

TRANSLITERAL EQUIVALENCE AND RELIABILITY  
OF THE TURKISH VERSION OF  
THE PIERS - HARRIS CHILDREN'S SELF-CONCEPT SCALE

by

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TRANSLITERAL EQUIVALENCE AND RELIABILITY OF  
THE TURKISH VERSION OF THE PIERS-HARRIS  
CHILDREN'S SELF-CONCEPT SCALE

The present study constituted the first step in the development of a standardized adaptation of a self-concept scale for Turkish students. It was concerned with two issues:

(1) to translate and adapt the Piers-Harris Children's Self-Concept Scale into Turkish, and

(2) to conduct research on the reliability of the Turkish version of the scale.

The study was realized in two phases. In the initial phase, the English version was translated into Turkish and checked by back-translations. The final translated form was tested for its transliteral equivalence. For this purpose, both the English and the Turkish versions of the scale were administered to a sample of 242 (66 boys, 176 girls) bilingual university and secondary school students with approximately two weeks interval. Analysis of variance,  $t$ -tests and Pearson Product Moment Correlations generally supported the expectation that the Turkish translation was transliterally equivalent to the English version.

In the second phase, research was conducted on the

reliability of the Turkish Piers-Harris scale with a sample of 447 (247 boys, 200 girls) students from grades four through eight. Test-retest reliability coefficients showed high stability of scores over time intervals ranging from one to seven days. Analysis using the Kuder-Richardson Formula 20 revealed the high homogeneity of the scale. Internal consistency of the items was also investigated using item-total (point biserial) correlations which varied greatly (ranging from zero to mediocre correlation) for different items in different sample groups. The varying low item-total correlations were interpreted to indicate the multifactorial nature of the scale. This supported the theoretical conceptualization of self-concept as a multidimensional phenomenon. Further research is needed on this topic.

## PIERS-HARRIS'İN ÇOCUKLARDA KENDİLİK ANLAYIŞI ÖLÇEĞİ TÜRKÇE FORMUNUN ÇEVİRİ GEÇERLİĞİ VE GÜVENİRLİĞİ

Bu çalışma standardize edilmiş, bir Türkçe kendilik anlayışı ölçeği geliştirilmesinde ilk adımı oluşturmaktadır. Çalışmanın başlıca iki amacı vardı:

- (1) Piers-Harris'in Çocuklarda Kendilik Anlayışı Ölçeği'ni Türkçe'ye çevirmek ve uyarlamak,
- (2) Ölçeğin Türkçe formunun güvenirliliğini araştırmak.

Çalışma iki aşamada gerçekleştirildi. İlk aşamada Piers-Harris Ölçeği Türkçe'ye çevrildi ve bu çeviri birkaç kez düzeltilerek geri-çevirme (back-translation) tekniğiyle tekrar kontrol edildi. Daha sonra gözden geçirilen düzeltilmiş çevirinin geçerliliği (İngilizce formla eş değeri) deneysel olarak araştırıldı. Bunun için toplam 242 (176 kız, 66 erkek) iyi İngilizce bilen üniversite ve lise öğrencisine ölçeğin hem İngilizce hem Türkçe formları değişik sırayla ve farklı zamanlarda verildi. Terazileme (counter-balancing) adı verilen bir yöntemle her öğrenci ölçeğin İngilizce ve Türkçe formlarını yaklaşık iki hafta arayla almış oldu. Sonuçlar varyans analizi, t-testi ve Pearson Çarpımlar Korelasyonu'yla analiz edildi. Tüm analiz sonuçları Türkçe çevirinin orijinal İngilizce formla eş değerde olduğunu gösterdi.

Çalışmanın ikinci aşamasında Piers-Harris ölçeğinin güvenilirliği toplam 447 (200 kız, 247 erkek) ilkokul ve ortaokul öğrencisinden oluşan örneklem üzerinde araştırıldı. Denekler 10-16 yaş grubunda, farklı sosyoekonomik düzeye sahip öğrencilerdi. Türkçeleştirilmiş ölçek birden yedi güne kadar değişen aralıklarla iki kez uygulandı. Test-tekrartest güvenilirliği için elde edilen korelasyonlar, puanların yüksek değişmezlik (stability) düzeyine sahip olduğunu gösterdi. Kuder-Richardson 20 formülüyle hesaplanan güvenilirlik katsayıları ise Türkçe ölçeğin madde homojenliğinin tatmin edici ölçüde olduğunu belirtiydi. Testin iç tutarlılığı ayrıca madde analizini oluşturan item-total ya da madde-puan korelasyonlarıyla araştırıldı. Madde-puan korelasyon katsayıları sıfır ile .50'ler arasında değişen farklılıklar gösterdi. Bu farklılıklar testin çok faktörlü (multidimensional) olduğunu bir göstergesi olarak yorumlandı. Daha sonraki çalışmalarda bu konunun ele alınması önerildi.



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## I. INTRODUCTION

This study attempts to establish the transliteral equivalence and the reliability of the Turkish form of the Piers-Harris Children's Self-Concept Scale: The Way I Feel About Myself (WIFAM). It is the first step in the development of a standardized Turkish self-concept scale for elementary and secondary school students between the ages of 10 and 16.

Self-concept is broadly defined as a person's perceptions, ideas and feelings about himself (Anderson, 1965; Donelson, 1973; Arndt, 1974). It is formed through the individual's own perception of his experiences.

In education, the topic of self-concept is important both as an entry variable and as an outcome in the teaching-learning process (Bloom, 1976). Research findings on the relationship between self-concept and school achievement support this position. Reviewing research on the relationship between self-concept and academic achievement, Scheirer and Kraut (1979) cited several studies on positive correlations between these two variables. In his model of school learning, Bloom (1976) has formulated that academic self-concept accounts for about 25 per cent of the variation in school achievement, especially after the elementary school period. Brookover (1964) found that self-concept of ability in school is significantly and positively related to the academic

performance of students when the ability dimension is controlled.

Another area in which self-concept has a central place is counseling. The Rogerian phenomenological self-theory of personality asserts that for a basic understanding of a counselee, the counselor has to have an idea of how the client perceives himself (Rogers, 1951). According to this theory, behavior is directly influenced by the person's perception of himself. The individual perceives situations and other individuals in terms of how he perceives himself (Rogers, 1968). Therefore, the most characteristic outcome of psychotherapy or counseling should be the willingness of the client to perceive himself as he is, and accept himself realistically, perceiving both his negative and positive attributes. This realism will then be accompanied by a sense of freedom from tension and a feeling of contentment (Rogers, 1968).

#### The Rationale and Purpose of the Study

One current trend in education is humanism. This trend stresses the importance of positive self-concept for healthy psychological development of individuals.

In Turkey, the primary emphasis of school and family is on the school achievement of children. At every grade level, examinations constitute the most important part of the students' school experience. Success and failure in these examinations and school play an important role in the students' development of positive (adequate) or negative (inadequate) self-concept. Experiencing success or failure continually over a long time period is a decisive factor as well. In a study on the cumulative effects of achievement on academic self-concept, Kifer (1973) compared successful

students' self-concept of ability to that of unsuccessful students over grades one to eight<sup>1</sup>. He found that as years of successful and unsuccessful school experiences increased, the successful and unsuccessful groups got more and more differentiated in their average self-concept of ability scores (in Bloom, 1976). Inferring from such research findings it can be said that failure in school especially when experienced over a number of years, encourages a negative self-concept and lack of self-confidence. Negative self-concept, in turn, facilitates failure.

If an important function of education is to help students develop affectively as well as cognitively, then educators and guidance counselors should deal with the phenomenon of self-concept scientifically. For this purpose, we need to measure self-concept with dependable and valid instruments. Since no such instruments are known to exist in Turkey, they need to be developed. This study aims to help meet such a need by adapting the Piers-Harris Children's Self-Concept Scale into Turkish.

The purpose here is two-fold:

- 1) to translate and adapt the Piers-Harris Children's Self-Concept Scale into Turkish and to establish the transliteral equivalence of this form,
- 2) to test the reliability of this form on Turkish students.

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<sup>1</sup>Students who were in the upper fifth of their classes in teacher marks constituted the successful group and students in the lowest fifth group in the same classes were taken as the unsuccessful sample group. Self-concept of ability was measured by Brookover's scale on academic self-concept.

### The Scope of The Study

The present study undertook two steps in the development of a Turkish version of the Piers-Harris Children's self-Concept Scale on bilingual and monolingual Turkish samples drawn from various Istanbul schools. These steps were as follows:

1) The scale was translated into Turkish, tested by back translations and analyzed by experts. During this phase of the study, empirical data for transliteral equivalence of the scale were gathered by administering both the Turkish and the English versions of the scale to a total of 242 (66 boys, 176 girls) bilingual Turkish high school and university students. A time interval of approximately two weeks was allowed between the two administrations of the scale.

The results of the transliteral equivalence study were tested by analysis of variance,  $t$ -test and Pearson Product Moment Correlation techniques.

2) The reliability estimates of the Turkish version were obtained from the scores of 447 (247 boys and 200 girls) elementary and secondary school students from grades four through eight. Test-retest correlations with time intervals ranging from one to seven days, Kuder-Richardson 20 and point biserial reliability techniques were utilized to establish the stability and the internal consistency of the scale.



## II. THEORETICAL CONCEPTUALIZATION AND ASSESSMENT OF SELF-CONCEPT

In this chapter, theoretical conceptualizations and assessment of self-concept are presented in three sections. In the first two sections, the definitions, the major features and the development of self-concept are discussed along with some empirical studies conducted on the topic. Special attention is paid to the theoretical background of the Piers-Harris scale. In the third section-the assessment of self-concept-, methods of the measurement of self-concept, and particularly the description of the Piers-Harris scale are provided.

Although research on self-concept has a long history, many researchers and theoreticians in the fields of education and psychology state that the area still lacks an agreed-upon-definition of self-concept and standardized measurement instruments (Shavelson et al., 1976; Marsh et al., 1983). Theoretical background of self-concept and approaches to its measurement include various conceptualizations derived from models such as the symbolic interactionism<sup>1</sup> of social learning theories and phenomenology (Pervin, 1975; Scheirer and Kraut,

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<sup>1</sup>Deriving from Mead's model of self-concept formation symbolic interaction theory states that self-concept includes symbolic meanings and labels that are learned by everyday interaction with others, especially "significant others" (Scheirer and Kraut, 1979).

1979). In this chapter, the phenomenological approach to self-concept will be emphasized, since the theoretical origin of the Piers-Harris scale derives mainly from this theory.

### Definitions and Major Features of Self-Concept

#### Definitions

In the phenomenological approach to self-concept the term "self" denotes a "self-as-portrait" framework. Here the term self-concept stands for the person's own conception of himself (Arndt, 1974).

For Lecky, self-concept constitutes the nucleus of personality. It delineates the person's view of "what he means, who he is, what he can do and how he fits into the world" (In Arndt, 1974, p.305).

Similarly, Rogers defines self-concept as "the organized, consistent conceptual gestalt composed of perceptions of the characteristics of the "I" or "me", and the perceptions of the relationships of the "I" or "me" to others and to various aspects of life, together with the values attached to these perceptions" (Rogers, 1959, p.200). He draws further distinction between "the actual-self" (self as one perceives himself) and "the ideal-self" (self as one would like to be). In this regard, it can be said that the Piers-Harris Children's Self-Concept Scale is concerned with the actual self of the person.

After reviewing twenty-two different definitions of self-concept, Shavelson et al. (1976) concluded that all of these definitions suggest some common aspects in the conceptualization of the term which include an emphasis on a stable or changing self-concept, methods for changing self-concept, situational, phenomenal or internal determinants of self-concept, types of evaluation, and uni- or multidimen-

sionality of self-structure. Within this framework, the theoretical background of the Piers-Harris scale is based on a conceptualization of self-concept viewed as an organized (structured), fairly stable phenomenon for which change is also possible. In this approach, determinants of self-concept are basically phenomenal in the sense that a person's self-concept is in line with his perception and subjective evaluation of himself. A person can evaluate his behavior by comparing it with his ideals or views of significant others. Self-concept is also multidimensional; that is, it has different facets or aspects.

### Major Features of Self-Concept

Organized (structured) character of self-concept. An individual's subjective experiences constitute a vast amount of data on which he bases his perceptions of himself. The person recodes his perceptions into simpler forms, and categorizes them to reduce the complexity of experiences. For example, a child may represent his experiences in his family and school in different categories (Jersild, 1952). The categories represent a way of organizing or structuring experiences and giving meaning to them.

Stability of self-concept. The second feature of self-concept is its stability. Syngg and Combs (1949) suggest that an individual differentiates definite and fairly stable characteristics of himself as a unique way of defining himself. According to these theoreticians, self-concept and its stability are of particular importance in the motivation of behavior.

In a study on the connotative structure of self-concept, Monge (1973) examined the developmental trends in factors of adolescent self-concept. He used a seven-point

semantic differential scale to rate the concept, "my characteristic self", on 21 polar adjective pairs. He found that self-concept was constant through adolescence (grades six through twelve), and more so for boys than for girls.

Using the Q-sort technique, Engel (1959) investigated the stability of adolescent self-concept over a two-year period. In this longitudinal study, the sample was 172 public school students. A hundred and four of these students were in the eighth grade, and 68 were in the tenth grade at the time of first testing. The results revealed relative stability with an overall item-by-item correlation of .53 between two testing periods. When corrected for attenuation, the overall test-retest mean correlation was .78.

In an extensive study on the origins and stability of self-esteem (here it stands for self-concept)<sup>1</sup>, Coopersmith (1976) reported similar findings. Working primarily with children in the fifth and sixth grades, he asked them to fill out a Self-Esteem Inventory (SEI) which contained 58 items. He obtained a test-retest correlation of .88 with an interval of five weeks. Moreover, retesting after a lapse of three years yielded a stability coefficient of .70. These results showed that children have maintained consistent levels of self-esteem (here self-concept) over the three-year period, and they kept approximately the same position in the self-esteem distribution relative to other children.

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<sup>1</sup>Conceptualization and use of the term self-concept are not consistent in the literature. The Self-Esteem Inventory has been used as a measure of general self-concept in many studies (Dyer, 1964; Epstein and Komorita, 1971; Smith, 1973) including Coopersmith's study (Shavelson et al., 1976). Also an inspection of the Self-Esteem Inventory would reveal that its items are very similar in content to those of the Piers-Harris Self-Concept Scale. Therefore, what Coopersmith calls self-esteem in his inventory corresponds to the term self-concept used in the present study.

The findings of Engel and Coopersmith studies give support to Piers and Harris' view that self-concept is fairly stable after age eight (Piers, 1969). This is also in line with the theoretical position that there is a tendency in the self to maintain self-consistency.

The self-consistency hypothesis was derived from Heider's balance theory which predicts that persons interpret events in a way that is consistent with their own self-evaluation (Ames, 1978). An individual also behaves in a way that is congruent with his self-concept in order to maintain his view of himself. Self-consistency and congruence are basic premises of Rogers' self-theory. Research findings supporting the view that one's behavior is in accord with one's self-concept are present in the works of Chodorkoff (1954) and Aronson-Mette (1968).

Although self-consistency is a phenomenon that facilitates the stability of self-concept and makes it relatively resistant to change, change is possible. According to Rogers (1968), as behavior changes, so does one's perception of self. Conversely, when the perceptions of self and reality are modified, behavior undergoes some modifications as well. A basic premise of Rogers' theory is that counseling or psychotherapy need not necessarily result in the solution of problems, but it must help the individual to acquire freedom from tension and a different feeling about the self. Once this new perception of self is reached, then solutions to problems can be found without much difficulty.

Shavelson et al. (1976) view the issue of stability and change of self-concept as a continuous process. Self-concept is fairly stable in general, but it may be modified in specific situations. When there are situation-specific instances inconsistent with the person's general self-concept,

a change in the self-concept may occur. The person compares his perception of the outside reality with his view of himself, and tries to assimilate the environmental evidence with his self-concept. However, change does not occur very often. Before it happens, the person may attempt to use defensive processes to maintain self-concept. Rogers describes two kinds of defense mechanisms of the organism: denial and distortion. While the former serves to preserve the self-structure from threat by leaving the experience completely unsymbolized, the latter allows the experience into awareness but in a form that makes it consistent with the self. Rogers gives the example of a student whose self-concept includes a statement like "I am a poor student," and who distorts the experience of receiving a high grade by making such interpretations like "It was luck," "That professor is a fool" to make his experience congruent with his self-concept (Pervin, 1975).

Extreme stability of self-concept is neither expected nor desired, because it may be indicative of defensive processes. Defenses are assumed to lead to an inability to admit or to assimilate dissonant information about oneself, and thus impede personal growth (Kugle et al., 1983).

In summary, it is seen that the empirical evidence supports the view that self-concept is relatively stable. Stability, however, does not rule out change altogether. Change that facilitates congruence between self-concept and external stimuli is desirable for growth.

Descriptive/evaluative nature of self-concept. Another feature of self-concept is that self-perceptions have both descriptive and evaluative nature. A person describes a particular experience and evaluates himself by the help of that experience. For example, one can make a descriptive

statement about himself such as "I like to play the piano," and an evaluative statement such as "I am good in music."

Descriptions and evaluations are reflections of individual's perceptions of his subjective experience. Evaluations can be made against absolute standards such as "ideals" and/or they can be made against relative standards such as "peers," and perceived evaluations of "significant others" (Shavelson et al., 1976).

Scheirer and Kraut (1979) add an affective component to this descriptive/evaluative aspect in their classification. This affective component of self-concept is a person's emotional attitude toward himself. It is often referred to as "self-esteem" or "self-regard" in which the emphasis is on global feelings of self-worth, the personal judgment of worthiness (Donelson, 1973).

Multidimensionality of self-concept. Recent research on the characteristics of self-concept indicates that it has different facets (Shavelson and Bolus, 1982; Marsh et al., 1983; Shavelson and Marsh, 1984). Exploring the construct validation analyses of five different self-concept inventories<sup>1</sup>, Shavelson et al. (1976) suggested tentatively that self-concept scores can be related to four areas of experience: academic, social, emotional and physical.

Recently Shavelson and others advocated more differentiated components of self-concept, they applied

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<sup>1</sup>The inventories used in this study were the Michigan State Self-Concept of Ability Scale (Brookover, 1965), the Self-Esteem Inventory (Coopersmith, 1967), the How I See Myself Scale (Gordon, 1968), the Way I Feel About Myself (Piers and Harris, 1964), and the Self-Concept Inventory (Sears, 1963).

factorial analysis and analysis of covariance to data obtained from a self-concept inventory called Self-Description Questionnaire which was administered to different samples of preadolescents and adolescents. They identified seven factors corresponding to facets like Physical Appearance, Physical Abilities, Peer Relations, Parent Relations, Reading, Mathematics and School Subjects (Shavelson and Bolus, 1982; Marsh et al., 1983; Shavelson and Marsh, 1984).

Ludwig and Maehr (1967) claimed that individuals have a self-concept of ability apart from a general self-concept. This kind of conceptualization was based on their findings that success or failure in an athletic task changed the subjects' self-concepts of specific physical abilities, but not their general self-concepts.

Research on the relationship between self-concept and achievement stems from the hypothesis that self-concept is multifaceted; that it is a category system. Investigations on mutual effects of self-concept and achievement focus on "academic" self-concept which is accepted to be directly related to school performance (Brookover, 1964). Jersild (1952) and Sears (1963) also showed that self-concept includes areas such as school, social acceptance, physical attractiveness, and ability.

The factor analysis of the Piers-Harris scale revealed Intellectual and School Status, Physical Appearance and Attributes, Behavior and Popularity as dimensions of self-concept (Piers, 1969).

#### Development of Self-Concept

For Rogers, the growth of the organism involves the development of self. Growth or what Rogers calls "self-



actualization," is the basic striving of the organism. It stands for "greater differentiation, expansion, increasing autonomy and greater socialization" (Pervin, 1975, p.232). Rogers believes that growth forces basically exist in all individuals. As the self develops, the self-concept becomes a differentiated part of the phenomenal field, and it gets increasingly complex.

### Development of Self-Awareness

The development of self-concept goes back to the time when a child first learns to distinguish self from what is not self. He begins to become aware of the fact that he has a body that is always within his immediate control. This is called "self-awareness," and it develops during the first year of life.

Reviewing research on the development of the "sense of self" in infants, Maccoby (1980) concludes that by the age of three-and-a-half to four years children begin to have some conception of a private thinking self that is not accessible to the observation of others.

### Content Development of Self-Concept

The realization of the uniqueness of the psychological self is accompanied by a developmental progression.

Initially children think of themselves in terms of appearance and activities as in statements like "I have brown hair," "I go to school." Children also include their likes and dislikes in their self-descriptions. Keller et al. (1978) collected self-descriptive data from 48 children of three, four and five years of age. Their responses were classified in categories including relationships, body image, possessions, personal labels, gender, age, evaluation, personal characteristics

and preferences. Activity was the most salient response category that appeared in the answers to two open-ended questions.

Gradually a more abstract kind of conceptualization like "I am an individual," "I am human" emerges (Montemayor and Eisen, 1977). Using a sample whose age range was 9.8 to 17.9 and who responded to the question of "Who am I?," Montemayor and Eisen found that self-conceptions undergo a developmental transformation just as in the Piagetian developmental stages. This transformation shows in general, a change from concrete to abstract with increasing age.

#### Impact of Significant Others-Child Relationship on the Development of Self-Concept

Self-concept is formed through experience with the environment, interactions with significant others, and attributions of the person's own behavior.

A healthy psychological development of self takes place in a climate of acceptance. For instance, in an ideal family the child is accepted by his parents even if they disapprove of his particular behaviors. A positive, accepting view of self develops only in an atmosphere of unconditional positive regard (in Donelson, 1973)<sup>1</sup>.

The major influence on the development of self-concept comes from the family environment. Coopersmith (1967) investigated the relationship between different patterns of parent-child interactions, and the development of self-

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<sup>1</sup>In "unconditional positive regard," the person is provided with continuous acceptance and empathy. In this way, he experiences a nonthreatening milieu in which he can explore his inner self.

concept, the nature of the child-rearing practices would provide pertinent information. Coopersmith found that in the families of children with high self-esteem, three conditions were present. They were:

- (1) total or nearly total acceptance of children by their parents,
- (2) clearly defined and enforced limits, and
- (3) respect and latitude for individual action that exists within certain defined limits.

He also found that democratic pattern of parental attitudes rather than strictness and autocracy is associated with high levels of self-esteem in children (in Pervin, 1975).

In another study, Cox (1966) examined family background, parental child-rearing attitudes and characteristics of the child. He found a significant correlation of .56 between self-concept (measured by the Piers-Harris scale) and the child's perception of each parent as loving. A major portion (72 per cent) of the predicted variance in self-concept was associated with child-rearing practices (in Piers, 1969).

✓ Other sources significant for the development of a child's self-concept are teacher-student relationships and peer relationships. Metcalfe (1981) reviewed the studies on the relationship between students' self-concept and attitude toward school. He concluded that teachers may have a significant influence on students' level of self-concept. He further claimed that teachers could depress or elevate students' self-concept, and thus affect their self-esteem.

Importance of peer group relations, especially around middle adolescence, has been pointed out by Hamachek (1976).

Along with such variables as peer acceptance and social adjustment, peer groups can be another important source for the development of self-esteem, since the adolescent feels that he is also important to someone outside the primary family unit. Cox (1966) reported that the correlation between peer acceptance-rejection and self scores (measured by the Piers-Harris Scale) was around .61, significant at the .01 level.

However, a person's self-concept is not just a "looking-glass self" in which the ideas of the significant others are directly reflected on. Instead it is an assimilation of one's feelings, thoughts and self-observations with those of others (Donelson, 1973). Thus the self is said to be composed of a person's ideas, strivings, hopes, fears and fantasies. It includes not only the person's present view of himself, but also his opinion of what he has been and what he might become (Jersild, 1960).

#### Assessment of Self-Concept

There are different assessment techniques of self-concept developed from various personality theories. They can be classified into two groups:

- (1) Free choice self-descriptions (interviews, autobiographies, open-ended question tests), and
- (2) Standard sets of verbal stimuli (adjective check lists, Q sorts, semantic differentials and inventories).

Of these techniques one self-concept inventory, namely the Piers-Harris Children's Self-Concept Scale, will be presented and dealt with in this study. The basic understanding of this inventory is that person's experiences constitute a subjective frame of reference for self-concept. This

subjective frame can best be attained by that person's report of his self-concept.

### Description of the Piers-Harris Children's Self-Concept

#### Scale: The Way I Feel About Myself (WIFAM)

The Piers-Harris scale was developed in 1964 by Piers and Harris as a measure of general self-concept. The authors' main purpose in designing the scale was to use it for research on the development of children's attitudes toward self. The scale can also be used in clinical and counseling settings and in schools to identify children in need of psychological referral.

Starting from the theoretical assumption that a self-concept inventory for children should contain items on children's concerns about themselves, the items were developed from children's own statements on "what they liked and disliked about themselves" (Piers, 1969). Jersild (1959) had grouped these statements into eleven categories:

"a) Physical Characteristics and Appearance; b) Clothing and Grooming; c) Health and Physical Soundness; d) Home and Family; e) Enjoyment of Recreation; f) Ability in Sports and Play; g) Ability in school, Attitudes toward School; h) Intellectual Abilities; i) Special Talents (music, arts); j) Just me, myself; and k) Personality, Character, Inner Resources, Emotional Tendencies" (Piers, 1969, p.2).

Initially the scale contained 164 items. In a pilot study on 90 children from grades three, four and six, a 140-item form was attained after eliminating the items answered in one direction by less than 10 per cent, or more than 90 per cent of the responses. This 140-item form was then administered to a total of 12 classes from grades three

six and ten for the standardization of the scale. In the standardization study, statements were classified as reflecting high (adequate) and low (inadequate) self-concept to develop a standard scoring procedure for the scale. Also repetitious items were discarded and a 95-item form of the scale was attained. Later, an item analysis was conducted with data from the sixth grade sample of the standardization study. Via this item analysis, items that discriminated best between low self-concept and high self-concept children were retained while those items with low discrimination power were dropped. The final form of the scale with 80 items was obtained after the item analysis (Piers, 1969).

Piers (1969) describes the scale as a self-report instrument which has been designed for children over a wide age range of approximately 9 to 16 years. It is a quickly completed (15-20 minutes), and easily administered scale. It contains 80 items in the form of simple descriptive statements with a "yes" or "no" response. A total score, or several cluster scores can be obtained. The total score yields a composite self-concept score that may range from 0 to 80. Items are scored in the direction of high (adequate) self-concept. The higher the score, the more positive (adequate) the self-concept is. A scoring key is supplied by the authors of the instrument. The cluster scores represent the six factors of the scale. They are: I. Behavior, II. Intellectual and School Status, III. Physical Appearance and Attributes, IV. Anxiety, V. Popularity, VI. Happiness and Satisfaction.

For the interpretation of raw scores, percentiles and stanines are presented. These were developed by using a sample of 1183 students from grades four, six, eight, ten and twelve.

The norm groups do not show consistent sex or grade differences in general. This led Piers (1969) to claim that

self-concept is a relatively consistent phenomenon across time and sex.

Reliability. The reliability data of this scale were obtained from the standardization study with the 95-item form. The scale proved to have high coefficients of internal consistency and stability. The internal consistency and item homogeneity were obtained using the Kuder-Richardson Formula 21 with coefficients ranging from .78 to .93 for public school students from both sexes in grades three, six and ten.

The Spearman-Brown odd-even reliability coefficients were .90 and .87 for half of the grade six and grade ten samples, respectively.

The four month test-retest coefficients of .72 for grade three, .71 for grade six and .72 for grade ten showed the stability of scores. In an earlier study (Wing, 1966) with 244 fifth graders stability coefficients around .77 were reported for both two-month and four-month test-retest periods. This result is consistent with the findings of Piers and Harris (Piers, 1969).

The standard error of measurement of the scale is approximately 6 points. Piers recommends that individual scores that show any change less than 10 points can be ignored.

Validity. For concurrent validation, Mayer (1965) compared the scores on the WIFAM scale with Lipsitt's Children's Self-Concept Scale (1958). A correlation of .68 was obtained for a sample of 98 special education students who ranged in age from 12 to 16 years (in Piers, 1969).

Cox (1966) compared scores on the Piers-Harris scale with problems checked on the SRA Junior Inventory and obtained a correlation of  $-.64$  (in Piers, 1969).

Piers and Harris obtained teacher and peer ratings as another measure of the validity of the scale. From the phenomenological viewpoint, it is irrelevant to seek correspondence between one's self-concept and ratings of others, since only a person knows how he perceives himself. But still the degree of agreement between the two is accepted to be useful, because a person assimilates significant others' opinions and expectations of himself into his self-system while he develops a self-concept (Piers, 1969).

For a sample of 244 fourth and sixth graders, correlations between WIFAM scores and teacher ratings ranged from .06 to .41. For the same group, self-concept scores were found to correlate with peer-ratings between .26 and .49. The peer ratings showed a slightly higher tendency to correspond with the WIFAM scores (Piers, 1969).

In Cox's (1966) study, correlations between WIFAM scores and teacher and peer ratings of children's socially effective behavior were reported to be .43 and .31 respectively. Similar ratings of teachers and peers on children's superego strength were also correlated with WIFAM scores (.40 and .42) (in Piers, 1969).

For the construct validity of the scale factor analysis of scores was applied. Piers and Harris found that basically ten factors accounted for 42 per cent of the total test score variance (Piers, 1969). These researchers considered six of the factors to be large enough to warrant interpretation. The items which loaded highest on these factors are as follows:

I. Behavior: "I do many bad things" (.66), "I am obedient at home" (-.64), "I am often in trouble" (.60);

II. Intellectual and School Status: "I am good in my schoolwork" (-.66), "I am smart" (-.63), "I am dumb about most things" (.56);



III. Physical Appearance and Attributes: "I am good-looking" (-.74), "I have a pleasant face" (-.65), "I have a bad figure" (.56);

IV. Anxiety: "I cry easily" (-5.7), "I worry a lot" (-.57), "I am often afraid" (-.55);

V. Popularity: "People pick on me" (-.62), "I am among the last to be chosen for games" (-.61), "It is hard for me to make friends" (-.56);

VI. Happiness and Satisfaction: "I am a happy person" (.65), "I am unhappy" (-.62), "I like being the way I am" (.60).

Limitations of the scale. Limitations of the scale emerge basically from the general limitations or pitfalls of the self-report inventories.

Firstly, there is the social desirability issue. It is well-known that "faking-good" takes place in responding to the self-concept inventories. This tendency leads people to present themselves in a favorable way. Piers suggests a way of mitigating the problem of social desirability in self-report inventories by making both the "yes" and the "no" choice alternatives equally desirable. But Cronbach (1960) does not recommend this procedure, because it reduces the reliability of the instrument. Correlations between social desirability and the WIFAM range from .25 to .45 for grades ten and four, respectively (in Piers, 1969). This indicates that social desirability, lie scales were used in the pilot study. The findings revealed non-significant results, however, and thus the lie scales were eliminated.

Secondly, the choices for responses are very limited in such inventories. A mid-position like "uncertain" does not exist in this scale in order to prevent young children from overusing it. Thus the responses are forced only into two categories.

Thirdly, some items in the scale are rather ambiguous and open to different interpretations. As examples the following statements can be given: "I do many bad things," "I think bad thoughts," or even "I get into a lot of fights."

Despite these limitations, reliability and validity coefficients seem good enough to warrant the use of the scale in research and practice.

### III. THE TRANSLITERAL EQUIVALENCE STUDY

The Turkish translation of the WIFAM scale was subjected to examination in two phases. At first, the translated Turkish form of the scale was compared with the original version by the back-translation technique. In this procedure, the Turkish version was translated into English by two bilingual English teachers who did not know the original English form. These back-translations were later checked against the original statements in the English scale. Any errors and inconsistencies in the conceptualization or the language of the Turkish items were worked out, corrected, and revised accordingly. This became the final Turkish version of the scale.

Since expert opinion on the acceptability of a translation is not enough, empirical evidence in showing the similarity between the original and the translated versions of the scale is needed (Le Compte and Öner, 1976). In the second phase of the translation process, an experimental study was conducted to determine the transliteral equivalence of the revised Turkish scale. For this purpose three different, one Turkish and two mixed language (English-Turkish), experimental forms of the scale were developed.

Our expectations of the transliteral equivalence study were as follows:

(1) There would be no significant differences among the experimental forms or the experimental groups.

(2) There would be no significant differences between the pure-language and split-language (half items in English and the other half in Turkish) forms of the scale.

(3) There would be no significant differences between the scores obtained from the Turkish and English items of the scale.

(4) The correlations between testing and posttesting using alternate forms would be moderately high.

In the following part of this chapter, the methodology used in the transliteral equivalence study and the results obtained from different sample groups are presented.

## M E T H O D

### Sample

The subjects were bilingual university and high school students. A total of 242 students were taken from three schools in Istanbul. They were:

- (1) 60 freshmen from Boğaziçi University, Faculty of Education,
- (2) 107 tenth grade students from Robert College,
- (3) 75 eighth and eleventh grade students from Üsküdar American Academy for Girls.

Although education is in English in all three schools, the level of English proficiency was assumed to be high in two of the sample groups but variable in one. In the Boğaziçi University sample, for instance some of the students had their education in the English language between six to eight

years, but some had two semesters of preparatory English before the regular university education. Students from Robert College and the eleventh graders from Üsküdar American Academy for Girls had seven years of English. Eighth graders from Üsküdar American Academy had studied English for four years.

### Instrumentation

Four different forms (A, B, C, D) of the WIFAM scale were used. One of these was the original English form, and the other three were the newly developed experimental forms.

Form A was the original English scale with 80 items. Form B was the translated Turkish form. Forms C and D were split or mixed-language forms each containing 40 randomly selected items in English, and the other 40 items in Turkish.

The order of the items in the original scale was changed in the experimental forms so as to balance the sequence of the affirmative and negative statements. The same arrangement of the items was kept in all of the forms.

### Procedure

The three school sample groups were administered the four different forms of the scale as presented in Table 1.

Table 1: Design of the Transliterated Equivalence Study

School	Class	Number of Students			Test form	Alternate Test form
		Female	Male	Total		
Boğaziçi University	class 1, section*1	9	6	15	A	B
	class 1, section 2	12	3	15	B	A
	class 2, section 1	13	2	15	C	D
	class 2, section 2	12	3	15	D	C
Robert College	class 1	15	14	29	A	B
	class 2	13	13	26	B	A
	class 3	14	14	28	C	D
	class 4	13	11	24	D	C
Üsküdar American Academy	class 1, section 1	19	-	19	A	-
	class 1, section 2	15	-	15	B	-
for Girls	class 2, section 1	20	-	20	C	-
	class 2, section 2	21	-	21	D	-
TOTAL		176	66	242		

\*Sections indicate that the same class is divided into two for practical purposes in test administration.

This design is known as counter-balancing by which the order bias of forms is controlled. According to the order in which the forms were administered, four experimental groups (A-B, B-A, C-D, and D-C) were derived. Subjects were assigned to these groups randomly. Through this technique, each subject answered each item twice, once in English and once in Turkish.

The time interval between testing and posttesting for alternate forms was approximately two weeks in two schools. Due to unforeseen school reasons posttesting could not be held at Üsküdar American Academy. So only the first test forms were included in the analysis of this group.

Both test and posttest forms were administered by the same experimenters. The purpose of the study was briefly explained to the subjects. They were told that the aim was to see if the scale was an adequate adaptation of the English form. Subjects who expressed hesitation in writing their names on the answer sheets were suggested to use nicknames. Assumingly this is a precaution against faking.

All forms were administered and scored according to the instructions stated in the manual of the scale.

### Statistical Analysis

The data for equal and unequal groups were analyzed by analysis of variance, t-test and Pearson Product Moment Correlation techniques.

Two-way analyses (sex by experimental variables, and school by experimental variables) of variance were conducted to test the differences among scores obtained from each of the four forms (A, B, C, D) and the experimental groups (A-B, B-A, C-D, D-C).

Two-way analysis (sex by language) of variance for the Robert College sample and t-tests for the Boğaziçi University and Üsküdar American Academy samples were used in examining the differences between responses to items in pure-language and split-language forms.

Scores obtained from the English and the Turkish item forms were analyzed by correlated sample t-tests to see whether responding to items in English or in Turkish made a difference. In this analysis, scores for the English items were derived by combining the scores of the English form (A), with the scores for 40 English items of Form C and 40 English items of Form D for each subject. The same procedure was followed for the Turkish items.

Product moment correlations were computed for stability of scores between testing and posttesting.

In the analyses, sex differences were taken into consideration in the Robert College sample, but not in the Boğaziçi University nor in the Üsküdar American Academy samples, because the Boğaziçi University sample happened to have very few male subjects while the Üsküdar American Academy group was composed of female subjects only.

## R E S U L T S

The means and standard deviations of the four experimental forms for testing and posttesting were obtained for the three sample groups (Tables 2, 3 and 4). The means for the different forms of the scale in these three samples were seen to range from 57.20 to 63.26 at testing and from 55.20 to 63.00 at posttesting. For different forms, standard deviations ranged from 5.58 to 10.40 at testing, and from 6.82 to 12.90 at posttesting.

Table 2: Means and Standard Deviations for the Üsküdar American Academy Sample

Form	N	Mean	SD
A	19	60.00	7.20
B	15	57.20	10.13
C	20	60.25	8.16
D	21	58.57	9.15
Total	75	59.11	8.55

Table 3: Means and Standard Deviations for the Robert College Sample

TEST				POSTTEST			
Form	N	Mean	SD	Form	N	Mean	SD
A	29	59.72	9.88	B	29	60.38	9.32
B	26	58.85	7.16	A	26	58.35	7.92
C	28	58.29	10.29	D	28	60.31	9.94
D	24	59.42	9.79	C	24	61.08	10.22
Total	107	59.07	9.27	Total	107	60.03	9.30



Table 4: Means and Standard Deviations for the Boğaziçi University Sample

TEST				POSTTEST			
Form	N	Mean	SD	Form	N	Mean	SD
A	15	60.13	8.76	B	15	63.20	7.61
B	15	63.26	5.58	A	15	63.00	6.82
C	15	60.53	7.17	D	15	59.80	7.30
D	15	57.57	10.40	C	15	55.20	12.90
Total	60	60.36	8.23	Total	60	60.30	9.36

Generally at the first testing higher means were obtained by the university sample in comparison to the other two groups and the range of variance was greater at the university level. Otherwise, all groups were similar on the test and posttest results.

#### Analysis of the Four Experimental Forms

Two-way analysis of variance for the differences among the four forms of the scale and sexes yielded nonsignificant F scores in the Robert College sample (Table 5).

Table 5: Analysis of Variance for Four Experimental Forms (A, B, C, D) and Sex for Robert College, First Testing

Source of Variation	DF	MS	F
Sex	1	1.93	.29
Forms	3	.92	.14
Interaction	3	5.01	.74
Error	99	6.73	-

Similarly differences among forms were also non-significant in the Boğaziçi University and Üsküdar American

samples as shown in Table 6. Neither was there any difference between the two school samples. These findings confirmed our expectation of nonsignificance among the four experimental forms.

Table 6: Analysis of Variance for Four Experimental Forms (A, B, C, D) and Two Schools: Boğaziçi University and Üsküdar American Academy, First Testing

Source of Variation	DF	MS	F
Schools	1	3.71	.86
Forms	3	2.41	.56
Interaction	3	5.09	1.18
Error	127	4.31	-

#### Analysis of the Four Experimental Groups

Analysis of variance showed that the differences among the scores of the students in the four experimental groups (A-B, B-A, C-D, D-C) were not significant in either of the sample groups shown in Tables 7 and 8. Sex difference was not significant either.

Table 7: Analysis of Variance for Four Experimental Groups (A-B, B-A, C-D, D-C) and Sex in Robert College

Source of Variation	DF	MS	F
Sex	1	2.53	.41
Experimental Groups	3	1.11	.18
Interaction	3	7.06	1.12
Error	99	6.30	-

Table 8: Analysis of Variance for Four Experimental Groups (A-B, B-A, C-D, D-C) in Boğaziçi University

Source of Variation	DF	MS	F
Between experimental groups	3	126.90	1.84
Within experimental groups	56	68.79	

In these analyses (Tables 7 and 8), the mean of each subject was obtained by combining the testing and posttesting scores. These mean scores were used in the computation of the F values.

The findings support our first expectation and indicate that scores of students taking the four forms of the scale in varying orders at two different times of testing did not make any difference. So it does not seem to be important whether students are confronted first with the Turkish or the English version of the items of the scale.

#### Analysis of the Pure-Language and Split-Language Forms

The scores from the pure-language forms (A and B) were compared with the scores from the split-language forms (C and D) in order to see whether responding to items in one (pure) language or in two (split) languages made a difference.

Two-way analysis of variance for the scores of the male and female subjects from Robert College yielded non-significant results (Table 9). Neither the pure-language and split-language forms nor sex made any difference in students' responses to the scale.

Table 9: Analysis of Variance for Pure-language and Split - language Forms and Sex in Robert College

Source of Variation	DF	MS	F
Sex	1	.80	.26
Pure-language and split-language	1	.07	.02
Interaction	1	.88	.28
Error	103	3.13	-

Nonsignificant differences were also obtained from t-test analysis between Forms A+B and C+D in the Boğaziçi University and Üsküdar American Academy samples (Table 10). These results confirm the second expectation that responding to the scale in a single or split-language form does not make difference.

Table 10: Independent Sample T-tests for Pure-language and Split-language Forms in Boğaziçi University and Üsküdar American Academy

School	PURE-LANGUAGE			SPLIT - LANGUAGE			t
	N	Mean	SD	N	Mean	SD	
Boğaziçi University	30	62.40	6.82	30	58.27	9.52	1.93
Üsküdar A. Academy	34	58.77	8.59	41	59.39	8.61	-.31

In the analyses shown in Tables 9 and 10, the scores used for the pure-language forms (A and B) and the split - language forms (C and D) were taken from both the testing and posttesting data.

#### Analysis of the Two Languages

The results of the analyses for the Turkish and English Language items of the scale are summarized in Table

11. In Robert College, the total sample mean score for the Turkish items (from Forms B, C and D) is 59.89, and for the English items (from Forms A, C and D) it is 59.17. This difference is nonsignificant. In the Boğaziçi University sample, however, the mean for Turkish items is 61.10 and the English items 59.57. The difference here is significant ( $t(60) = 2.81, p < .005$ ). In Üsküdar American Academy, t-tests for independent samples yielded nonsignificant mean differences between the Turkish and the English mean scores in different groups. Opposed to the other two groups, scores for Turkish items and English items were taken from different subjects in the Üsküdar American Academy sample.

Seperate t-tests (for correlated samples) also yielded nonsignificant t scores for male and female student groups in the Robert College sample (Table 11).

Table 11: Means, Standard Deviations and T-tests, in Robert College, Boğaziçi University and Üsküdar American Academy

School	TURKISH ITEMS			ENGLISH ITEMS			t
	N	Mean	SD	N	Mean	SD	
Robert Female	55	59.51	7.94	55	58.56	7.79	1.51
College Male	52	60.29	9.65	52	59.81	11.53	.74
TOTAL	107	59.89	8.78	107	59.17	9.76	1.60
Boğaziçi University	60	61.10	8.28	60	59.57	9.15	2.81*
Üsküdar	15	57.20	10.13	19	60.00	7.28	.94 <sup>1</sup>
A. Academy	20	31.20	4.30	21	29.90	5.12	.87 <sup>2</sup>
	21	28.67	4.69	20	29.05	4.26	.27 <sup>2</sup>

\*p < .005

<sup>1</sup>In the Üsküdar American Academy sample, independent t-tests were used, while t-tests for correlated samples were applied in all other sample groups.

<sup>2</sup>These two independent sample t-tests were computed over a 40-item score for the English and Turkish items from Forms C and D since posttests did not exist. Means and Standard deviations were also computed from scores obtained from half of the scale.

These results show that our third expectation of non-significant differences between the English and Turkish versions of the scale was supported by the scores of the Robert College and Üsküdar American Academy samples, but not the Boğaziçi University sample.

Among seven t-tests (Table 11) there is only one significant result, - in the Boğaziçi University sample -, which can be attributed to a chance factor.

From these data, it is tentatively concluded that the Turkish version is similar to the English form of the WIFAM scale.

#### Analysis of the Test and Posttest

Data in Table 12 show that significant correlations ( $p < .01$ ) between testing and posttesting have been obtained in all experimental groups. The stability of responses over approximately two weeks are high both for the Robert College and Boğaziçi University samples yielding correlation coefficients of .85 and .88, respectively for the total groups.

Table 12: Test-Posttest Correlation Coefficients for the Robert College and Boğaziçi University Samples

Experimental Group	<u>Robert College</u>		<u>Boğaziçi University</u>	
	N	Pearson r	N	Pearson r
I (A-B)	29	.88*	15	.85*
II (B-A)	26	.77*	15	.72*
III (C-D)	28	.91*	15	.91*
IV (D-C)	24	.93*	15	.91*
Total Group	107	.88	60	.85

\* $p < .01$

These results can also be interpreted as showing the similarity of scores across the two languages. Subjects responding to items in Turkish at testing answer the corresponding English items similarly at posttesting. These correlations fulfill our last expectation of high positive relationship between test and posttest scores and provide support for the transliteral equivalence of the English and Turkish versions of the scale.

## IV. THE RELIABILITY STUDY

In this chapter, the aim is to generate and present data on the stability and internal consistency of the experimental Turkish Piers-Harris Self-Concept Scale.

### M E T H O D

#### Sample

Subjects of this study were 155 elementary and 292 secondary school students from 14 classes in three public and two private schools of Istanbul.

Table 13 gives the distribution by grade, socio-economic status (SES) and sex of these students ranging in age from 10 to 16.



Table 13: Sample Distribution by Grade, Socioeconomic Status and Sex in the Reliability Study

School	Grade	SES	N		
			Girls	Boys	Total
Türkan Şoray İlkokulu	5	Low	12	22	34
Çağlayan İlkokulu	4	Low	6	19	25
	5		7	14	31
Şişli Terakki Lisesi İlk Kısım	4	Middle-high	18	17	35
	5		17	13	30
Davutpaşa Lisesi	6	Low	10	24	34
	7		21	8	29
	8		21	15	36
Şişli Terakki Lisesi	6	Middle-high	15	20	35
	7		18	22	40
	8		15	16	31
Robert College	8	High	12	19	31
	8		10	22	32
	8		8	16	24
TOTAL			200	247	447

Forty-two per cent of the students were from public schools generally representing low socioeconomic status and 58 per cent were from private schools representing middle-high and high SES. The distribution of students by schools and SES is as follows:

Low SES (Public schools):

- (1) 34 fifth grade students from Türkan Şoray İlkokulu,
- (2) 56 fourth and fifth grade students from Çağlayan İlkokulu,
- (3) 99 sixth, seventh and eighth grade students from Şişli Terakki Lisesi.

Middle-high and high SES (private schools):

- (1) 171 students from grades four through eight from Şişli Terakki Lisesi,
- (2) 87 eighth grade students from Robert College.

These schools were selected for reasons of availability. Most of them have guidance and counseling services (except for Türkan Şoray İlkokulu and Çağlayan İlkokulu), and this facilitated the scale administration.

### Instrument

The instrument used in the reliability study was the experimental Turkish Piers-Harris Children's Self-Concept Scale.

Two different versions of the Turkish translation were used. One of these was the translation administered in the first study. The second was a slightly modified version. In this version, four items which did not seem as well translated as the other items were rephrased and revised. In the previous applications, the experimenters had observed that students had difficulties in understanding the above four items. This modified form was used with all but the Robert College sample.

### Procedure

Each class in the sample was administered the Turkish version of the scale twice. Time intervals between test and retest ranged from one day to seven days. Longer intervals were not possible, because schools ended for that academic year.

The purpose of the administration was briefly described to the subjects. It was made clear that the scale

was not a test. The students were asked to respond to the items of the scale as they really felt, and not as they thought they ought to.

Both testing and retesting were conducted by the same experimenters. Except for the Robert College sample, all of the sample groups were administered the modified Turkish version.

### Statistical Analysis

Means and standard deviations of the sample groups were computed to obtain an overall picture of the reliability sample.

Test-retest reliability correlations for different time intervals were computed to determine the stability of scores over time. Standard errors of measurement were provided to obtain further information on reliability.

Internal consistency of the scale was measured by Kuder-Richardson Formula 20. Kuder-Richardson reliability is a measure of item homogeneity. It is based on an examination of the consistency of performance among the entire set of items.

Item-total correlation coefficients were obtained for the internal consistency of individual items. Point biserial formula was employed in this analysis, since one of the variables was dichotomous (yes/no type of response) and the other continuous (scores changing from 0 to 80).

In the computation of Kuder-Richardson and item-total biserial correlations, scores from the first testing were used with the assumption that they would be more valid self -

report data than scores from retesting. Research has shown that group means on a retest of the WIFAM tend to be generally higher (in the direction of more positive self-concept), perhaps due to subjects' increasing familiarity with the items (Piers, 1969).

## R E S U L T S

Table 14 shows the mean scores and standard deviations for the 14 classes in the sample. In the elementary schools means ranged from 55.91 to 65.06 at testing, and from 58.82 to 67.76 at retesting. In the secondary schools the means fell between 57.19 and 64.03 at testing, and 58.90 and 64.48 at retesting. Standard deviations were between 6.36 and 11.89 at testing, and 4.21 and 12.39 at retesting.

Table 14: Total Means and Standard Deviations For 14 Classes for the Turkish Piers-Harris Scale

School	Grade	N	TEST		RETEST	
			Mean	SD	Mean	SD
TŞI	5	34	55.91	10.38	59.29	10.22
ÇI	4	25	59.40	9.65	61.80	11.39
ÇI	5	31	58.00	8.78	58.82	9.15
ŞTL	4	35	63.89	8.38	66.39	8.23
ŞTL	5	30	65.06	9.24	67.76	8.43
DL	6	34	61.53	9.97	64.00	8.05
DL	7	29	59.69	11.89	61.03	12.39
DL	8	36	64.03	7.82	66.53	7.61
ŞTL	6	35	61.31	8.85	63.46	9.65
ŞTL	7	40	61.65	9.67	64.48	8.99
ŞTL	8	31	58.93	8.10	61.10	7.23
RC	8	31	57.19	8.81	58.90	8.24
RC	8	32	60.03	7.61	61.75	8.71
RC	8	24	57.25	6.36	59.00	4.21

TŞI = Türkan Şoray İlkokulu, ÇI = Çağlayan İlkokulu,  
 ŞTL = Şişli Terakki Lisesi, DL = Davutpaşa Lisesi,  
 RC = Robert College.

Means and standard deviations for girls and boys in the sample are presented in Table 15. Total mean scores for girls at testing and retesting were 60.59 and 63.23, respectively. For boys total mean score for testing was 61.63 and for retesting 63.63. The differences between girls and boys were nonsignificant.

These data show that mean scores at retesting are slightly higher than means at testing, in each sample group for girls, boys and totals (Tables 14 and 15). Consistent grade and SES differences, on the other hand, are not detected.

Table 15: Means and Standard Deviations for the Turkish Piers-Harris Self-Concept Scale

School	Grade	TEST						RETEST			
		Girls			Boys			Girls		Boys	
		N	Mean	SD	N	Mean	SD	Mean	SD	Mean	SD
TŞI	5	12	56.17	11.94	22	55.77	9.73	61.25	10.43	58.23	10.19
ÇI	4	6	55.00	11.76	19	60.79	8.79	61.80	11.39	61.74	11.53
ÇI	5	17	58.00	8.78	14	66.07	7.90	58.82	9.15	67.07	9.83
ŞTL	4	18	63.89	8.38	17	62.47	9.99	66.39	8.23	65.18	10.07
ŞTL	5	17	65.06	9.24	13	63.77	7.77	67.76	8.43	65.23	8.11
DL	6	10	63.30	11.50	24	60.79	9.44	66.90	6.26	62.79	8.51
DL	7	21	59.10	12.76	8	61.00	9.47	60.48	13.02	62.50	11.25
DL	8	21	62.57	7.74	15	66.07	7.73	65.43	7.78	68.07	7.34
ŞTL	6	15	57.67	10.51	20	64.05	6.36	59.27	11.84	66.60	6.26
ŞTL	7	18	62.67	10.45	22	60.82	9.14	66.00	8.49	63.23	9.38
ŞTL	8	15	58.20	8.63	16	59.63	7.79	60.33	7.81	61.81	6.81
RC	8	12	54.83	6.93	19	58.68	9.70	56.58	6.63	60.37	8.96
RC	8	10	59.50	9.44	22	60.27	6.85	62.60	10.34	61.36	8.10
RC	8	8	57.25	6.36	16	61.44	9.54	59.00	4.21	61.88	7.24

TŞI = Türkan Şoray İlkokulu

ÇI = Çağlayan İlkokulu

ŞTL = Şişli Terakki Lisesi

DL = Davutpaşa Lisesi

RC = Robert College

### Test-Retest Reliability

Scores from testing and retesting with different time intervals ranging from one day to seven days yielded high test-retest correlations. These correlation coefficients ranged from .72 to .91 for the elementary school sample with a median correlation of .90, and from .83 to .91 for the secondary school sample with a median correlation of .89 (Table 16).

Table 16: Test-Retest Reliability Correlations for Different Time Intervals

Time Interval Between Testing and Retesting	School	Grade	Pearson r
One day	ŞTL	7	.79*
	ŞTL	8	.83*
	DL	6	.88*
	DL	7	.98*
Two days	ÇI	4	.72*
	ŞTL	6	.88*
	ŞTL	4	.90*
	ÇI	5	.91*
Five days	DL	8	.90*
Six days	TŞI	5	.82*
	ŞTL	5	.90*
Seven days	RC	8	.89*
	RC	8	.90*
	RC	8	.91*

ŞTL = Şişli Terakki Lisesi  
 DL = Davutpaşa Lisesi  
 ÇI = Çağlayan İlkokulu  
 TŞI = Türkan Şoray İlkokulu  
 RC = Robert College

\*p < .01

### Standard Error of Measurement

Standard errors of measurement were calculated for each class in the sample (Table 17). They range from 1.55 in grade seven to 5.13 in grade four.

Table 17: Standard Errors of Measurement of the Turkish WIFAM

Grade	School					
	TŞI	ÇI	ŞTL	DL	RC	
4	N	25	35			
	$r_{tt}$	.72	.90			
	SD	9.65	8.38			
	<u>SE<sub>m</sub></u>	<u>5.13</u>	<u>2.89</u>			
5	N	34	31	30		
	$r_{tt}$	.82	.91	.90		
	SD	10.38	8.78	9.24		
	<u>SE<sub>m</sub></u>	<u>4.46</u>	<u>2.78</u>	<u>2.74</u>		
6	N		35	34		
	$r_{tt}$		.88	.88		
	SD		8.85	9.97		
	<u>SE<sub>m</sub></u>		<u>3.05</u>	<u>3.39</u>		
7	N		40	29		
	$r_{tt}$		.79	.98		
	SD		9.67	11.89		
	<u>SE<sub>m</sub></u>		<u>4.45</u>	<u>1.55</u>		
8	N		31	36	31	32
	$r_{tt}$		.83	.90	.89	.90
	SD		8.10	7.82	8.81	7.61
	<u>SE<sub>m</sub></u>		<u>3.34</u>	<u>2.43</u>	<u>2.83</u>	<u>2.81</u>
					24	
						.91
						6.36
						<u>2.23</u>

TŞI: Türkan Şoray İlkokulu, ÇI: Çağlayan İlkokulu, ŞTL: Şişli Terakki Lisesi, RC: Robert College.

The standard error of measurement ( $SE_m = SD\sqrt{1-r_{tt}}$ ) for the total sample was also computed and found to be 3.43<sup>1</sup>. Statistically speaking, changes in a subject's scores obtained from a scale have to be more than twice the standard error of measurement to be significant ( $p < .05$ ). Therefore any change less than seven points in the Turkish WIFAM scores of an individual can be ignored.

#### Kuder-Richardson Reliability

Analysis using the Kuder-Richardson 20 Formula yielded high alpha coefficients for each sample group (Table 18). The correlations were .87 for the total elementary school sample, and .86 for the secondary school sample, and .87 for the entire total sample. In the nonmodified form of the scale, a correlation coefficient of .84 was obtained for the Robert College group. These results show that both forms of the Turkish WIFAM have high internal consistency.

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<sup>1</sup>In computing this index the mean of standard deviations for the total sample which was 9.34, and the mean of the test-retest coefficients which was .87 were used. The mean test-retest coefficient was obtained by z transformation. For a detailed computation of this, please see Appendix A.



Table 18: Kuder-Richardson 20 Reliability Correlations<sup>1</sup> for the Turkish WIFAM

Grade	S C H O O L S						Total
	Low SES (N:185)			High SES (N:243)			
	TŞI	ÇI	DL	ŞTL	RC		
4		.85		.86			.87
5	.88	.87		.87			
6			.89	.86			.86 <sup>2</sup>
7			.89	.88			
8			.84	.81	.84 .80 .86		
Total (N:341)		.88		.86	.84		.87 <sup>2</sup>

TŞI = Türkan Şoray İlkokulu

ÇI = Çağlayan İlkokulu

DL = Davutpaşa Lisesi

ŞTL = Şişli Terakki Lisesi

RC = Robert College

<sup>1</sup>All correlations are significant at the .01 level.

<sup>2</sup>Robert College sample is not included in the total.

#### Item-total (Point Biserial) Reliability

Point biserial correlations for the total sample and the low SES and high SES groups, as well as the elementary and secondary schools are given in Table 19. In the total sample group, these correlations ranged from .09 to .50. The median correlation for the low SES was .32, high SES .28, and the total .30. For both the elementary and secondary schools the medians were .31. In the Robert College sample, where the nonmodified scale was applied, the median correlation was .27.

In Table 19 it is seen that the obtained item-total (point-biserial) correlations are distributed over a wide range. This means that the relationship between the variance of individual items and the scores range from none (zero correlation) to mediocre among the different items of the scale.

Table 19: Item-Total Correlations for the Turkish WIFAM

ITEM-TOTAL CORRELATIONS (rpb)						
Item number	Non-Modified Version	Modified Version				Total
	RC Total	Elementary Schools	Secondary Schools	LOW SES	Middle-high SES	
1	.07	.31	.12	.16	.23	.19
2	.45	.35	.17	.24	.28	.25
3	.33	.24	.23	.22	.27	.24
4	.34	.35	.29	.26	.38	.31
5	.29	.10	.23	.18	.16	.17
6	.14	.21	.12	.20	.14	.17
7	.43	.19	.36	.38	.13	.29
8	.37	.27	.34	.34	.25	.31
9	.32	.24	.28	.38	.11	.26
10	.39	.31	.20	.22	.28	.25
11	.41	.28	.24	.32	.20	.26
12	.16	.21	.31	.23	.30	.26
13	.28	.20	.42	.24	.43	.32
14	.09	.17	.26	.33	.13	.22
15	.28	.40	.36	.34	.44	.38
16	.20	.34	.17	.25	.23	.24
17	.38	.20	.33	.29	.24	.27
18	.35	.41	.14	.36	.20	.29
19	.23	.51	.44	.53	.41	.48
20	.26	.21	.15	.13	.22	.17
21	.21	.23	.28	.17	.38	.26
22	.25	.23	.21	.20	.24	.22
23	.22	.21	.33	.33	.23	.28
24	.16	.21	.09	.19	.10	.15
25	.48	.41	.39	.41	.39	.40
26	.20	.25	.40	.33	.35	.33
27	.32	.35	.31	.31	.33	.33
28	.29	.23	.38	.33	.30	.31
29	.17	.35	.44	.26	.53	.38
30	.17	.36	.25	.35	.27	.31
31	.17	.19	.19	.18	.25	.18
32	.23	.34	.32	.31	.36	.33
33	.33	.42	.37	.28	.55	.40
34	.35	.04	.35	.15	.31	.22
35	.48	.48	.47	.45	.50	.47
36	.21	.22	.16	.26	.08	.29
37	.33	.40	.48	.48	.38	.44
38	.21	.37	.44	.45	.34	.41
39	.15	.36	.35	.39	.31	.35
40	.14	-.02	.19	.00	.21	.09

Table 19: Continued

ITEM-TOTAL CORRELATIONS (rpb)						
Item number	Non- Modified Version	Modified Version				
	RC Total	Elementary Schools	Secondary Schools	LOW SES	Middle- high SES	Total
41	.37	.43	.29	.44	.23	.36
42	.34	.22	.33	.38	.18	.28
43	.33	.13	.32	.21	.28	.23
44	.20	.29	.28	.32	.24	.28
45	.08	.21	.17	.24	.09	.19
46	.28	.28	.17	.24	.22	.23
47	.23	.48	.43	.49	.41	.45
48	.32	.28	.31	.30	.29	.30
49	.19	.11	.37	.20	.35	.27
50	.27	.30	.36	.35	.29	.33
51	.14	.38	.34	.41	.26	.36
52	.26	.32	.29	.31	.29	.30
53	.45	.25	.52	.39	.40	.39
54	.25	.36	.25	.32	.31	.30
55	.39	.30	.24	.24	.28	.26
56	.18	.34	.25	.30	.30	.29
57	.43	.39	.33	.38	.31	.35
58	.17	.45	.37	.44	.36	.40
59	.31	.46	.41	.39	.49	.43
60	.20	.14	.16	.23	.06	.15
61	.41	.45	.55	.46	.56	.50
62	.48	.37	.42	.37	.43	.40
63	.22	.36	.23	.37	.15	.29
64	.39	.38	.44	.43	.38	.41
65	.44	.23	.31	.27	.28	.27
66	.45	.40	.43	.37	.48	.42
67	.05	.34	.32	.36	.29	.33
68	.22	.32	.20	.31	.19	.25
69	.21	.36	.23	.32	.24	.29
70	.00	.16	.12	.18	.10	.15
71	.09	.40	.23	.40	.18	.30
72	.43	.49	.42	.43	.48	.45
73	.22	.38	.32	.33	.37	.35
74	.32	.31	.25	.28	.27	.28
75	.14	.21	.15	.19	.16	.17
76	.34	.30	.38	.31	.37	.34
77	.32	.27	.19	.20	.25	.23
78	.21	.28	.37	.40	.22	.33
79	.27	.44	.39	.43	.38	.41
80	.15	.34	.31	.33	.30	.32
Median	.27	.31	.31	.32	.28	.30

## V. DISCUSSION AND CONCLUSIONS

The primary purpose of this study was to conduct research on the transliteral equivalence and the reliability of the Turkish version of the WIFAM. It attempted to contribute to the development of a Turkish self-concept scale to be used in research and in practice.

In the initial phase of this research, the adequacy of the Turkish translation of the scale was judged first by back-translations, and then tested experimentally on Turkish bilingual students from three schools. Through the counterbalancing technique each subject answered the scale both in Turkish and in English at different times of testing, and in different orders. The results were mostly supportive of our expectation of no difference between the Turkish and the English forms of the scale regardless of time or order of administration.  $F$  and  $t$  values among forms and between the English and Turkish items of the scale were nonsignificant, except in one case. This one significant ( $p .005$ )  $t$  value was obtained in the Boğaziçi University sample ( $N=60$ ) with less than two-point difference between the English (59.57) and Turkish (61.10) item mean scores. The significant difference observed, is as small as is often found between test-retest scores obtained from identical or parallel forms of any scale.

The two-week interval test-retest correlations between the English and Turkish versions of the scale were in the .80s in all of the sample groups including the Boğaziçi University sample. The high significant correlations indicated the similarity of scores obtained from the two languages.

Altogether, the findings were interpreted to indicate that the Turkish version of the scale was an adequate translation, and can be used for further experimentation in this study.

In the second phase of this research, the stability and internal consistency of the Turkish scale were tested on a relatively large heterogeneous sample including 447 elementary and junior high school students of varying SES in Istanbul.

The stability coefficients derived from test-retest product moment correlations over one day to seven-day period intervals were generally high, ranging from .72 to .91. The median test-retest correlation was .89, and this is consistent with the findings of Piers and Harris (Piers, 1969). Although in the present study time intervals between testing and retesting were short in comparison with those used by Piers and Harris, these stability coefficients compared favorably with coefficients reported in the manual of the English form.

Our findings were also parallel to and even better than Engel's (1959) and Coopersmith's (1967) findings on different self-concept inventories. As referred to before, Engel (1959) had obtained a test-retest correlation of .68 over a ten-day period, and Coopersmith (1967) found a correlation of .88 over a five week interval.

Standard errors of measurement for the Turkish WIFAM were also indicative of high reliability. The obtained standard error for the total sample was 3.43. This is small compared to the standard error of 6 for the English WIFAM. On the basis of the presently obtained standard error of measurement, only differences more than seven points in an individual's Turkish WIFAM scores could be considered significant at or below the .05 level.

For the internal consistency of the Turkish WIFAM, the Kuder-Richardson reliability coefficients were interpreted to indicate high item consistency and homogeneity. The reliability coefficient of .87 for total sample is similar to the Kuder-Richardson 21 reliability coefficients (ranging from .78 to .93) reported by Piers and Harris for a 95-item form of the scale.

The absence of item-total correlations for the original English scale does not make it possible to compare the two versions in terms of individual items. In the original English form of the scale the items were selected on the basis of item discrimination between high and low self-concept groups (Piers, 1969).

In the present study, a different item analysis, item-total (point biserial) technique, was used. The obtained point biserial correlations showed that the agreement between the variance of items and the variance of total scores differed considerably from item to item, ranging from no relationships in some items (those, with zero item-total correlations) to mediocre level of relationship. This may be due to the factorial complexity of the scale. In such a case cluster of items tend to have high correlations with one another but very low correlations with total scores (Nunnally, 1967). Such an interpretation is also in line

with the theoretical position that self-concept is multi-dimensional. The original English form of the WIFAM, in fact, has proven to have facets such as Behavior, Intellectual and School Status, Physical Appearance and Attributes, Anxiety, Popularity, and Happiness and Satisfaction.

### Limitations of the Study

Limitations of the study generally include the sample and time intervals.

The samples used in the transliteral equivalence study did not all have high levels of English proficiency. For instance the Boğaziçi University sample was not as good a bilingual group of students as was expected. Moreover to obtain samples in good command of both English and Turkish high school and university students were taken. Younger children could not be included, although the scale is meant more for children and adolescents than for young adults. In the reliability study, the sample included low, and middle-high students in Istanbul. It would be preferable to select a more representative sample of Turkish children.

It was not possible to have longer time intervals for test-retest sessions due to practical reasons. In the literature, it is observed that for the stability (test-retest reliability) of a self-concept instrument time intervals more than two months are employed.

### Implications for Further Research

Further research on several issues related to the development of the WIFAM is necessary.

The validity of the Turkish WIFAM including factor analysis and other construct validation techniques has to be determined.

Social desirability which is a special issue in the Turkish culture and its impact on the scores of Turkish children must be investigated.

Finally, norm groups and standard scores should be developed and established before this adaptation can be used in research with Turkish children and youth.



- APPENDIX A -  
THE COMPUTATION OF THE MEAN TEST-RETEST  
RELIABILITY CORRELATION

The Computation of the Mean Test-Retest Reliability Correlation.

The mean test-retest reliability correlation coefficient is calculated by the formula:

$$\bar{r} = \frac{\sum(r_i n_i)}{N}$$

in which  $\bar{r}$  = mean test-retest correlation

$r_i$  = test-retest correlation for  $i^{\text{th}}$  class

$n_i$  = number of students in  $i^{\text{th}}$  class

$N$  = total number of students.

Computation

<u>School and Grade</u>	<u><math>r_i</math></u>	<u><math>n_i</math></u>	<u><math>r_i n_i</math></u>
T&I 5	.82	34	27.88
CI 4	.72	25	18.00
	.91	31	28.21
S&L 4	.90	35	31.50
	.90	30	27.00
	.88	35	30.80
	.79	40	31.60
	.83	31	25.73
DL 6	.88	34	29.92
	.98	29	28.42
	.90	36	32.40
			$N=360 \sum r_i n_i = 311.46$

$$\bar{r} = \frac{311.46}{360} = .8651666 \quad \boxed{\cong .87}$$

- APPENDIX B -

THE ENGLISH FORM OF THE PIERS-HARRIS SELF-CONCEPT SCALE

## THE WAY I FEEL ABOUT MYSELF

Here are a set of statements. Some of them are true of you and so you will blacken the yes circles pertaining to these items on the answer sheet. Some are not true of you and so you will blacken the no circles. Answer every question even if some are hard to decide, but do not blacken both the yes and the no circles. Remember, blacken the yes circle if the statement is generally like you, or blacken the no circle if the statement is generally not like you. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside.

1. I can draw well.
2. I am slow in finishing my school work.
3. I am good at making things with my hands.
4. I am good in my school work.
5. I am an important member of my family.
6. My classmates make fun of me.
7. I am a happy person.
8. I am often sad.
9. I am smart.
10. I get nervous when the teacher calls on me.
11. My looks bother me.
12. I am shy.
13. It is hard for me to make friends.
14. When I grow up, I will be an important person.
15. I cause trouble to my family.
16. I am strong.
17. I get worried when we have tests in school.
18. I am well-behaved in school.
19. I am unpopular.
20. I have good ideas.
21. I usually want my own way.
22. I give up easily.
23. I am good in music.
24. I do many bad things.
25. I behave badly at home.
26. I am an important member of my class.

27. I am nervous.
28. I have pretty eyes.
29. I can give a good report in front of the class.
30. In school, I am a dreamer.
31. I pick on my brother(s) and sister(s).
32. My friends like my ideas.
33. I often get into trouble.
34. I am obedient at home.
35. I worry a lot.
36. My parents expect too much of me.
37. I like being the way I am.
38. I feel left out of things.
39. I have nice hair.
40. I often volunteer in school.
41. I wish I were different.
42. I sleep well at night.
43. I hate school.
44. I am among the last to be chosen for games.
45. I am sick a lot.
46. I am often mean to other people.
47. My classmates in school think I have good ideas.
48. I am unhappy.
49. I have many friends.
50. I am cheerful.
51. I am dumb about most things.
52. I am good-looking.
53. I have lots of pep.
54. I get into a lot of fights.
55. I am popular with boys.
56. People pick on me.
57. My family is disappointed in me.
58. I have a pleasant face.
59. I am picked on at home.
60. I am a leader in games and sports.
61. When I try to make something, everything seems to go wrong.

62. I am clumsy.
63. In games and sports, I watch instead of play.
64. I forget what I learn.
65. I am easy to get along with.
66. I lose my temper easily.
67. I am popular with girls ,
68. I am a good reader ,
69. I would rather work alone than with a group.
70. I like my brother (sister).
71. I have a good figure ,
72. I am often afraid.
73. I am always dropping or breaking things.
74. I can be trusted.
75. I am different from other people.
76. I think bad thoughts.
77. I cry easily.
78. I am a good person.
79. It is usually my fault when something goes wrong.
80. I am lucky.

- APPENDIX C -

THE TURKISH FORM OF THE PIERS-HARRIS SELF-CONCEPT SCALE

## KENDİM HAKKINDA DÜŞÜNCELERİM

AÇIKLAMA: Aşağıda 80 cümle var. Bunlardan sizi tanımlayanları evet, tanımlamayanları ise hayır ile cevaplandırın. Bazı cümlelerde karar vermek zor olabilir. Ama lütfen bütün cümleleri işaretleyin. Aynı cümleyi hem evet hem hayır diye işaretlemeyin. Unutmayın, cümledeki ifade genellikle sizi anlatıyorsa evet, genellikle sizi anlatmıyorsa hayır şeklinde işaretleyeceksiniz. Cümlelerin size uygun olup olmadığını en iyi siz bilebilirsiniz. Bunun için kendinizi gerçekten nasıl görüyorsanız öyle cevaplayın. Cevaplarınızı cevap kağıdına işaretlerken, cümle numarası ile cevap kağıdındaki numaranın aynı olmasına dikkat ediniz.

1. İyi resim çizerim.
2. Okul ödevlerimi bitirmem uzun sürer.
3. Ellerimi kullanmada becerikliyimdir.
4. Okulda başarılı bir öğrenciyim.
5. Aile içinde önemli bir yerim vardır.
6. Sınıf arkadaşlarım benimle alay ediyorlar.
7. Mutluyum.
8. Çoğunlukla neşesizim.
9. Akıllıyım.
10. Öğretmenler derse kaldırıncaya heyecanlanıyorum.
11. Dış görünüşüm beni rahatsız ediyor.
12. Genellikle çekingenim.
13. Arkadaş edinmekte güçlük çekiyorum.
14. Büyüdüğümde önemli bir kimse olacağım.
15. Aileme sorun yaratıyorum.
16. Kuvvetli sayılırım.
17. Sınavlardan önce heyecanlanıyorum, korkuyorum.
18. Okulda terbiyeli, uyumlu davranırım.
19. Herkes tarafından pek sevilen biri değilim.
20. Parlak fikirlerim vardır.
21. Genellikle kendi dediklerimin olmasını isterim.
22. Birşeyden kolayca vazgeçerim.
23. Müzikte iyiyim.
24. Hep kötü şeyler yaparım.
25. Evde çoğu zaman huysuzluk ederim.



26. Sınıfta arkadaşlarım beni sayarlar.
27. Sinirli biriyim.
28. Gözlerim güzeldir.
29. Sınıfta derse kalktığımda bildiklerimi sıkılmadan anlatırım.
30. Derslerde sık sık hayal kurarım.
31. (Kardeşiniz varsa) Kardeş(ler)ime sataşırım.
32. Arkadaşlarım fikirlerimi beğenir.
33. Başım sık sık derde girer.
34. Evde büyüklerimin sözünü dinlerim.
35. Sık sık üzülür, meraklanırım.
36. Ailem benden çok fazla şey bekliyor.
37. Halimden memnunum.
38. Evde ve okulda pek çok şeyin dışında bırakıldığımı sanıyorum.
39. Saçlarım güzeldir.
40. Çoğu zaman okul faaliyetlerine gönüllü olarak katılırım.
41. Şimdiki halimden daha başka olmayı isterdim.
42. Geceleri rahat uyurum.
43. Okuldan hiç hoşlanmıyorum.
44. Arkadaşlar arasında oyunlara katılmak için bir seçim yapılırken, en son seçilenlerden biriyim.
45. Sık sık hasta olurum.
46. Başkalarına karşı iyi davranmam.
47. Okuldaki arkadaşlarım iyi fikirlerim olduğunu düşünürler.
48. Mutsuzum.
49. Pek çok arkadaşım var.
50. Neşeliyim.
51. Pek çok şeye aklım ermez.
52. Yakışıklıyım (güzelim).
53. Hayat dolu bir insanım.
54. Sık sık kavgaya karışıyorum.
55. Erkek arkadaşlarım arasında sevilirim (popülerim).
56. Arkadaşlarım bana sık sık sataşırlar.
57. Ailem benle düş kırıklığına uğruyor.
58. Hoş bir yüzüm vardır.

59. Evde hep benle uğraşırlar.
60. Oyunlarda ve sporda başı ben çekerim.
61. Ne zaman birşey yapmaya kalksam herşey ters gider.
62. Hareketlerimde sakarım.
63. Oyunlarda ve sporda, oynamak yerine seyrederim.
64. Öğrendiğimi çabuk unuturum.
65. Herkesle iyi geçinirim.
66. Çabuk kızarım.
67. Kız arkadaşlarım arasında sevilirim (popülerim).
68. Çok okurum.
69. Bir grupla birlikte çalışmaktansa tek başıma çalışmaktan hoşlanırım.
70. (Kardeşiniz varsa) Kardeş(ler)imi severim.
71. Vücutça güzel sayılırım.
72. Sık sık korkuya kapılırım.
73. Her zaman birşeyler düşürür ve kırarım.
74. Güvenilir bir kimseyim.
75. Başkalarından farklıyım.
76. Kötü şeyler düşünürüm.
77. Kolay ağlarım.
78. İyi bir insanım.
79. İşler hep benim yüzümden ters gider.
80. Şanslı bir kimseyim.

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