Abstract—Emerging Adulthood, the period during ages 18 to 25, is a new conceptualization proposed by Arnett which is especially prevalent in the industrialized countries. Turkey is basically a developing country having a young population structure. Investigating the presence of such a life period in such a culture might be helpful in understanding educational and psychological needs of people who are in their twenties. With the aim of investigating Emerging Adulthood in Turkey, a well-known instrument (IDEA, 2003) was adapted to Turkish language and Turkish culture. The scale was administered to 296 participants between 15 and 34 ages and validity and reliability were conducted. Exploratory factor analysis revealed three subscales. Reliability coefficients of the scale (Cronbach α) was found as .69. Test-retest reliability coefficients was found for the scale as .81. Finally, “The IDEA” with 20 items was obtained to be used in the Turkish population. The instrument is ready to be administered among Turkish young people for the investigation of transition to adulthood, and whether such an emerging adulthood period really existed.

Keywords—Adaptation, Emerging Adulthood, Turkey, IDEA.

I. INTRODUCTION

Human life has been classically identified as childhood, adolescence, and adulthood with specific periods in each life phases such as adulthood is usually defined as young adulthood, middle ages, and old age or late adulthood. However, changes in life conditions seem to change life phases. During the last 50 years, there had been changing trends in the transition to adulthood and roles of especially 18-25 years olds, had experienced dramatic shifts. However there are no precise evidences indicating 18–25 years olds, had experienced dramatic shifts. However

Furthermore, there are considerable variations among young people in those ages [11] – [12] – [3] – [6]. As a result of all these changing trends, Arnett [3], defines this period as emerging adulthood which is a stage of development bridging adolescence and young adulthood.

In this period, people are no longer adolescents but have not yet attained full adult status. According to Arnett [3] – [4], emerging adulthood ranges from the late teens through the twenties, with a focus on ages eighteen through twenty-five, and is characterized by frequent change as young people explore various possibilities in love, work, and worldviews. Emerging adulthood exists only in cultures that postpone entry into adult roles and responsibilities until the late teens [10]. In last seven years, emerging adulthood has been investigated in countries such as Argentina, Israel and USA [8] – [9] – [3] – [10]. It seems quite helpful to investigate emerging adulthood in other parts of the world. Turkey is one of the countries presenting a very complex picture during transition to adulthood. So investigating emerging adulthood in this country might be a contribution to the related literature. The short description of social and cultural characteristics of the country may be helpful.

Turkey varies in social and cultural structure, with ‘modern’ and ‘traditional’ life styles co-existing simultaneously within the society [13] – [14] – [15]. Thus, as “modernization” means in Turkish society has been spreading out different layers of society in the last decades, corresponding effects may have possibly transformed classical Turkish family types to more modern manner. The population of Turkey has undergone an intensive process of urbanization, especially from the 1950s onwards [16] – [14] [15] – [17] – [18] [19] – [20] – [21]. In terms of socioeconomic development and demographic conditions there are considerable variations within the country, across gender and region. Turkey has experienced a major population shift from rural areas to cities in the last fifty years which lead to higher rate of urbanization. Family ties are still strong and influential in the formation of values, attitudes, aspirations, and goals [14] – [15] – [17] – [21]. The people in their twenties are autonomically considered adults in the Turkish culture. However, general changes in the age of education, entering work life, marriage, and changes in social life are considerable in the culture.

According to Arnett [3], most important factors contributing the rise of emerging adulthood, such as marriage,
completion of education, becoming parents and entering to a fulltime work tend to shift to middle twenties. These changing seem to be major factors of emerging adulthood. Turkey is basically a developing country that has a young population structure. Previous research seems to prove these changing trends in Turkey. Therefore, first of all these changes need to be studied to make a study about emerging adulthood. With this purpose, whether these changes happen in Turkey or not were investigated on the basis of some important records and research [21] – [22] – [18].

One of the most important factors causing the emergence of the emerging adulthood is that there was an increase in the age of completing education. In the study the increase in the age of completing education in Turkey also took attention with the reasons of both legally and willingness basis. Eight year elementary schooling is mandatory in Turkey. Among the population with schooling, about one-third of both males and females have completed at least second level primary school. The proportion of population with at least high school education is 23 percent for males and 14 percent for females. However, the indicators for successive cohorts show a substantial increase over time in the educational attainment of both men and women [19] – [20] – [21]. The median years of education of female population in the West of the country was 4.5 years whilst it was only 0.6 years in the East region in 1998 according to TDHS. The younger generations are today increasingly attaining higher education levels compared to older ones that will have a substantial effect on the lives of especially female population in future.

In very important studies such as TDHS-2003, Progress Report [22], State Institute of Statistics (SIS) [18], the increase in the age of marriage and parenthood accepted as one of the preconditions of emerging adulthood was also studied. In Turkey, marriage is very important from the demographic perspective, besides being prevalent throughout the country, because almost all births occur within marriage [16] – [14] [15] – [21]. The TDHS [21] results document an increase in the median age at first marriage across age cohorts, from 19.2 years for the 45–49 age group to 21 years for the 25–29 age group. The results also show pronounced differences in the age at first marriage by educational level of women. Among women age 25–49 there is a difference of almost seven years in the timing of entry into marriage between those with no education and those who have at least high school education [18] – [19]. Along with the increasing educational attainment, mean age at first marriage and median age at first birth, two important demographic attributes, are in a steady increase. One can expect that along with higher educational level and postponement of the marriage age, more women will involve market-centered economic relationships in Turkey in the future. Certain demographic features like average age of marriage, becoming the parent of first child, completion of education, entering to full time work ages have been changing throughly in last forty years in Turkey, like in industrialized nations, these changes have turned into late twenties [19] – [21] – [18].

The Inventory of Dimensions of Emerging Adulthood— A well-known instrument called The Inventory of Dimensions of Emerging Adulthood had been used in cultures such as Argentina [8], Israel [9], and USA [3], [10]. Therefore, the purpose of this study is to adapt the Inventory of Dimensions of Emerging Adulthood to Turkish culture in order to use for emerging adulthood studies in Turkey. The short description of the scale may be helpful. The IDEA is basically an instrument determining dimensions of emerging adulthood based on Reifman, Arnett and Colwell’s [23] framework. The respondents are presented points their lives representing emerging adulthood. The subjects are asked to think about “this time in your life” as “the present time, plus the last few years that have gone by, and the next few years to come, as you see them.” The highest possible score is 124 and the lowest is 31. In Reifman, Arnett and Colwell’s study [23] factor analysis revealed six subscales. Five of the subscales are proposed for representing emerging adulthood theory and only one is just the opposite of emerging adulthood framework which is “other focused”. Subscales of The IDEA are named as identity explorations, experimentation/possibilities, negativity/instability, self-focused, and feeling in between and other-focused. For all subscales, higher scores represent greater amounts of the construct in question. “Is this period of your life a...” followed by 31 items (e.g., “time of confusion?”, “time of being not sure whether you have reached full adulthood?”). Individuals indicate their degree of agreement (strongly disagree [1], somewhat disagree [2], somewhat agree [3], strongly agree [4]) with these self-characterizations [23].

II. METHOD

A. Study Design and Procedure

This study aims to adapt the IDEA to Turkish culture. Analyses presented in this article employed administration to translated IDEA to a Turkish group. Regarding validity, exploratory factor analysis and principal component analysis were conducted. In addition, cross-language validity was provided. The original scale was translated to Turkish and the translated scale to Turkish was translated to English by a group of specialists who were highly competent in English language. The final form of the scale was administered to volunteer participants in their classes at universities.

For reliability test-retest reliability was obtained, alpha coefficient, and Spearman-Brown value for split-half reliability were provided. The test-retest reliability was also conducted in three weeks intervals. The IDEA was administered to another group of university students who voluntarily agreed to participate. Respondents were asked put their initials in a corner of the questionnaire sheet. Those scales at least one missing item weren’t used. 46 participants were included in the test-retest reliability of the IDEA. SPSS 13.0 pocket programme was used to analyse data. In analyzing the data, factor analysis and reliability analysis were made.
B. Participants

Scales were administered to participants and a few sheets were dropped and finally 296 sheets were used. Of the participants, 42.9 percent was male and 57.1 percent was female. Age range was 15 to 34 years (25 percent was between 15–18 years, 64.9 percent was between 19–26 years and 10.1 percent was between 27–34 years), mean age of the group was 24.2 years. Participants in factor analysis study were 296 volunteer students at two universities in Ankara, Turkey. Students were drawn by various departments in both universities. Participants were high school students, college students, graduate students, and research assistants. A group of relatively older people were recruited from two hospitals working as doctors. All respondents were residing in Ankara, the capital. Participants in test-retest study were 46 volunteer students at two universities in Ankara. Since the age range had to be wide (15–34) different age group of respondents were included in the study. Young people who were not students could not be included in the group which may be considered as one of the limitations of the study. So the whole group are either students or people who completed their education and working at the hospital as professionals.

III. RESULTS

Data analyses and results are presented in two sections; validity and reliability.

A. Validity: The validity of language and structure fundamentally used in scale adaptation study were carried out for the validity study of the scale. The process has been explained below.

Cross-Language Validity— The following procedures were carried out during the process of the adaptation of The IDEA. A group of researchers translated The IDEA into Turkish and then back translated it into English. Both the translation into Turkish and back translation were than reviwed by a group of researchers who were fluent in English at Ankara University. It was accepted that the scale’s Turkish form obtained by getting the reference of specialist view and the English form expressed the same meaning and the scale’s language validity was provided with the help of specialist view.

Construct Validity— Factor analysis was carried out in order to determine structure validity.

### TABLE 1

<table>
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<tr>
<th>THE PARTICIPANTS’ CHARACTERISTICS: FACTOR ANALYSIS STUDY (N=296)</th>
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Factor Analysis: Reifman, Arnett ve Colwell [23] determined the dimensions of emerging adulthood and developed a scale measuring emerging adulthood period. Researchers who wants to work on emerging adulthood period in another culture have been able to use this scale. However, the researchers wanting to use this scale in their own culture have to do factor analysis study due to two basic reasons. The first one of these, emerging adulthood changes from culture to culture and according to subcultures in a country [3] – [4]. The second one is that a scale which is reliable and valid in a culture may not possibly be reliable and valid in another culture. For these reasons, factor analysis was carried out after providing language validity. Therefore, factor analysis was used to explore construct validity in this research. Exploratory factor analysis revealed three subscales, that are primary to emerging adulthood theory (negativity/instability, identity explorations/feeling in-between and experimentation/self-focused). Factors (subscales), Eigenvalues, variances of subscales and cumulative variances of subscales were shown in Table 2.

In factor analysis study, the 31 IDEA items that had been administered, were subjected to a principal components analysis, followed by varimax rotation. First of all, Kaiser-Meyer-Olkin (KMO) test which gives an idea about appropriation of sample’s factor analysis was carried out. In the analysis, KMO value was found as .84. This KMO value has shown that this scale is appropriate for factor analysis. Based on the KMO criterion, 5 factors were retained based on Eigenvalues > 1. After Principal Components Analysis scored that scale was formed in a structure with 5 factors and total variance explained as 50.08. Overlapping items were removed from the scale and factor analysis was conducted again. As a result of the Principle Components Analysis, it was found that the scale had a three-factored structure and total variance it explained was 44.81.

Though one could certainly argue for retaining fewer than 3 factors, the rotated 3 factors solution provided a largely interpretable pattern. In this adaptation research, some items of original subscales were combined in one subscale. These factors were labeled "Identity Exploration/Feeling in Between, Experimentation/Self-Focused and Negativity/Instability". Factor loadings (each item on its designated factor) are shown in Table 3, along with other psychometric information. In the factor analysis carried out the items belonging to the subscale “Others-Focused” in the original scale were left out from the scale as their item loading values were low. Therefore, this scale consists of the items suitable for the emerging adulthood characteristics and getting a higher point from the scale means that you are in emerging adulthood period. Exploratory factor analysis results were shown in Table 2.

Virtually all the initial loadings were greater than .36, with some as high as .69 and all the extraction loadings were greater than .42, with some as high as .82. As a result of factor analysis, 11 items didn’t work (1, 4, 5, 7, 10, 13, 14, 18, 25, 29 and 31) and they were dropped in the IDEA. Factor analysis shows that the third item of scale has to score opposite.
questions of the second factor (Identity Exploration-Feeling in Self-Focused), the highest correlations were found in the questions of the third factor (Experimentation-adequate as item distinction. The lowest correlations were coefficients which were statistically significant were found in Table 4. Correlation correlations of the items were calculated and shown in Table 4.

B. Reliability: First of all, the item analysis was carried out and item characteristics were determined. Total points and correlations of the items were calculated and shown in Table 4. Item-scale correlations change from 0.36 to 0.65. Correlation coefficients which were statistically significant were found adequate as item distinction. The lowest correlations were found in the questions of the third factor (Experimentation-Self-Focused), the highest correlations were found in the questions of the second factor (Identity Exploration-Feeling in

As a result of the analysis, the first factor was called as Negativity/ Instability (Items; 2, 3, 4, 5, 6, 10, 12); because it included the items about the characteristics of negativity and instability; the second factor was called as “Exploration/Feeling in between (Items; 7, 16, 17, 18, 19, 20)” because it included the items about some basic characteristics such as finding who you are and feeling yourself in a transition period of emerging adulthood. Finally, the third factor was called as “Experimentation/ Self focused (Items; 1, 8, 9, 11, 13, 14, 15)” as it included the items about the basic characteristics such as individual’s focusing on himself and his own life, recognising new things, experimentation and exploration. The lowest point to be taken from the scale is 20, the highest point is 80. Alpha coefficients of all factors, means and standard deviations were shown in Table 3.

For reliability, test-retest reliability, Spearman-Brown and reliability coefficients (Cronbach α) were conducted. The first one of these is test-retest method. After it was applied to fifty participants at Hacettepe University with three- week intervals, those who left at least one item empty were left out and test-retest reliability coefficients which were calculated on 46 participant were found for the first factor of scale as 0.78, for the second factor of scale as 0.76, for the third factor of scale as 0.82, and for total of the scale as 0.81. This result has shown that between the scale’s points obtained in different times have a high consistency. In addition, as a second method, Cronbach Alpha Coefficient which gives the inner consistency of the items consisting of the scale was calculated. Reliability coefficient of the scale (Cronbach α) was found as 0.69. Spearman-Brown reliability coefficient was found for the first half of scale 0.58, for the second half of scale 0.65 and for total of the scale as 0.69. The strength of the 3 identified factors is further evidence from the high reliabilities of the subscales. In three subscales, items were assigned to subscales other than the ones on which they had the highest absolute factor loadings. As a result, with test-retest method, both Spearman- Brown and innerconsistency coefficient were found as high and for this reason, it was accepted that The IDEA was reliable. Correlations between the factors of TV-IDEA are shown below.

As shown Table 4, correlations among factors and total score, and also correlations among factors are significant (p<.01). After all of these operations, “The Turkish Version of the IDEA” with 20 items was obtained. In sum, validity and reliability studies of IDEA indicated that this scale can use in Turkish culture.
IV. DISCUSSION

Dimensions of Emerging Adulthood in Turkey—Cultural context for the dimensions of emerging adulthood is outlined. Emerging adulthood seems to exist in various countries of the world. In order to study emerging adulthood in Turkey, a basic instrument was aimed to be adapted for Turkish culture. For this aim, firstly Cross-Language validity was provided, and the instrument was administered to a group of people ages 15–34. Reliability and validity studies showed that the instrument is reliable and valid. Obtaining 3 factors based on exploratory factor analysis while former study in USA had found 5 factors might be attributed to cultural characteristic of the present group. Identity exploration and Feeling in between, and Experimentation and Self-focused factors were found as one factors in this study.

Emerging adulthood is a period includes confusion, negativity and instability. Emerging adults who leave their parents, try to establish a new way of life, try new relationships and then another one, experience new things such as alcohol and drug, focus on their lives. Therefore, the first subscale was called as “Negativity-Instability (Items: 2, 3, 4, 5, 6, 10 and 12)" because it includes some items relating to characteristics of emerging adulthood such as stressed out, negativity and instability. Like other industrialized or developing countries, negativity-instability is one of the dimensions of emerging adulthood in Turkey.

Adolescence is a biological and social transition period that is critical for establishing developmental trajectories relevant to identity development [24] – [25]. Identity exploration is basically examined into 3 fields; love, work, and world view [3] – [4]. Besides, emerging adulthood is the years that the person feels himself in a transition period between adolescence and adulthood. These two characteristics basically seem to be different from each other and in the original scale the items related to these two characteristics were gathered in two different factors. Although in original scale "Identity Exploration" and “Feeling in-between” subscale (e.g., “being not sure whether you have reached full adulthood”) were independent subscales, but some of their items were combined as one subscale in Turkish version of the IDEA. In the Turkish group "Identity Exploration" and “Feeling in Between” might have perceived and experienced together by the participants. Therefore, the second subscale was called as “Identity Exploration-Feeling in Between (Items: 7, 16, 17, 18, 19 and 20)" because it includes some items relating to characteristics of emerging adulthood such as feeling in-between adolescence and young adulthood and identity exploration. This situation explains why identity exploration and feeling in between work together in same structure in Turkey. In Turkey, numerous studies not from the emerging adulthood perspective, focused on the following: work experiences starting at the ages corresponding emerging adulthood period not earlier [26], [16], [27], [28], [29]; love and dating experiences show different characteristics between the emerging adulthood and adolescence [30], [31], [32], [33], [28], [34]; and difference in the world view [30], [35], [36], [37], [38], [39], [40], [41], [28] during the university education apart from their parents’ world view. According to these studies, love, work and world view experiences are increasing and being concentrated during the college years. Therefore, earlier studies explained above and the results of this study, it can be said that identity exploration, and feeling in between are the major dimensions of emerging adulthood in Turkey.

Experimentation and self focusing are the two basic characteristics of emerging adulthood. Individuals, by focusing on themselves, have been living some experiences that they have never passed through previously. These experiments let them focus on themselves more. This is a process cherishing itself. Towards the end of the period, these characteristics leave their places to stable life structures as adults. Self–focusing means that an individual makes his own decisions even the smallest ones in his life or has to make up his mind. In industrialized societies these two characteristics are related to each other but they are different characteristics. However, in Turkish culture, the situation is a little bit different. This study has shown that these two characteristics have been perceived as one structure in this culture. Perhaps, the main reason of this is that in this culture there is always somebody to consult when they are making decisions in every period of their lives. For instance, it is not necessary for adolescents to focus on themselves, because there is always somebody who can give advise and decide instead of themselves [14] – [15]. In addition, adolescents are having support from others for even a simple decision. This causes the restriction of experimentation by the adults because, dependency and protection are the factors supported by the community or culture [14] – [15]. Emerging adults have their first important relationships, start living another place other than their parents’ houses, try temporary jobs and by the help of these experiences they focus on themselves. Because of these, “Experimentation” and “Self-Focused” were combined as one subscale in Turkish version of the scale though they were independent subscales in original scale. Therefore, the third subscale was called as “Experimentation-Self-Focused (Items: 1, 8, 9, 11, 13, 14 and 15)”. It includes some items relating to characteristics of emerging adulthood such as self-focused, values emphasizing independence, individualism and self-expression.

Marriage and having children are important factors on taking the responsibilities for others [4]. In Western cultures, while other-focused (e.g. hours of paid employment, projected amount of education needed for one’s desired occupation) generally starts with marriage [42], [43], other-focused experiences seem to persist at all life period, not start with marriage in Turkish culture. The Turkish society had been known as a collectivist culture and parental values such as obedience and conformity were emphasised [14]. In Turkish culture, individuals are bringing up starting form their childhood with having the responsibilities for others [15]. On the other hand, Turkish people always find somebody to tell...
what to do which results in postponing adult responsibilities for the person’s own life. Therefore, in Turkish society, other-focusing is a characteristic which can exists each period of life, not at specific periods such as adolescence. In original version of The IDEA, a subscale representing “Other-focused” (e.g., “responsibility for others,” “commitment to others”) is included, although not part of main feature of emerging adulthood [23]. It can be said that the “other-focused” subscale didn’t work in Turkish version of the scale because of collectivistic effect of Turkish culture.

Perhaps another reason why this subscale didn’t work is that in Turkey there are both broad and narrow socialization. Arnett [44], proposed concepts of broad and narrow socialization in social development. Narrow socialization characterizes pre-industrialized societies referring to the restriction of life course patterns to a narrowly defined range. Arnett and Taber argue that this distinction is crucial for understanding the transition to adulthood according to cognitive, emotional, and behavioral trajectories. Broad socialization which characterizes large segments of the contemporary West, including Europe, Canada, and the United States, refering to the encouragement of multiple routes through the life course, consistent with values emphasizing independence, individualism, and self-expression. According to Arnett and Taber [45], the contrast between the traditional conception of adulthood and “emerging adulthood” reflects the distinction between broad and narrow socialization. Turkey has experienced various intensive social and economic changes in the 20th century. Demographic changes took place within the family or they are somehow related to the family composition. For instance, in most of the social, economic and cultural processes rather than the individual, families are considered as a relevant decision making unit. Various new forms of residence have emerged as an alternative to traditional living arrangements. The major ones may be summarized as follows: Increasing trend of single living, single parent families, diverse parental home leaving patterns, late marriages, and increasing divorce etc. The size and the structure of the population have been exposed to a range of transitions along with alterations in the society. On the other hand, it is possible to assert more straightforwardly that a composite effect of modernization, psychological outcomes

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