

## Projective Identification: The Study of Scale Development, Reliability and Validity

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### ABSTRACT

The aim of the research is to develop the scale of projective identification and to examine the validity and reliability. Research was conducted on 674 students. 58.36% of total variance in the factor analysis of that describes the four factors were collected from 30 items. First-level confirmatory factor analysis, chi-square ( $\chi^2 = 1338.36$ ,  $df = 399$ ,  $p = 0.00$ ) significant, the RMSEA fit indices = .059, GFI = .96, AGFI = .95, CFI = .92, IFI = .93, NFI = .90, RFI = .90 were found. Second-level confirmatory factor analysis, the chi-square ( $\chi^2 = 801.20$ ,  $df = 401$ ,  $p = 0.00$ ) significant, the RMSEA fit index = .039, GFI = .98, AGFI = .97, CFI = .97, IFI = .97, NFI = .93 and = .93 was found RFI. Internal consistency coefficient of .92 for the whole of the scale, sub-dimensions for the dependence of projective identification and .81, .78 for the power of projective identification, for sexuality projective identification, projective identification and to curry favor with .95 and .66, respectively. In addition, 27% and upper 27% of the test sub-groups t-test for comparison of the results were significant. Projective identification is the first time on the basis of these findings scale developed by the researcher in the field of education and psychology that can be used, said to be valid and reliable instrument.

**Keywords:** Projective identification, test development, validity, reliability, factor analysis

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## Introduction

The life process of individuals own internal dynamics, and environmental factors due to issues they may experience conflicts. This conflict can be considered as the most intense growth period of adolescence. Experienced during this period because of biological, cognitive, social and personality characteristics of the transition to adulthood from childhood and adolescence may adversely affect the mental health of an individual may give rise to conflicts.

Most of the conflict can be solved deliberately and intentionally operated with coping mechanisms to deal with these conflicts, and also largely pre-designed, self-reported can be solved with the emerging unconscious defense mechanisms. In addition, people use these defense mechanisms, both internal and external reasons of mental ill health prevented is expressed as (Geçtan, 2008; Güleç, 2009; Köroğlu, 2004; Plotnik, 2009).

Internal conflicts and emotional worlds of individuals to protect the integrity of the defense mechanisms used to overcome one of the projective identification. Sandler (1989) said that the mechanism of projective identification with an interactive inter-subjective communication intrapsychic formed (or fantasy) is a condition of the mechanism and the analytical process provides the link between intrapsychic area and inter-subjective space. Stadter (1996), define to projective identification of the individual's identification with other people who projectives as unconscious again. Köroğlu (2004) defines projective identification as reflecting someone about the disturbing aspects of one's own personality, else establish identification with that person. In the literature seen that, there are four species of Projective identification such as dependence, power, sexuality, and subservience (Cashdan, 1988; Göka, Yüksel, & Göral, 2006).

Cashdan (1988), projective identification, dependence, power, sexuality, and subservience the states that the four species. Dependency in the form of projective identification purposes, to help other people and to force himself. These people usually look for someone they can trust for help and support, and the other, to make matters even need to decide on their own work to ensure. The second type uses the power of projective identification, the individual dominance against others, there is the desire to control and work to ensure that it feels insufficient. In this, the person across from you, is the belief that, like himself can not do

anything without. This species projective identification that can function supports the direction of gender discrimination. The person who uses sexuality projective identification, forces to react sexual content to partner. A messages of sexuality content is reflected in the implicit communication. Unlike normal sexual relationships where relationships where sexuality identification reflective, spontaneous and impulsive sexual act does not arise as, sexuality overshadowed everything else, and covers the whole of the relationship. Finally, the person who uses the mechanism of subservience projective identification, shows him a sacrifice to win his love. He always took the second plan, and devote to other person himself. When individuals experience disappointment, they dedicated themselves most of the time the person asks for the favors account.

In the field of marriage and family counseling studies are examined that projective identification is observed continuously between married couples. Projective identifications in the marital relationship, indicate carried a feature supportive and complementary (Scharff, & Scharff, 1997; Zosky, 2003). For example, a husband can continue to the image of aggressive and competitive to desire to be in himself in the family thanks to reflecting to wife the weakness of passivity doesn't want to be himself. This case, is ideal for women who her aggressive and competitive features though reflecting to her husband, for able to provide the image of the passive, helpless and dependent on the protected person. Main (1975) states that some couples have an affair with dominated by each other, connected projection imaginations, and as if married to a projected portion that indicates own unwanted not the opposite of each person. Farther, he implies that in the relationships which are generated as a result of nodes formed by mutual projective identifications, it is experienced occupations and burnout of personality, and the deterioration in the emergence of interpersonal (Göka, Yüksel, & Göral, 2006). Kernberg (1987) in humans are not self-limit its relations with relatives, suggest that they use the defense mechanism of projective identification. Kernberg (1987) in humans are not self-limit its relations with relatives, suggest that they use the defense mechanism of projective identification. Individual limits in a relationship is not clear, if it is nested, it states that projective identification is basically what happened in the relationship. Similarly Porder (1987) opposite the normal relations in the form of forcing people to behave in a certain way, behaviors that a person bites into the psychological system and its internal parts of the other person in the face due to the

implantation of the relationship between their own piece of it living someone to take control of their works as part of refers to.

As a result, poor people's lives and the devastating effects of projective identification, as well as some of the communicative necessity and the requirements resulting from human relations, the protection of the stability of relationships that can provide the best aspects that may contribute to the protection of their mental health may also be considered. Positive aspects of projective identification may help to understand oneself and others, the negative aspects that are unreal and the extent of the projective identification of individuals can lead to narcissistic behaviors and attitudes exhibited. For this reason, individuals can be helped by developing a scale to measure projective identification can be made and further studies on this subject may have been light.

As a result of these investigations in the literature so far, it seen that there hasn't been levels of projective identification of individuals that is used proven reliability and validity of any measurement tool in domestic and abroad. Therefore, this study aims to evaluate the individuals in a safe manner, and the current levels of projective identification is to develop a measurement tool.

## **Method**

### **Participants**

Research in some primary and secondary schools in the district of Istanbul Sultangazi attending high school and elementary school students was conducted on 674. 381 (57%) of the students in participating in the survey were female and 280 (42%) were male and 161 (24%) of primary eighth grade, 220 (33%), ninth 78 (12%), tenth 159 (23%), and eleventh 56 (8%) twelfth grade high school student.

### **Procedure**

Literature about Projective identification in order to improve scale, domestic and overseas studies on the subject examined, according to impressions from interviews with experts and adolescents about projective identification and projective identification related to dependence type 23, 24 on the power projective identification type, projective identification related to sexuality 24, for a total of 23 items related to subservience the projective identification is a matter 94-item pool was created. Content validity of the scale (Büyüköztürk, 2010) to determine these substances, four experts in the field of Guidance and Counselling, high school and primary

school teachers from three Turkish and the other referring to the four branches of the items represents whether the projective identification of adolescents. After the scale form were reviewed and criticism of the experts, some items were deleted and some items were changed accordance with the recommendations in terms of language and content. 79-item scale was created as a result of these operations from the trial.

In this study, content validity and constructive validity were examined to determine the validity of the scale. Büyüköztürk (2010) scale development studies, the validity of the scale could be used to determine the construct validity and content validity techniques. For content validity and construct validity of expert judgment for referable varimax rotated principal component analysis and factor analysis of factors could be used. In order to determine the reliability of the scale, Cronbach's alpha for internal consistency reliability coefficients generated by the total points of the test formulation and 27% lower and upper 27% of the differences between groups in mean scores of items unrelated t-test can be used to test represents. Şimşek (2007) theory of "truth" to separate from each other in order to understand what points are, within the scope of the construct validity of the factor that determined by exploratory factor analysis, confirmatory factor analysis of structures liable to indicate the first and second level. Therefore, the analysis of the validity of expert opinions to determine content validity and construct validity were exploratory and confirmatory factor analyzes were conducted within. Cronbach's alpha formula and the total points in the reliability analysis of the test substance formed according to the average scores of the top and bottom 27% of unrelated t-test was used for testing the differences between groups of.

## **Findings**

### **Construct Validity**

The construct validity of the scale in the study was done exploratory and confirmatory factor analysis. Büyüköztürk (2010) scale development studies, the validity of the scale could be used to determine the construct validity and content validity techniques. For content validity and construct validity of expert judgment for referable varimax rotated principal component analysis and factor analysis of factors could be used. Şimşek (2007) theory of "truth" to separate from each other in order to understand what points are, within the scope of the construct validity of the factor that determined by exploratory factor analysis, confirmatory factor analysis of structures liable to indicate the first and second level. Therefore, the analysis of the validity of expert

opinions to determine content validity and construct validity were exploratory and confirmatory factor analyzes were conducted within.

Exploratory Factor Analysis. Appropriateness of factor analysis of data KMO for more than .60 's and the Barlett test is significant, high-need (Büyüköztürk, 2010; Spahi Yurtkoru ve Çinko, 2008). For this purpose, as a result of the analysis sample compliance coefficient .93 KMO, Barlett Sphericity test,  $\chi^2$  value of 11475.05 ( $p < .001$ ) were found and could be factour responses to the items of the scale. These results can be considered to be appropriate to conduct exploratory factor analysis. 58.36% of the total variance of factor analysis as a result of its, and describing the dependence of projective identification, the power of projective identification, sexuality projective identification and projective identification in the form of subservience under the four factors were obtained from 30 items collected. The first factor is the scale, "Dependence of projective identification" of the total variance of 10.78% percent, and factor loads of explanatory. Varied between 58 and .80, the second factor in the "Power of projective identification" of the total variance of 9.52% and the factor loadings .63 and .77 accounted for changed between the third factor, "Sexuality projective identification" in 31.49% of the total variance 'explained, and factor loadings that ranged between .72 and .84, which is the fourth factor, "subservience the projective identification" 6:56% of the total variance in percent and the factor loads of explanatory ranged from .70 to .62. The analysis results presented in Table 1.

**Table 1. The items of The Scale of Projective Identification, Factor Loadings, Eigenvalues, Percentages of Explained Variance, and Cronbach's Alpha Values**

| Items | Subscales                               |                                    |                                     |   |
|-------|---|------------------------------------|-------------------------------------|---|
|       | Dependence of Projective Identification | Power of Projective Identification | Sexuality Projective Identification | Subservience of Projective Identification |
| 1     | .60                                     |                                    |                                     |   |
| 2     | .76                                     |                                    |                                     |   |
| 3     | .58                                     |                                    |                                     |   |
| 4     | .80                                     |                                    |                                     |   |
| 5     | .68                                     |                                    |                                     |   |
| 6     | .75                                     |                                    |                                     |   |
| 7     |   | .67                                |                                     |   |
| 8     |   | .74                                |                                     |   |
| 9     |   | .77                                |                                     |   |
| 10    |   | .65                                |                                     |   |
| 11    |   | .63                                |                                     |   |
| 12    |   |                                    | .77                                 |   |
| 13    |   |                                    | .80                                 |   |

|                         |       |      |       |      |
|-------------------------|-------|------|-------|------|
| 14                      |       |      |       | .82  |
| 15                      |       |      |       | .78  |
| 16                      |       |      |       | .77  |
| 17                      |       |      |       | .77  |
| 18                      |       |      |       | .84  |
| 19                      |       |      |       | .79  |
| 20                      |       |      |       | .72  |
| 21                      |       |      |       | .77  |
| 22                      |       |      |       | .79  |
| 23                      |       |      |       | .73  |
| 24                      |       |      |       | .78  |
| 25                      |       |      |       | .80  |
| 26                      |       |      |       | .79  |
| 27                      |       |      |       | .62  |
| 28                      |       |      |       | .70  |
| 29                      |       |      |       | .66  |
| 30                      |       |      |       | .63  |
| Eigenvalues             | 4,07  | 1,78 | 10,34 | 1,30 |
| Variances (%)           | 10,78 | 9,52 | 31,49 | 6,56 |
| Cronbach's Alpha Values | .81   | .78  | .95   | .66  |

*First Level Confirmatory Factor Analysis.* Subscales of the scale of projective identification scale (dependence of projective identification= B, power of projective identification= G, Sexuality of projective identification= G, Subservience of projective identification= Y) for the first-level confirmatory factor analysis was conducted. The analysis results presented in Figure 1.

The first level of the four-factor structure of the scale, confirmatory factor analysis in order to verify the value of chi-square ( $\chi^2 = 1338.36$ ,  $df = 399$ ,  $p = 0.00$ ) was significant. Compliance index values RMSEA = .059, GFI = .96, AGFI = .95, CFI = .92, IFI = .93, NFI = .90, and RFI = .90, respectively. Easily seen in this state, the model can be considered.

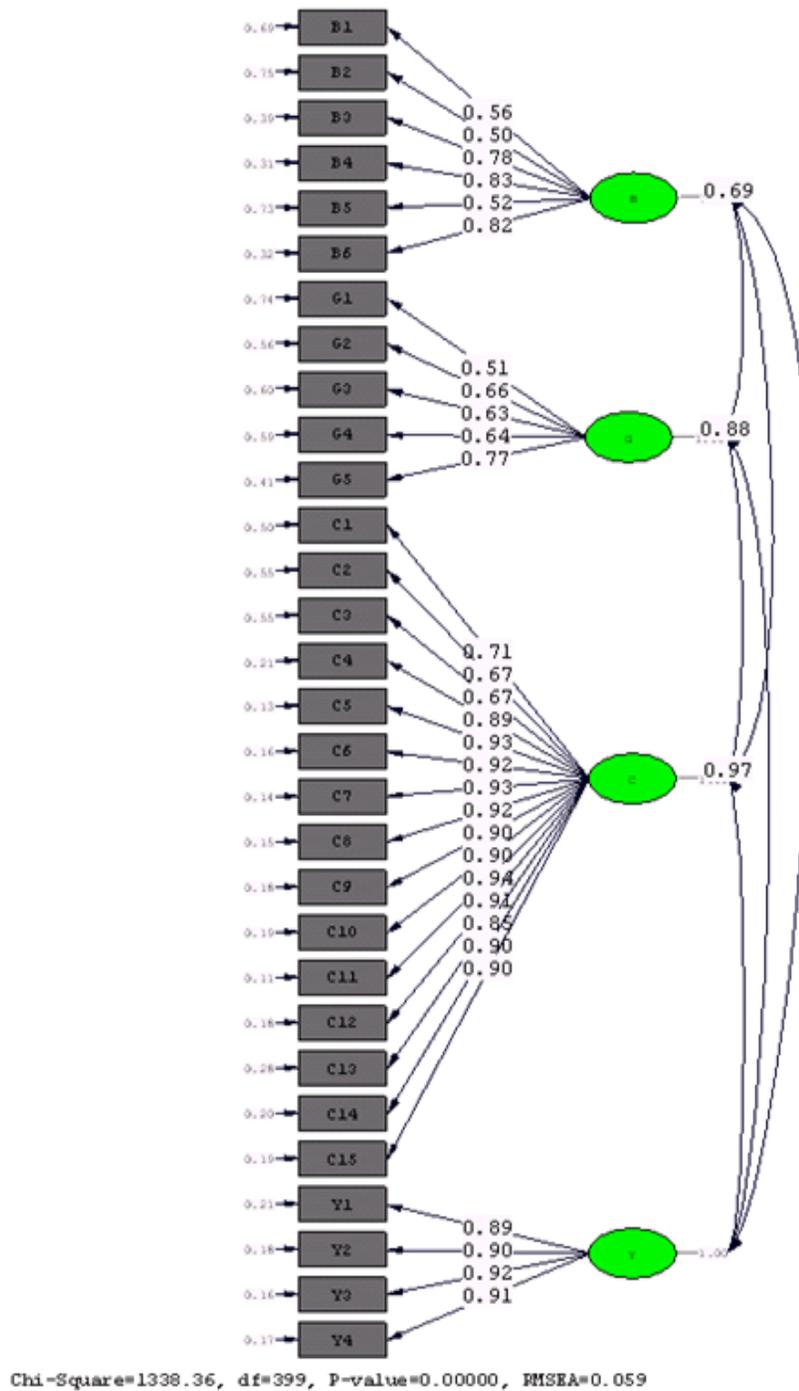
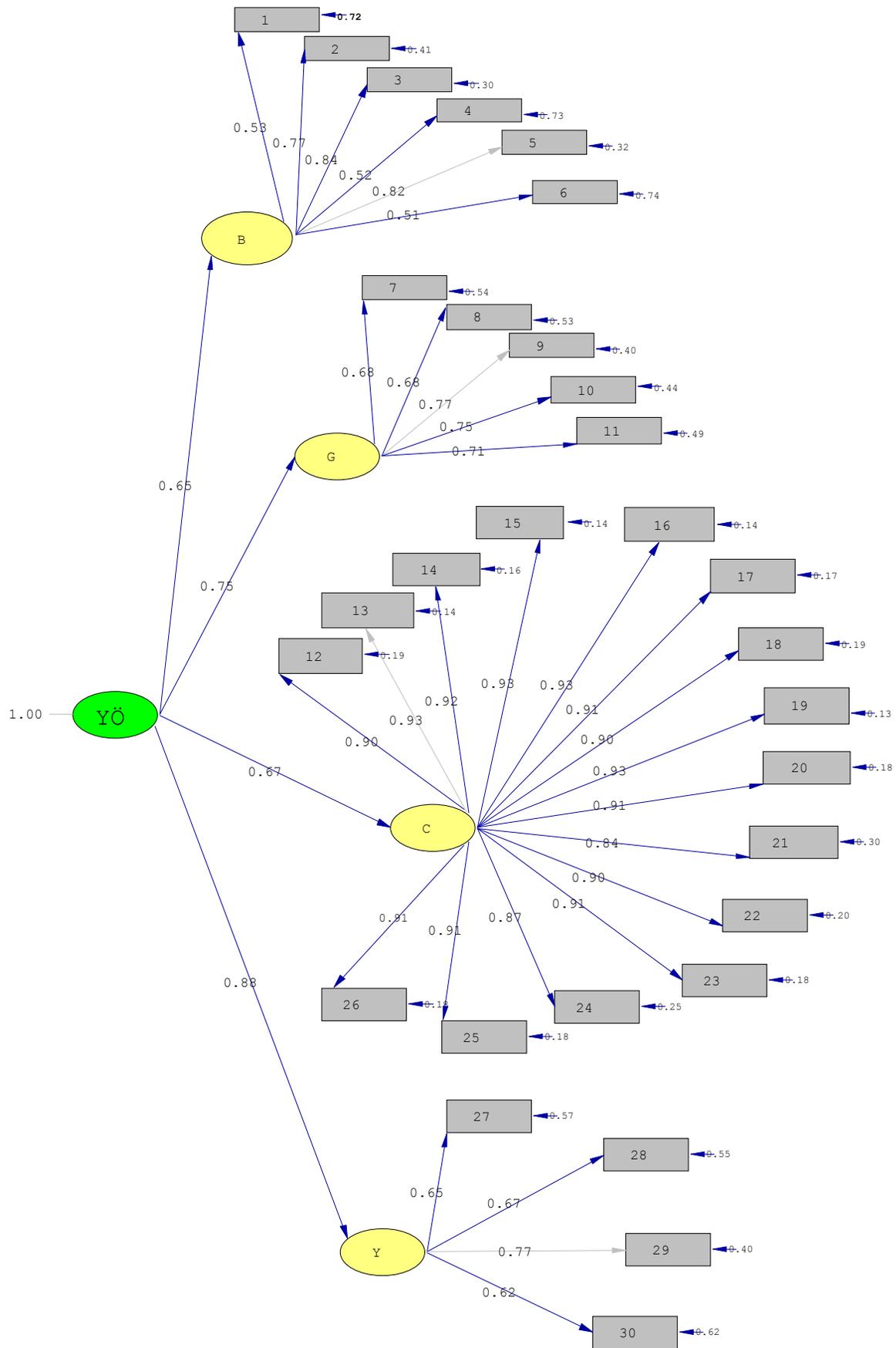


Figure 1. Path Diagram and The Factor Loadings of The Scale of Projective Identification First Level Confirmatory Factor Analysis

*Second-level Confirmatory Factor Analysis.* In the literature three components of projective identification (Dependency (B), Power (G), Sexuality (C), Subservience (Y)) are stated to be occurred. Şimşek (2007) states that such theoretical structures can be tested by

second-level confirmatory factor analysis. Therefore, the second-level confirmatory factor analysis was conducted. The analysis results presented in Figure 2.



Chi-Square=801.20, df=401, P-value=0.00000, RMSEA=0.039

**Figur 2. Path Diagram and The Factor Loadings of The Scale of Projective Identification**  
**Second Level Confirmatory Factor Analysis**

Projective identification, a high-level structure consists of a combination of these four factors in order to verify the second-level confirmatory factor analysis of the chi-square value ( $\chi^2 = 801.20$ ,  $df = 401$ ,  $p = 0.00$ ) was significant. Compliance index values  $RMSEA = .039$ ,  $GFI = .98$ ,  $AGFI = .97$ ,  $CFI = .97$ ,  $IFI = .97$ ,  $NFI = .93$ , and  $RFI = .93$ , respectively. The  $\chi^2$  value of the ratio of two to or lower than the degree of freedom model is a good model, have a value of five or below, the model shows that with a specified goodness of fit is acceptable. If the value of  $RMSEA$  is below .05 's, it fit good and if it is under .08's, it shows the value of the expression of the goodness of fit is acceptable. If other values of  $GFI$ ,  $AGFI$ , the  $CFI$  values of .90 's value on the goodness of fit is acceptable, if it is greater than 95 they could be regarded as an indicator of the goodness of fit indicated a good (Schermelleh-Engel, Moosbrugger, & Müller, 2003 transfers the Şimsek, 2007). In this context, the first and second level confirmatory factor analysis study of all the goodness of fit of the model and the model produced values quite well in terms of the criteria adopted in this state can be easily seen.

**Reliability**

Büyüköztürk (2010) states that in the scale development studies In order to determine the reliability of the scale, Cronbach's alpha for internal consistent reliability coefficients generated by the total points of the test formulation and 27% lower and upper 27% of the differences between groups in mean scores of items unrelated t-test can be used to test represents. In this context, Cronbach's alpha formula and the total points in the reliability analysis of the test substance formed according to the average scores of the top and bottom 27% of unrelated t-test was used for testing the differences between groups of. T-test, while the results of about the t-test presented in Table 2.

**Table 2. Result of t-test for The Scale of projective identification**

| Items | T<br>(Lower %27-<br>Upper %27) <sup>2</sup> | Items | T<br>(Lower %27-upper%27) <sup>2</sup> |
|-------|---|-------|--|
| 1     | 9,04***                                     | 16    | 15,97***                               |
| 2     | 11,68***                                    | 17    | 15,77***                               |
| 3     | 7,92***                                     | 18    | 18,61***                               |
| 4     | 10,87***                                    | 19    | 19,34***                               |
| 5     | 9,24***                                     | 20    | 14,78***                               |
| 6     | 11,02***                                    | 21    | 20,95***                               |
| 7     | 9,35***                                     | 22    | 18,16***                               |
| 8     | 11,76***                                    | 23    | 14,85***                               |
| 9     | 10,79***                                    | 24    | 16,11***                               |
| 10    | 12,03***                                    | 25    | 17,13***                               |
| 11    | 9,97***                                     | 26    | 17,97***                               |
| 12    | 19,90***                                    | 27    | 15,43***                               |
| 13    | 17,21***                                    | 28    | 15,25***                               |
| 14    | 19,19***                                    | 29    | 5,90***                                |
| 15    | 21,17***                                    | 30    | 15,92***                               |

<sup>1</sup>n=674    <sup>2</sup>n1 = n2 =182    \*\*\*p<.001

Scale internal consistent coefficients of .92 for the whole scale, projective identification, projective identification dependence to .81, .78 for the power of projective identification, for sexuality projective identification, projective identification subservience for .95 and .66, respectively. Level of reliability of measurement tools used in research is provided for .60 (Büyüköztürk, 2010; Çokluk, Şekercioğlu ve Büyüköztürk, 2010) given the scale and level of reliability of all sizes as well as enough can be said that the bottom. Also created tests based on the total points of 27% in the lower and upper 27% of the differences between the average scores of groups unbound material is tested using t-test analysis, the results obtained have been observed to be significant ( $p < .001$ ). Based on these findings, projective identification scale

developed by researchers for the first time used in the field of education and psychology, said to be a reliable and valid measurement tool.

### **Discussion And Conclusion**

In this study, projective identification scale for adolescents is developed in order to determine the levels projective identification of adolescents. In this research four factor scale about the projective identification are obtained. In the literature  $\chi^2$  value of the ratio of two to or lower than the degree of freedom model is a good model, have a value of five or below, the model shows that with a specified goodness of fit is acceptable. If the value of RMSEA is below .05 's, it fit good and if it is under .08's, it shows the value of the expression of the goodness of fit is acceptable. If other values of GFI, AGFI, the CFI values of .90 's value on the goodness of fit is acceptable, if greater than 95 they could be regarded as an indicator of the goodness of fit indicated a good (Schermelleh-Engel, Moosbrugger, and Müller, 2003 transfers the Şimsek, 2007). In this context, the first-level confirmatory factor analysis study of all the goodness of fit of the model and the model produced values quite well in terms of the criteria adopted in this state can be easily seen. Scale internal consistency coefficients of .92 for the whole scale, projective identification, projective identification addiction to .81, .78 for the power of projective identification, for sexuality projective identification, projective identification subservience for .95 and .66, respectively. Level of reliability of measurement tools used in research is provided for is .60 (Büyüköztürk, 2010; Çokluk, Şekercioğlu ve Büyüköztürk, 2010) given the scale and level of reliability of all sizes as well as enough can be said that the bottom. Also created tests based on the total points of 27% in the lower and upper 27% of the differences between the average scores of groups unbound material is tested using t-test analysis, the results obtained have been observed to be significant ( $p < .001$ ). Based on these findings, projective identification scale developed by researchers for the first time used in the field of education and psychology, said to be a reliable and valid measurement tool.

Worked to develop the research, all findings from this study examined psychometric properties of the scale characteristics of the students in determining the validity and reliability of projective identification can be used as a tool. However, further studies will contribute to the development of the scale can be made. In order to determine the validity of the scale, harmony, reflecting the various structures that may be related measure, proven reliability and validity of scales developed in this study examined the relationship between the scale. This scale was made

with the experimental or psychometric research to be able to measure the scale could contribute to even more powerful. The scale in various regions of Turkey with different educational levels and socio-economic characteristics of samples can be done by applying the validity and reliability studies. Investigated the predictive validity of the scale, near and far-reaching. However, except for the scale sample of students in the youth and adult samples can be determined by applying should be recommended as a valid and reliable.

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