	.44	,50
2. Happy (KR-20 = .56)								
5	.62		,76	-,19	,70	,25	.88	,32
1	.54		,73		,71	,35	.87	,33
10	.52		,65	,30	,59	,33	.90	,28
3. Scared (KR-20 = .44)								
4	.69	,19		,80	,78	,50	.62	,48

9	.59	-,15	,75	,81	,36	.55	,50
Eigenvalue		1.69	1.60	1.33			
Variance Explained %		21.21	20.03	16.71			

In regards to Emotion Comprehension Test, Kaiser-Meyer-Olkin “Measure of Sampling Adequacy” value (.53) indicates an average compatibility value. Bartlett “Sphericity” test results are observed to be at ($\chi^2=113.048$) .0001 level of significance. As seen on Table 4, item communality values are over .50. When factor loadings pertaining to factors are studied, factor loadings fluctuate between .80 and .65. When item sub-test correlations are studied, correlation coefficient is observed to fluctuate between .59 and .81 while the item-test correlation coefficient fluctuates between .25 and .59. KR-20 internal consistency coefficients are as follows: “angry” sub-test .56; “happy” sub-test, .56; “scared” sub-test, .44. KR-20 value for the overall test is .42.

On Table 4, correlation coefficients for the total points for Emotion Comprehension test and sub-test points are included. When the Table is observed, correlation between sub-test points and total test points appears quite high while the correlation between individual sub-tests appears quite low.

Table 4. Coefficient Correlations between Emotion Comprehension Test and Sub-Tests

	Total	Angry	Happy
Angry	.72**		
Happy	.47**	.03	
Scared	.54**	.04	-.008

** $p < .01$

Emotion Expression Test

Items pertaining to the “Emotion Expression Test” (12 items) were analyzed by factor analysis using the “Principal Component Analysis” method (PAC) and the varimax rotation. The analysis showed that three different factors, whose eigenvalues related to the “Emotion Expression Test” are 2.00, 1.62, 1.35 and whose variance percentage are 22.28, 18.07, 15.00 were obtained (Table 5). These three factors explain 55.35 percent of the total variance. Factors are given labels in the particular sequence of “happy, scared, angry” as they relate to emotions. Items that relate to comprehending emotions did not come together during factor analysis.

Kaiser-Meyer-Olkin “Measure of Sampling Adequacy” value of Emotion Expression Test indicates an average compatibility value (.53). Bartlett “Sphericity” test results are observed to be at ($\chi^2=159.256$) .0001 level of significance. As seen on Table 4, aside from four items (2,8,9,11), item communality values are over .50.

Table 5. Emotion Expression Test, Items’ Factor loadings, Eigenvalues, Percentages of Variance Explained Item Sub-Test Correlation Coefficients, Item-Test Correlation Coefficients, Item Average and Item Standard Deviation Values

Sub-Tests & Items	Communalities	Factor Loadings			Item-Sub-Test r	Item-Test r	M	SD
		1	2	3				
		1. Happy (KR-20= .64)						

3	.72	,83	-,15	,77	,40	.80	,40
5	.63	,77	,15	,62	,42	.88	,32
9	.49	,64	,21	,17	,74	,52	.80
2.Scared (KR-20= .55)							
12	.71	-,19	,81	,11	,75	,47	.59
10	.62	,17	,76		,73	,56	.62
8	.46	,15	,53	-,39	,68	,39	.50
3.Angry (KR-20 = .37)							
6	.52		,31	,64	,67	,52	.36
2	.46	,20	-,10	,64	,71	,40	.45
11	.35			,58	,58	,30	.26
Eigenvalue		2.00	1.62	1.35			
Variance Explained %		22.28	18.07	15.00			

When factor loadings pertaining to the factors are observed, factor loadings fluctuate between .53 and .83. When item sub-test correlation coefficients are studied, correlation coefficient is observed to fluctuate between .58 and .77 while the item-test correlation coefficient fluctuates between .30 and .56. KR-20 internal consistency coefficients are as follows: “happy” sub-test .64; for “scared” sub-test, .55; for the “angry” sub-test, .37. KR-20 value for the overall test is .50.

Table 6. Coefficient Correlation between Expressing Emotion Test and Sub-Tests

	Total	Happy	Scared
Happy	.61**		
Scared	.65**	.09	
Angry	.61**	.16*	.02

** p < .01, * p < .05

On Table 6, correlation coefficients for the total points for Emotion Expression test and sub-test points are included. When the Table is observed, correlation between the sub-test points and the total test points appears quite high while the correlation between individual sub-tests appears quite low.

CONCLUSIONS

In this study, validity and reliability studies on the Assessment of 6-year-old Children’s Emotional Skills Test (ACES) developed by Schultz and Izard and the Turkish study generated by Durmuşoğlu Saltalı, et al. (2009) for the Turkish Republic of Northern Cyprus sample, were conducted. As a result of the overall test (36 items) factor analysis, it was observed that a structure with 12 factors where recognizing, comprehending and expressing emotions items were intermixed had emerged. Factor analysis done by forcing three factors yielded similar results. In other words, it was observed that the results of the factor analysis conducted were not consistent with the results of Durmuşoğlu Saltalı, et al. (2009) factor analysis and a three factor structure did not emerge. Whereupon, recognizing,

comprehending and expressing emotion sub-tests in this study are treated as individual tests and factor as well as item analysis were conducted with in each test. It is possible to claim that the main reason for this is that recognizing, comprehending and expressing emotions in reality require different skills and when addressed as one, they become indistinguishable.

As a result of factor analysis, a 4 factor structure for recognizing emotions test, a 3 factor structure for comprehending emotions test and a 3 factor structure for expressing emotions test were formed. In recognizing emotions test, it was observed that "scared, happy, angry and sad" states converged in 4 separate factors, and in comprehending and expressing emotions tests, items pertaining to the state of "sad" did not function. The item related to "sad" was observed to have intermixed with the item related to "happy" in the factor analysis. In other words, in terms of recognizing emotions, children are able to differentiate between the four emotions shown to them in pictures. Yet, regarding the emotion of sadness, on the level of comprehending and expressing emotion, it is possible that they interfuse. One possible reason for this may be that the hypothetical situations described in the emotion comprehension and expression tests were not constructed according to the cognitive levels of 6-year-olds. Thus (Transfer, Çelik, Tuğrul, Yalçın, 2002) studies show that frequent use of specific words qualifying facial expression of emotions increase the likelihood of children naming facial expression of emotions correctly to a great degree and that there is a positive relationship between preschool age children's verbal competency skills and their performance of defining such expressions (Deutsch, 1974, 1975; Felleman et. al., 1983).

In addition, the difference between the social and emotional fabric of TRNC and the Turkish society can be thought as another reason. As a result of observations, it is noted that Turkish Cypriot families are very protective of their children. Especially mothers being supported by their own mothers in child rearing and the big influence of grandmother's in care and education of children appear to be significant. Mother's leaving the initiative of rearing and educating their children to grandmothers allow for the grandmothers' traditional understanding of providing grandchildren with opportunities they could not offer to their own children. As a result of all their needs and wants being satisfied, these children seldom experience sadness and the feeling of lack. It is believed that this understanding was prevalent in the previous generation as well. Thus, the very first emotions experienced are between the mother and the child (Pehlivantürk, 2004). Especially the mother's emotional responses are very important and meaningful for the baby. For this reason, how mothers in the TRNC community experience and reflect such may be of importance. Martin and Green's (2005) study where 50 mothers and their 3.5 year olds were studied is worthy of attention in regards to this point. Each mother-child pair was filmed while conducting an activity which entailed telling a story with various emotions. Mothers enacted the stories. Words relating to emotions used by the mother and the child, authentic emotional expressions and emotional etiquette with the total number of times of expression of emotions were encoded in the videotapes. In the same manner, explanations of emotional cause and effect in the stories by mothers and the mothers' explanation of emotional expectations from their children were encoded. At the end of the application, the total sum of the emotional expression components (emotion words, authentic expression of emotion, emotional etiquette) and children's expression of emotion appeared to be closely related. Similarly, it was observed that mothers' expression of emotions show a positive correlation with the cumulative emotional expression with children and it was observed that children's authentic expression of emotions and labeling of emotions show a positive relationship.

Again, a lack of cosmopolitan, active lifestyle in TRNC, and a lack of neighborhood/street culture (playing with peers in the neighborhood may enrich the social and emotional wealth of a child) may be the reason for children lacking exposure to a variety of social experiences.

In other words, it is possible to claim that studies pertaining to the topic need to generate groundwork prior to the actual study so that a higher sampling adequacy can be acquired. At the same time, it was observed that for all three tests, the Bartlett "Sphericity" test result at .0001 level was significant. In this context, it is possible to claim that the "test sizes" were appropriate.

Points of recognizing, comprehending and expressing tests and the related sub-tests' coefficient correlations are observed, the correlation coefficient between the test and the sub-test points appear to be high and the correlation coefficient of sub-tests between one another appear to be low. It is possible to claim that the low correlation rates among sub-tests indicate that each sub-test measured separate traits. It is possible to assess that the high correlation rate between the overall test and sub-tests indicate that the test succeeded in measuring the predetermined traits. Thus, Walden and Field (1982) conducted a study on the emotional facial expressions of preschool age children. This study included 40 children attending the same preschool between the ages of 3 and 5. In this study, happy and sad expressions matched at the same frequency. Furthermore, the fact that children had succeeded in matching happy faces on all four phases drew attention.

In general, item sub-test correlations are observed to be quite high. It is possible to assess that the item holds a significant place in the sub-test and the traits meant to be measured are measured. These correlations can also be interpreted as the item validity coefficient. Items' total test point correlation values, when compared to the sub-test point correlations, appear to be lower. Nonetheless, aside from the 5th item on the emotion comprehension test, all item correlations seem quite good. Thus, Widen and Russell (2003), in their study where they observed free labeling of facial expressions included 80 (40 girls and 40 boys) preschool children ages between 4 year and 0 months and 5 year and 11 months. In emotional stories, five emotions about cliché incidents (happy, sad, angry, scared, and disgusted) were created based on specific results of the previous laboratory studies as they relate to the cause and effect relations of emotional incidents. A total of 800 applications, 400 on labeling facial expressions of children and 400 on stories, were completed. In stories, the margin of error appeared to be the lowest within emotions of "happiness" and "sadness". In labeling, children succeeded 100 percent in labeling "sadness" and 75 percent in labeling "happiness". In general, the percentage of success in labeling was 57 percent.

Item-test correlations may be evaluated as item discriminating power. When item-test correlations are observed, the item sub-test or the item discriminating power; other words the level of differentiation between children that comprehend and those that don't, do appear to be quite high.

Item averages also provide item difficulty. In other words, the percentage of correct answers given to an item can be assessed as item difficulty. Observing item difficulties in tests, it becomes evident that they all have easy and difficult items.

In this study, it appears that the KR-20 reliability coefficients in general are quite low. If these tests are to be conducted in TRNC, it is crucial that its results be assessed with utmost care and attention.

As a result, within the framework of data collected in this study, it is possible to state that psychometric attributes of the validity and reliability of "Assessment of 6-year-old Children's Emotional Skills Test" (ACES) conducted by Durmuşoğlu Saltalı, et al. (2009) are not compatible enough. As assessed in the TRNC sample, it may be useful to apply validity and reliability tests to other samples as well. In its current condition, this study indicates that the test is not reliable enough and its use may yield objectionable results. For this particular reason, a new and culturally more sensitive test that will reflect levels for emotional recognition, comprehension and expression accurately should be developed.

REFERENCES

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., Wall, S. (1978). *Patterns of Attachment: A Psychological Study of the Strange Situation*. Contributors: [Lawrence Erlbaum Associates](#).
- Campbell, S.,B. (1995). *Behavior Problems in Preschool Children: a Review of Recent Research*. J. Child psychol psychiatry. Department of Psychology, University of Pittsburgh, U.S.A. Jan; 36(1), 113-49.
- Çataloluk, C. (2004). *Farklı Sosyo Ekonomik Ve Kültürel Ortamda Yetişen Çocukların Okul Olgunluğu Açısından Karşılaştırılması*. İstanbul Üniversitesi Sosyal Bilimler Enstitüsü Yayınlanmamış Yüksek Lisans Tezi.
- Çelik, E., Tuğrul, B., Yalçın, S., S. (2002) Dört-Altı Yaşlar Arasındaki Anaokulu Çocuklarının Duygusal Yüz İfadesiyle Kendilerini, Anne Babalarını ve Öğretmenlerini Algılaması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 22, 29-39.
- Çorapçı, F., Aksan, N., Arslan Yalçın, D., Yağmurlu, B. (2010).Okul Öncesi Dönemde Duygusal, Davranışsal Ve Sosyal Uyum Taraması: Sosyal Yetkinlik ve Davranış Değerlendirme Ölçeği. *Çocuk ve Gençlik Ruh Sağlığı Dergisi*, 17 (2), 63-74.
- Davaslıgil, Ü. (1985). *Farklı Sosy oEkonomik ve Kültürel Çevreden Gelenİ.Sınıf Çocuklarının Dil Gelişimine Okulun Etkisi*.İstanbul.Üniversitesi.Edebiyat.FakültesiYayınları.
- Durlak A.J., Weissberg, P.R., Dymnicki B.A., Taylor, D.R., Schellinger, B.K. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child Developmet*.January/February. Vol. 82, No.1, 405-432.
- Durmuşoğlu, Saltalı, N. (2010). *Duygu Eğitiminin OkulÖncesi Dönem Çocuklarının Duygusal Becerilerine Etkisi*. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Çocuk Gelişimi ve Ev Yönetimi Eğitimi Anabilim Dalı Doktora Tezi.

- Durmuşoğlu S. N., Engin Deniz, M., Çeliköz, N., Arı, R. (2009). Altı Yaş Çocukları için Duygusal Becerilerin Değerlendirilmesi Testi'nin (ACES) Türkçeye uyarlanması: Geçerlik ve Güvenirlik Çalışması. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*. 42 (1), 403-420.
- Elksnin, L., K. ve Elksnin, N. (2003). *Fostering Social-Emotional Learning in the Classroom Education*, 124(1), 63-75.
- Gormley, T. W., Phillips, A. D., Newmark, K., Perper, K. (2009). *Social-Emotional Effects Of Early Childhood Education Programs in Tulsa*. S.E.E.C.E.I. Denver, Colo.
- Keltner, D. & Ekman, P. (2003). *Expression of emotion. Handbook of Affective Sciences*. New York: Oxford University Press.
- Martin, R. ve Green, J. (2005). *The Use Of Emotion Explanations By Mothers: Relation to Preschoolers' Gender And Understanding Of Emotions*. *Social Development*, 14(2), 229-249.
- Min-Ju Tsai (2008). *Guiding Taiwanese Kindergarteners' Emotional Understanding and Emotion Regulation: the Effects of Children's Picture Books*. The Pennsylvania State University. The Graduate School Department of Curriculum and Instruction. A Dissertation in Curriculum and Instruction.
- Morris, C.A.S. (2010). *Emotionally Competent Caregiving: Relations among Teacher-Child Interaction Patterns, Teachers' Beliefs about Emotions, and Children's Emotional Competence*. George Mason University. ProQuest Information and Learning Company.
- Oktay, A. (1983). *Okul Olgunluğu*. İstanbul. Üniversitesi. Edebiyat. Fakültesi Yayınları. İstanbul.
- Payton, J., Weissberg, P.R., Durlak, A., Dymnick B.A., Taylor, D.R., Schellinger, B.K., Pachan, M. (2008). *The Positive Impact of Social and Emotional Learning for Kindergarten to Eighth-Grade Students*. *Collaborative for Academic, Social and Emotional Learning (CASEL)*.
- Pehlivan Türk, B. (2004). Otistik Bozukluğu Olan Çocuklarda Bağlanma. *Türk Psikiyatri Dergisi*. 15 (1), 56-63.
- Quinn, M.M., Kavale, K.A., Mathur, S.R., Rutherford, R.B., Forness, S.R. (1999). A Meta-Analysis of Social Skill Interventions for Students with Emotional or Behavioral Disorders. *Journal of Emotional and Behavioral Disorders*, 7(1), 54-64.
- Schultz, D., Izard, C. E., Stapleton, L. M., Buckingham, S., Bear, G. A. (2009). [Children's social status as a function of emotionality and attention control](#). *Journal of Applied Developmental Psychology*, 30, 169-181.
- Turaşlı, K.N. (2006). *6 Yaş Çocuklarda Benlik Algısını Destekleyen Duygusal-Sosyal Hazırlık Programının Etkililiğinin İncelenmesi*. Marmara Üniversitesi. Eğitim Bilimleri Enstitüsü. Yayınlanmamış Doktora Tezi. İstanbul.
- Walden, Tedra A., Field, Tiffany M. (1982). Discrimination of Facial Expressions by Preschool Children. *Child Development*. Vol.53, 1312-1319.
- Widen, Sherri, C., Russell, James, A. (2003). A Closer Look at Preschoolers' Freely Produced Labels for Facial Expressions. *Developmental Psychology*. 39(1), 114-128. Copyright by the American Psychological Association.