# Psychometric Features of Children Life Styles Inventory

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# Abstract

Children Life Styles Inventory was developed by Stiles & Wilborn and in this study, Psychometric features of the inventory in Turkey is researched. At the end of the study, it was found that correlation coefficient among original and applied form points was .87 for linguistic equivalence. Structural and consistence validity of Turkish form were analyzed. At the end of explanatory factor analysis, it was found that Children Life Style Inventory has 6 factors like in its original form and items in sub-factors coincided with the items in original inventory. On the other hand, for consistence study of Children Life Styles Inventory, original scale was taken into consideration. Scale's data in terms of Turkish reliability and validity were also positive. At the end of DFA, it was found that  $\chi^2$  (938.94) sd (290) ( $\chi^2$ /sd= 3.23), RMSEA (.07) RMR (.08) SRMR (.07) GFI (.95) AGFI (.93) CFI (96)

Keywords: life styles; individual psychology; childhood experiences

# 1. Introduction

Life Styles is rooted from child's power of creation, how he sees the world and what he sees as success (Adler, 1993). Newborn make use of his experiences while creating concepts about the world he was born into and learn his environment. This learning process is the result of child's experiences at the end of his trial and error process aimed at learning his environment. These experiences cause him develop rules about the world. These rules enable the child create a point of view about the world and give meaning to it. As a result, this set of rules become original life principals of individuals and they define original life styles of individuals (Shulman & Mosak, 1988). Life styles are not only affected from childhood experiences but also from the individuals' physical development (Adler, 1993). According to Adler, life styles have biological-psychological and social features. For example lack of an organ means biological or physical disadvantage and it is one of the most significant factors that affect lifestyle of individuals. Family, friends, teachers are the other significant factors that have role on individuals' life styles besides environmental effects, neighbors and culture.

Adler grouped lifestyles under four headings. *Ruling Type*; these individuals are normative and they force others obey these rules. Managers generally belong to this group. *Getting Type*; individuals that have this lifestyle do not give effort for anything, they want others to do everything. *Avoiding Type*; these individuals don't want responsibilities in their lives and they have poor social relations. *Socially Useful Type*; they have strong social relations and they can make cooperation (Adler, 1964). Stiles developed children life styles inventory in 1992 by taking Adler's views into consideration. This inventory is 5 point likert type and it has 6 factors: *Socially useful;* individuals have good relations with others and they have social life styles. These individuals are described as social individuals in their lives. This life style was developed according to Adler's *Socially Useful type* life style. *Pleasing Lifestyle;* these individuals need to take others' opinions and approval for everything in their lives and they act according to others. *Controlling life style*; these individuals try to control everything in their lives and around them and they have dominant roles on people with whom they communicate. This life style is inspired by Adler's *Ruling Type model. Getting Life Style;* it is similar with Adler's *Getting Type* Life Style. These individuals depend on others, they are very shy, they can not make decisions on their own and they can be used by others. *Inadequacy Life Style* has some similarities with Adler's *Avoiding type Life Style*. They avoid communicating with others. When they face

a problem, they step back and accept the situation rather than making cooperation with others and try to overcome the situation. *Rebelling* has similarities with Adler's *Ruling Type model*. Individuals that have this lifestyle are rebellious; they don't want to obey the rules set by others (Arnold, 1996). There are many surveys about life styles in the literature (Kern et al. 1984, Langenfeld, 1981,), but most of these are for adults (Allen, 2005). However, early childhood experiences are very important in forming the life style of an individual (Kopp & Eckstein, 2004, Kern et al., 2004; Lewis & Olson, 2011). First life styles inventory was developed by Stiles (1992) by taking this point of view into consideration. The aim of this study is to research psychometric features of this inventory in Turkey.

#### 2. Method

#### 2.1 Study Group

This research was made on 451 students chosen from various schools' 8<sup>th</sup> grade. The schools are in a city that has 80.000-100.000 population and the city is on the east of Turkey. Sampling of the research included 251 female, 200 male students, the age range of most of the sampling (%94) was 14-16, and average age was 15.

# 2.2 Data Collection Tool

Children Life Styles Inventory is made of 90 items and inspired from Adlerian concepts. The inventory has six sub dimensions. These are: Pleasing, Rebelling, Getting, Controlling, Inadequacy and Socially Useful. Inventory was conducted on students at 8-11 years old group; cronbach alpha coefficient for sub inventories were: Pleasing, (.70) Rebelling,(.76) Getting,(.76) Controlling,(.61) Inadequacy (,74) and Socially Useful.(.65). test retest results of sub inventories were meaningful ( p<.05 significance level) and they are respectively: Pleasing, (.72) Rebelling,(.75) Getting,(.76) Controlling,(.71) Inadequacy (,73) and Socially Useful.(.72), (Stiles & Wilborn, 1992).

#### 2.3 Process

In the process of adapting Children Life Styles Inventory, firstly the English form was translated into Turkish. In order to evaluate translation and develop the trial form of inventories, "Re-Translation Method" was used and "One Way Translation" was made. Translation and control of Children Life Styles Inventory from English to Turkish were made by researchers and 4 academic members of English Language Department. Views of two academic members (who know English) in the Psychological Counseling and Guidance department on the inventory (with their English translations) were taken into consideration. The developed Turkish form was given to two academic members of English Teaching Department who could use both languages fluently and they were retranslated. At the end of this re-translation, Turkish trial form, which was believed to present the original form well, was prepared. This trial form was applied in two sessions on 151 8<sup>th</sup> grade students in the private school in a city that has 40.000-50.000 population. In the first session, English original forms of the scale were given to students and they were required to answer all of the questions without any exception. 30 minutes later, 2<sup>nd</sup> session started and Turkish forms of the scale were given to the students and they were required to fill the form. Correlation between these two applications was taken as the standard of linguistic equivalence.

Item test correlation and %27 subgroup and super-group comparisons for item distinguishing of Children life Styles Inventory were used. In the evaluation of item test correlation, Paerson product-moment correlation coefficient was determined according to total point and t-test was used in comparing %27 sub and super-groups. Internal consistency and test re-test reliability study for reliability studies were made with 451 8<sup>th</sup> grade students. Turkish forms were applied on these students two times with 15-day break in between and correlation between the data of two applications were used as test retest reliability coefficient.

Structural and consistence validity were analyzed for validity studies of Children Life Styles Inventory. Explanatory and confirmatory factor analyses were applied for researching structural validity of the inventory. The inventory was compared with the original one in order to determine the consistence validity and the result was accepted to be the consistence validity. SPSS 15.0 and Lisrel 8.51 programs were used in order to understand the reliability and validity of the inventory.

# 2.3.1 Linguistic Equivalence

Correlations between English and Turkish form points were calculated in order to determine the linguistic equivalence of inventory and it was found that; for the complete scale .87, for Pleasing sub scale (.85) for Rebelling sub scale (.76) for Getting sub scale (.79) for Controlling sub scale (.80) for Inadequacy sub scale (.77) and for Socially Useful sub scale alt (.86) (p<.05 significance level).

# 2.3.2 Reliability

Corrected Item-Total point correlation of 13<sup>th</sup>, 14<sup>th</sup>, 16<sup>th</sup>, 26<sup>th</sup>, 27<sup>th</sup>, 30<sup>th</sup>, 31<sup>st</sup>, 37<sup>th</sup>, 80<sup>th</sup>, 82<sup>nd</sup> and 83<sup>rd</sup> items of Children Life Styles Inventory were found to be meaningless. Children Life Styles Inventory's 44<sup>th</sup>, 49<sup>th</sup>, 53<sup>rd</sup>, 56<sup>th</sup> and 79<sup>th</sup> items' corrected Item-Total point correlation was low and it was found that if these items were deleted, Cronbach Alpha coefficient value would increased up to .94. These findings show that 13<sup>th</sup>, 14<sup>th</sup>, 16<sup>th</sup>, 26<sup>th</sup>, 27<sup>th</sup>, 30<sup>th</sup>, 31<sup>st</sup>, 37<sup>th</sup>, 38<sup>th</sup>, 80<sup>th</sup>, 82<sup>nd</sup>, and 83<sup>rd</sup> items had adverse effect on the scale while 44<sup>th</sup>, 49<sup>th</sup>, 53<sup>rd</sup>, 56<sup>th</sup> and 79<sup>th</sup> items had little contribution to the scale. As a result, 13<sup>th</sup>, 14<sup>th</sup>, 16<sup>th</sup>, 26<sup>th</sup>, 27<sup>th</sup>, 30<sup>th</sup>, 31<sup>st</sup>, 37<sup>th</sup>, 38<sup>th</sup>, 44<sup>th</sup>, 49<sup>th</sup>, 53<sup>rd</sup>, 56<sup>th</sup>, 79<sup>th</sup>, 80<sup>th</sup>, 82<sup>nd</sup>, and 83<sup>rd</sup> items were removed from the scale. Total internal consistency reliability coefficient was found to be .94 for the complete inventory. Cronbach alpha coefficient for Pleasing sub scale was .92, Cronbach alpha coefficient for Rebelling sub scale was .93 Cronbach alpha coefficient for Inadequacy sub scale was .91 and Cronbach alpha coefficient for Socially Useful sub scale was .94. Test retest reliability coefficient for the complete scale was for Nebelling sub scale .87, for Rebelling sub scale .88.

# 2.3.3 Structural Validity

Explanatory and confirmatory factor analyses were made in order to analyze the structural validity of the inventory. Firstly, sampling coherence and Barlett Sphericity Tests were made. Data are accepted to be consistent with the factor analysis, KMO needs to be higher than .60 and Barlett test should be meaningful (Büyüköztürk, 2004). In this research, KMO sampling consistency coefficient was .93 and Barlett Sphericity test  $X^2$  value was 87455,607 (p<.001). These results show that items given to the inventory answers can be accepted as factors.

As the original Children Life Styles Inventory was made of 6 sub dimensions, basic component analysis and varimax rotation was limited with 6 factors. At the end of this process, a structure with 6 factors that can explain %90 of total variance was formed. It was seen that item distributions in the original form and in the adapted version were consistent. Factor results and factor loads are presented in Table 1.

Item	S U	Р	С	G	I	R
11	0,977					
15	0,974					
2	0,971					
20	0,970					
25	0,970					
33	0,969					
41	0,965					
43	0,965					
45	0,964					
6	0,957					
65	0,954					
7	0,953					
74	0,943					
84	0,931					
90	0,914					
1		0,973				
12		0,969				
23		0,967				
28		0,965				
40		0,965				
51		0,965				
54		0,965				
57		0,964				
58		0,964				
59		0,963				
62		0,936				
73		0,935				

**Table 1:** Children Life Styles Inventory Explanatory Factor Analysis Results

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77       0,909         8       0,877         17       0,956         22       0,944         3       0,938         36       0,931         5       0,930         52       0,928         63       0,904         67       0,901         76       0,893         86       0,885         88       0,841         32       0,943         34       0,941         39       0,941         34       0,933         55       0,928         66       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         72       0,885         85       0,887         85       0,887         85       0,885         85       0,885         85       0,897						
17       0,956         22       0,944         3       0,938         36       0,934         4       0,931         5       0,930         52       0,928         63       0,905         64       0,904         67       0,901         76       0,893         86       0,885         88       0,841         39       0,941         48       0,933         55       0,928         60       0,923         66       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,920         47       0,908         61       0,907         62       0,920         47       0,908         61       0,907         62       0,897         78       0,885         85       0,885         85       0,885         85       0,885         85       0,891         76       0,890	77	0,909				
22       0,944         3       0,938         36       0,931         4       0,931         5       0,928         63       0,905         64       0,904         67       0,901         76       0,893         88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         60       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         71       0,900         89       0,902         9       0,852         18       0,920         24       0,920         24       0,920         24       0,907         89       0,885         85       0,885         85       0,885         85       0,885         9       0,901         75       0,897         76       0,893	8	0,877				
3       0,938         36       0,934         4       0,931         5       0,930         52       0,928         63       0,905         64       0,904         67       0,901         76       0,899         81       0,835         88       0,841         32       0,943         34       0,941         39       0,941         39       0,941         48       0,933         55       0,928         60       0,923         66       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         19       0,933         61       0,907         62       0,901         75       0,897         78       0,885         85       0,885         85       0,885         85       0,897         78       0,893         93       0,940         19       0,933	17		0,956			
36       0,934         4       0,931         5       0,930         52       0,928         63       0,905         64       0,904         67       0,901         76       0,893         88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         66       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         72       0,893         63       0,901         74       0,908         75       0,897         78       0,885         85       0,885         85       0,885         85       0,897         78       0,901         74       0,9033 <tr< th=""><th>22</th><th></th><th>0,944</th><th></th><th></th><th></th></tr<>	22		0,944			
4       0,931         5       0,930         52       0,928         63       0,905         64       0,904         67       0,901         76       0,899         81       0,835         88       0,841         32       0,941         39       0,941         39       0,941         39       0,941         48       0,933         55       0,928         60       0,921         71       0,910         89       0,902         9       0,852         18       0,921         19       0,852         18       0,921         19       0,902         9       0,852         18       0,921         19       0,903         61       0,901         72       0,899         73       0,885         85       0,885         85       0,885         85       0,885         86       0,901         75       0,892         76       0,803	3		0,938			
5       0,930         52       0,928         63       0,905         64       0,904         67       0,901         76       0,899         81       0,885         88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         60       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         72       0,899         63       0,907         64       0,907         65       0,897         75       0,897         76       0,885         85       0,885         85       0,885         85       0,901         19       0,933         29       0,902 <tr< th=""><th>36</th><th></th><th>0,934</th><th></th><th></th><th></th></tr<>	36		0,934			
52       0,928         63       0,905         64       0,904         67       0,901         76       0,899         81       0,885         88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         66       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,920         47       0,907         69       0,901         72       0,899         75       0,897         78       0,885         85       0,885         85       0,885         85       0,885         85       0,901         75       0,933         99       0,922         90       0,923         61       0,907         62       0,901         75       0,885         85       0,885         85       0,901      <	4		0,931			
63       0,905         64       0,901         67       0,901         76       0,899         81       0,893         86       0,885         88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         60       0,921         71       0,910         72       0,907         89       0,902         9       0,852         18       0,921         21       0,920         24       0,920         24       0,920         24       0,920         25       0,887         78       0,887         78       0,887         78       0,885         85       0,885         85       0,885         85       0,885         9       0,922         35       0,893         36       0,893         37       0,901         38       0,885         85       0,885 <t< td=""><td>5</td><td></td><td>0,930</td><td></td><td></td><td></td></t<>	5		0,930			
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67       0,901         76       0,899         81       0,893         86       0,885         88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         60       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         21       0,920         47       0,907         69       0,907         69       0,907         69       0,907         69       0,907         69       0,907         69       0,907         69       0,907         61       0,907         62       0,897         78       0,885         85       0,885         85       0,885         9       0,922         9       0,933         9       0,933         9       0,921         10       0,900	63		0,905			
76       0,899         81       0,893         86       0,885         88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         66       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         21       0,920         47       0,907         69       0,901         72       0,899         75       0,897         76       0,885         85       0,885         9       0,822         10       0,940         19       0,933         29       0,922         35       0,897         78       0,893         79       0,922         75       0,897         76       0,893         77       0,900         64       0,901         75       0,922         75       0,893 <t< td=""><td>64</td><td></td><td>0,904</td><td></td><td></td><td></td></t<>	64		0,904			
81       0,893         86       0,885         88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         60       0,923         66       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,920         47       0,900         61       0,907         69       0,901         72       0,899         75       0,897         78       0,885         85       0,885         85       0,885         85       0,885         9       0,922         46       0,901         42       0,901         43       0,901         44       0,901         55       0,922         36       0,901         37       0,901         38       0,901         49       0,902         41       0,901 <t< td=""><td>67</td><td></td><td>0,901</td><td></td><td></td><td></td></t<>	67		0,901			
86       0,885         88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         60       0,923         66       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         21       0,920         24       0,907         69       0,901         72       0,885         85       0,887         78       0,885         85       0,885         9       0,922         9       0,933         9       0,940         75       0,887         76       0,885         85       0,885         9       0,922         9       0,933         9       0,933         9       0,940         9       0,940         9       0,933         9       0,940         10       0,940	76		0,899			
88       0,841         32       0,943         34       0,941         39       0,941         48       0,933         55       0,928         60       0,923         66       0,921         71       0,910         87       0,907         89       0,902         9       0.852         18       0,921         21       0,920         47       0,908         61       0,901         72       0,899         75       0,885         85       0,885         85       0,933         9       0,901         72       0,899         75       0,885         85       0,885         85       0,940         19       0,933         29       0,922         35       0,901         42       0,900         46       0,897         50       0,882         68       0,864	81		0,893			
320,943340,941390,941480,933550,928600,923660,921710,910870,907890,90290,852180,921210,920240,920470,908610,907690,901720,899750,885850,885100,940190,933290,921350,901420,900460,897500,882680,864	86		0,885			
34       0,941         39       0,941         48       0,933         55       0,928         60       0,921         66       0,901         71       0,907         89       0,902         9       0,852         18       0,921         21       0,920         24       0,907         69       0,901         72       0,899         75       0,897         78       0,885         85       0,885         10       0,940         19       0,933         29       0,922         35       0,885         85       0,885         85       0,885         85       0,901         19       0,933         29       0,922         35       0,901         42       0,900         46       0,897         50       0,885         68       0,864	88		0,841			
39       0,941         48       0,933         55       0,928         60       0,923         66       0,921         71       0,900         89       0,902         9       0,852         18       0,921         21       0,920         24       0,907         69       0,901         72       0,899         75       0,897         76       0,885         85       0,885         10       0,901         19       0,933         29       0,921         21       0,907         61       0,907         62       0,901         75       0,897         76       0,885         85       0,885         90       0,933         29       0,922         35       0,901         42       0,900         46       0,897         50       0,882         68       0,864	32			0,943		
48       0,933         55       0,928         60       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         121       0,920         24       0,920         47       0,907         69       0,901         72       0,899         75       0,885         85       0,885         85       0,885         10       0,940         19       0,933         29       0,921         35       0,933         29       0,923         35       0,937         35       0,937         35       0,937         35       0,887         35       0,887         35       0,933         36       0,933         35       0,933         36       0,933         35       0,887         36       0,887         35       0,887         36       0,882         36       0,883	34			0,941		
55       0,928         60       0,923         66       0,921         71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         21       0,920         24       0,920         47       0,908         61       0,907         69       0,901         72       0,899         75       0,885         85       0,885         85       0,885         85       0,933         29       0,921         35       0,901         42       0,901         42       0,901         43       0,903         44       0,904         50       0,885         68       0,864	39			0,941		
600,923660,921710,910870,907890,90290,852180,921210,920240,920470,908610,907690,901720,889750,887780,885850,885100,940190,933290,921420,900460,897500,885680,864	48			0,933		
660,921710,910870,907890,90290,852180,921210,920240,920470,908610,907690,901720,899750,885850,885100,940190,933290,922350,901420,900460,897500,885680,864	55			0,928		
71       0,910         87       0,907         89       0,902         9       0,852         18       0,921         21       0,920         24       0,920         47       0,908         61       0,907         69       0,901         72       0,899         75       0,885         85       0,885         85       0,885         10       0,901         13       0,901         14       0,901         15       0,885         10       0,940         19       0,933         29       0,921         35       0,901         42       0,900         46       0,897         50       0,882         68       0,864	60			0,923		
87       0,907         89       0,902         9       0,852         18       0,921         21       0,920         24       0,920         47       0,908         61       0,907         69       0,901         72       0,899         75       0,885         85       0,885         10       0,901         19       0,933         29       0,921         42       0,901         43       0,901         44       0,901         19       0,933         29       0,921         42       0,901         43       0,901         44       0,901         45       0,933         46       0,837         50       0,832         68       0,864	66			0,921		
89       0,902         9       0,852         18       0,921         21       0,920         24       0,920         47       0,908         61       0,907         69       0,901         72       0,899         75       0,885         85       0,885         10       0,940         19       0,933         29       0,921         35       0,901         42       0,900         46       0,897         50       0,892         68       0,864	71			0,910		
90,852180,921210,920240,920470,908610,907690,901720,899750,897780,885850,885100,940190,933290,922350,901420,900460,897500,845680,845	87			0,907		
18       0,921         21       0,920         24       0,920         47       0,908         61       0,907         69       0,901         72       0,899         75       0,897         78       0,885         10       0,940         19       0,933         29       0,922         35       0,901         42       0,900         46       0,897         50       0,892         68       0,864	89			0,902		
210,920240,920470,908610,907690,901720,899750,897780,885850,885100,940190,933290,922350,901420,900460,897500,845	9			0,852		
240,920470,908610,907690,901720,899750,897780,885850,885100,940190,933290,922350,901420,900460,897500,824680,864	18				0,921	
470,908610,907690,901720,899750,897780,885850,885100,940190,933290,922350,900460,897500,825680,864	21				0,920	
610,907690,901720,899750,897780,885850,885100,940190,933290,922350,900420,900460,897500,824680,864	24				0,920	
690,901720,899750,897780,885850,885100,940190,933290,922350,901420,900460,897500,824680,864	47				0,908	
720,899750,897780,885850,885100,940190,933290,922350,901420,900460,897500,822680,864	61				0,907	
750,897780,885850,885100,940190,933290,922350,901420,900460,897500,892680,864	69				0,901	
78       0,885         85       0,885         10       0,940         19       0,933         29       0,922         35       0,901         42       0,900         46       0,897         50       0,822         68       0,864	72				0,899	
85       0,885         10       0,940         19       0,933         29       0,922         35       0,901         42       0,900         46       0,897         50       0,864	75				0,897	
100,940190,933290,922350,901420,900460,897500,892680,864	78				0,885	
19       0,933         29       0,922         35       0,901         42       0,900         46       0,897         50       0,892         68       0,864	85				0,885	
29       0,922         35       0,901         42       0,900         46       0,897         50       0,892         68       0,864	10					0,940
35       0,901         42       0,900         46       0,897         50       0,892         68       0,864	19					0,933
42       0,900         46       0,897         50       0,892         68       0,864	29					0,922
46       0,897         50       0,892         68       0,864	35					0,901
50         0,892           68         0,864	42					0,900
68 0,864	46					0,897
	50					0,892
70 0,859	68					0,864
	70					0,859

When table 1 is analyzed, it can be seen that items under the group of "Socially Useful sub scale" include individuals' relations with others and social life style. Individuals that get high points in this sub-scale are generally defined as social people in their lives. This factor, whose factor loads change between .97 and .91, explains %20.30 of total variance and is made of 15 items. One of the example of this factor's items can be "*I take part in social activities*". The second factor Pleasing sub-scale is made of 14 items. Individuals who take high points from this scale are the ones that want to take others' opinions and approval and behave according to them. This factor, whose factor loads change between .97 and .87, explains % 18.65 of total variance. One of the example of this factor's items can be "*I* take part in social activities".

get said if I learn that somebody doesn't like me". Individuals in the group of the third factor controlling sub-scale want to take control of everything in their lives. They dominate people with whom they communicate. This factor, whose factor loads change between .95 and .84, explains % 16.64 of total variance and it is made of 14 items. One of the example of this factor's items can be "I change rules when I don't like the game we play". Points taken from the fourth factor Getting sub-scale show that individual depends on others. These individuals are timid, they can not make decisions and they may be used by others. This factor, whose factor loads change between .94 and .85, explains % 13.27 of total variance and it is made of 11 items. One of the example of this factor's items can be "I make mistakes because of others". The fifth factor is Inadequacy sub-scale. Individuals that have this life style avoid communicating with others. Instead of cooperating with others in order to solve problems, they retreat and accept the situation. This factor, whose factor loads change between .92 and .88, explains % 11.55 of total variance and it is made of 10 items. One of the example of this factor's items can be "I generally say no when my friends say 'Let's play a game or go somewhere'". The sixth factor is Rebelling sub-scale. Individuals that have this lifestyle do not obey the rules set by others and they are rebellious. This factor, whose factor loads change between .94 and .85, explains % 10.37 of total variance and it is made of 9 items. One of the example of this factor's items can be "I am sent to discipline board of the school many times (as I don't obey the rules)". On the other hand, in order to confirm the factor structure of Children Life Styles Inventory, data were analyzed through Lisrel 8.55 program. Some consistence statistics results were used in order to understand if the scale is verified or not in the confirmatory factor analysis. Commonly used of these consistence statistics is Chi Square. If chi square's ratio to degree of freedom is two or below, it means perfect consistence; if it is between two and five, this means an acceptable consistence. The others are GFI (Goodness of fit index), AGFI (Adjusted Goodness of fit index), CFI (Comparative fit index), RMSEA (Root mean square error of approximation), RMR (Root mean square residual) and SRMR (Standardized root mean square residual); if GFI, AGFI and CFI are higher than .90, it means an acceptable consistence. If RMSEA, RMR, SRMR values are .05, it means a good consistence; if it is below .08, it means an acceptable consistence (Jöreskog, 1969, Simsek, 2007).

At the end of confirmatory factor analysis of Children Life Styles Inventory, it was found out that  $\chi^2$  is (938.94) sd (290) ( $\chi^2$ /sd= 3.23), RMSEA (.07) RMR (.08) SRMR (.07) GFI (.95) AGFI (.93) CFI (96). This consistence shows that the scale is confirmed in terms of structure. Path diagram of the scale is given in Table 2.

#### 2.3.4 Consistence Validity

Firstly, original scale was analyzed in order to start the study of consistence validity of Children Life Styles Inventory. Original scale's Pleasing sub scale cronbach alpha coefficient was found to be .70, Rebelling sub scale cronbach alpha coefficient was found to be .76, Controlling sub scale cronbach alpha coefficient was found to be .76, Controlling sub scale cronbach alpha coefficient was found to be .74 and Socially Useful sub scale cronbach alpha coefficient was found to be .65 (Stiles & Wilborn, 1992). These values in Turkish reliability and validity study were; Pleasing sub scale cronbach alpha coefficient .92, Rebelling sub scale cronbach alpha coefficient .93, Inadequacy sub scale cronbach alpha coefficient .91, and Socially Useful sub scale cronbach alpha coefficient .94. Inventory's test retest reliability coefficient for the whole scale.88, for Pleasing sub scale .72, Rebelling sub scale .72 (Stiles & Wilborn, 1992). These values in Turkish reliability sub scale .75, Getting sub scale .76, Controlling sub scale .71 Inadequacy sub scale .73, Socially Useful sub scale .72 (Stiles & Wilborn, 1992). These values in Turkish reliability sub scale .75, Getting sub scale .76, Controlling sub scale .71 Inadequacy sub scale .73, Socially Useful sub scale .72 (Stiles & Wilborn, 1992). These values in Turkish reliability sub scale .79, Getting sub scale .80, for Controlling sub scale .85, Inadequacy sub scale .80, and Socially Useful sub scale .88.

The inventory had given better data in Turkish reliability and validity studies.

# Table 2: Child Life Styles Inventory Path Diagram



# 2.3.5 Item Analysis

Item total test correlation explains the relation between the points of test items and total point of the test. According to this, item total test correlations are expected to be positive and high (Baykul, 2000). In the interpretation of item test correlation, it is accepted that items that are 30 and higher distinguish individuals in terms of the evaluated feature (Büyüköztürk, 2004).

It was found out that Children Life Styles Inventory's corrected item-total point correlation was between .31 and .74; inventory's t (sd=327) values according to the differences between the points of %27 sub and super groups that were determined according to total points were between 10.01 (p<.01) and 73.43 (p<.01). Findings are given in Table-3.

Sub				Sub				Sub			
Scale	Item No	$\mathbf{r}_{jx}$	t	Scale	Item No	$\mathbf{r}_{\mathbf{jx}}$	t	Scale	Item No	$\mathbf{r}_{jx}$	t
	2	0,54(*)	63,81		1	0,57(*)	13,81		3	0,64(*)	16,29
	6	0,71(*)	62,52		8	0,69(*)	17,34		4	0,41(*)	10,25
	7	0,71(*)	50,91		12	0,62(*)	16,25		5	0,46(*)	11,23
	11	0,67(*)	43,16		20	0,68(*)	17,82		14	0,46(*)	10,71
	13	0,67(*)	43,03		23	0,65(*)	16,88		19	0,63(*)	16,25
IUL	17	0,74(*)	17,48		31	0,58(*)	15,15	CONTROLLING	29	0,65(*)	15,85
SOCIALLY USEFUL	22	0,72(*)	73,43	ŊĊ	40	0,71(*)	18,13		41	0,59(*)	16,39
l AT	26	0,67(*)	42,65	PLEASING	42	0,64(*)	15,91	ROL	50	0,41(*)	11,64
CİAL	32	0,52(*)	22,23	PLI	44	0,54(*)	13,79	INO	51	0,37(*)	10,59
SOC	34	0,69(*)	44,87		45	0,67(*)	17,12	0	54	0,62(*)	15,64
	35	0,47(*)	19,35		46	0,43(*)	12,29		63	0,51(*)	12,27
	52	0,55(*)	24,34		49	0,69(*)	17,28		66	0,31(*)	10,95
	61	0,66(*)	38,29		60	0,64(*)	16,25		69	0,45(*)	10,66
	67	0,67(*)	62,42		64	0,49(*)	11,34		71	0,44(*)	10,35
	73	0,55(*)	12,15								
Sub				Sub				Sub			
Scale	Item No	$\mathbf{r}_{jx}$	t	Scale	Item No	r <sub>jx</sub>	t	Scale	Item No	r <sub>jx</sub>	t
	9	0,61(*)	15,75		15	0,47(*)	10,54		10	0,47(*)	10,59
	25	0,41(*)	10,84		18	0,42(*)	13,42		16	0,39(*)	11,44
	27	0,41(*)	11,64		21	0,44(*)	13,97		24	0,38(*)	10,33
	30	0,41(*)	10,25		37	0,48(*)	19,73	REBELLÍNG	28	0,51(*)	14,81
Ŋ	38	0,42(*)	10,92	ACY	48	0,47(*)	12,19		33	0,39(*)	10,33
GETTING	43	0,34(*)	10,79	INADEQUACY	56	0,51(*)	10,01		36	0,39(*)	10,94
GE	47	0,62(*)	16,89		59	0,49(*)	11,34		39	0,37(*)	10,76
	53	0,47(*)	12,84	4	62	0,39(*)	10,56		55	0,41(*)	11,51
	58	0,38(*)	10,31		65	0,55(*)	13,97		57	0,42(*)	10,73
	70	0,39(*)	10,37		68	0,38(*)	10,54				
	72	0,41(*)	10,94								

# 2.4 Evaluation of Inventory Points

Item number in the Turkish form of Children Life Styles is 73. The scale is 5 point likert scale and there are 14 items in Pleasing sub scale, 9 items in Rebelling sub scale, 11 items in Getting sub scale, 14 items in Controlling sub scale, 10 items in Inadequacy sub scale, 15 items in Socially Useful sub scale. Minimum and maximum points that can be taken from each sub inventory are given. On the other hand, according to these points, determining children life styles and calculation of points are given in Table 4.

Sub Scale	Total Item	Lowest Score	Higest Score	Life style score
Socially Useful	15	15	75	Sub scale score X 1,33
Pleasing	14	14	70	Sub scale score X 1,42
Controlling	14	14	70	Sub scale score X 1,42
Getting	11	11	55	Sub scale score X 1,81
Inadequacy	10	10	50	Sub scale score X 2
Rebelling	9	9	45	Sub scale score X 2,22

In Children Life Styles Inventory, child's life style is determined according to his points from each inventory. As inventory items aren't distributed equally to the sub inventories, formula given in the above table ([100 ÷ Highest score] × life style score) is used and children's inventory points are calculated equally out of 100. According to this, coefficients of the sub scales were; Socially Useful sub scale  $100 \div 75 = 1,33$ , Pleasing sub scale  $100 \div 70 = 1,42$ , Controlling sub scale  $100 \div 70 = 1,42$ , Getting sub scale  $100 \div 55 = 1,81$ , Inadequacy sub scale  $100 \div 50 = 2$ , Rebelling sub scale  $100 \div 45 = 2,22$ . For instance, "A Life Styles point of a child who got 60 points from Socially Useful Sub Scale is 60 x 1,33 =80". High score of sub scale determines child's life style. Application process of the inventory continues for 20-30 minutes. It can be applied individually or as groups.

# 3. Discussion

Children Life Styles Inventory was developed by Stiles & Wilborn and in this study, Psychometric features of the inventory in Turkey is researched. At the end of the study, it was found out that correlation coefficient among original and applied form points was .87 for linguistic equivalence. This result shows that Turkish translated inventory items are similar with the original English ones. At the end of reliability analysis, it was understood that 17 items of Children Life Styles inventory decreased the Cronbach Alpha coefficient and should be removed from the inventory. In Arnold's study (1996) which was on the same issue, inventory items were removed too. In the light of this finding, which supported our study, these items were removed from the inventory. The Turkish form had 73 items and test retest reliability coefficient was .88, this shows the determination of inventory.

Turkish form's structure and consistence reliability were analyzed. At the end of the explanatory factor analysis, Children Life Styles Inventory had 6 items and it was found that items in the sub scales were consistent with the items in the original inventory. On the other hand, original scale was taken into consideration for the consistence validity study of Children Life Styles Inventory. The inventory gave better data in Turkish reliability and validity study. The reason of this can be that the sampling group of original scale included 381 people between 8 and 11 ages, and the sampling group of Turkish adaptation included 451 people between 14 and 16 ages and the problematic inventory items were removed. In Arnold's study (1996), the inventory gave better results than the original one and inventory items were decreased to 64.

In the light of these data, factor analysis was applied to confirmatory factor analysis. At the end of DFA, it was found that  $\chi^2$  (938.94) sd (290) ( $\chi^2$ /sd= 3.23) and, RMSEA (.07) RMR (.08) SRMR (.07) GFI (.95) AGFI (.93) CFI (96). These results also show that the structure of the scale was correctly adapted from the original form and corresponded to factor analysis results.

At the end of item analysis, it was found out that Children Life Styles Inventory's corrected item-total point correlations were between .31 and .74; inventory's t (sd=327) values according to the differences between the points of %27 sub and super groups that were determined according to total points were between 10.01 (p<.01) and 73.43 (p<.01). When t test results of the differences %27 sub and super groups' item points were taken into consideration, it was seen that the items' distinguishing power was sufficient.

Children Life Styles Inventory is prepared with inspiration from Adlerian concepts. In this sense, the inventory tries to determine the life style of children by depending on the basic concepts of Individual Psychology. High points taken from the sub scales of the inventory show the life style adopted by the child. There is not such a scale in Asian countries, and there are a limited number of studies about children life styles; so creating such a scale in Turkish will fill the gap in this field of study and will form a basis for future studies in Asia.

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