

Literary Curiosity Scale for Secondary Education Students: A Scale Development Study

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ABSTRACT

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This study is an attitude scale development study that reveals high school students (9th, 10th, 11th grades) literary curiosity. It is thought that students with high literary curiosity have a reading culture. Reading culture is a reading level reached by transforming reading into a habit and critical reading skill. The scale created for this purpose is a 5-point Likert-type scale consisting of 30 items. The scales pilot study was conducted on 522 high school students in the fall semester of the 2018-2019 academic year. Exploratory factor analysis was performed to assess the construct validity of the scale. A relationship was found between the variables in the factor analysis of the items (KMO=0.955>0.60). This size was sufficient for factors analysis. As a result of the factor analysis, the variables were gathered under four factors with a total explained variance of 52.664%. The Cronbach's Alpha (α) internal consistency coefficient for the scale items was found to be 0.945. According to the scale and test-retest findings, the scale scores differed in the bottom 27% and top 27% groups. Therefore, the literary curiosity scale was found out to be a valid and reliable instrument considering the alpha for reliability, the explained variance value, and the factor loads.

Keywords: Literary curiosity, literary curiosity scale, curiosity, attitude, secondary education (high school) students

1. Introduction

Learning begins with curiosity. Recognising student's curiosity and carrying out education processes and constructing education systems accordingly is a global necessity. To guide students, knowing their levels of knowledge and curiosity are important. Curious students ask questions and seek answers; they feel the need to search and investigate. Although curiosity does not result in a certain way of behaviour, it leads to learning and raises student's awareness.

The relationship between the concept of attitude and the concept of curiosity is important in terms of success. Besides showing the individuals' feelings for or against various groups, ideas, or objects, attitudes also show their tendencies to accept or reject them (Gay & Airasian, 2000). The student who desires to know, wonders, searches, and starts to learn through the process. Kilmer and Hofman (1995) consider the concept of science as wondering about the world, problem-solving, and the process of understanding how the world works. Hence, it can be suggested that attitudes are one of the significant issues in gaining habits. When education is considered the process of providing individuals with upper-level thinking skills and effective features such as interest, attitude, values, and fundamental knowledge, it can be asserted that literature is an important and concrete tool in fulfilling these purposes of education (Karakuş, 2005). In line with the general objectives of the

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Turkish National Education and national and sentimental values, upper level thinking skills can also be provided at schools through literary texts (Arslan & Şimşek, 2018, p. 111).

Accordingly, in her study, Kuzu (2013, p. 67) suggests that teachers should show the books they are reading to their students, give brief information about the books they benefit from, and make recommendations. Furthermore, Kuzu (2013, p. 67) has indicated that students' reading attitudes will be improved if administrators and teachers can be inspiring by quoting such works and be a model for students when they address them in class, meetings, or other occasions.

The age we live in can be defined as the information age, and it is an inevitable fact that it is easier to access information. Taşkesenlioğlu (2013, p. 2) points out that this situation does not devalue reading; on the contrary, it sets the ground for considering it not merely as a way to obtain information. Taşkesenlioğlu (ibid.) also emphasises that individuals should gain the habit of reading which is the basis for education to keep up with the pace of the age and have an important position in society. Reading shapes individuals' behaviours and relationships with others; enriches their inner worlds; widens their point of view; makes them look around in an unprejudiced way; makes them free to think and create and gain the habit of evaluation; develops their language skills; and increases their level of taste (Koç & Müftüoğlu, 2008, p. 62).

In his study on secondary education students' reading habits, Taşkesenlioğlu (2013, p. 3) has found that a considerable part of the students has a low reading culture (reading culture is highly related to the education levels of the parents of the student); they mostly read for their courses; and that the reading rate is lower for the 10th and 11th-grade students compared to the 9th-grade students who have just started high school and the 12th-grade students who are about to graduate. This study, which was conducted in 2013, has shown that student's background is not enough to reach the literary curiosity level.

In their study, Uzun and Hüküm (2014, p. 78) state that in today's world, literature is not exactly the subject matter of any discipline, and it is a field of art that is involved in different disciplines, which involves a great deal of information. Additionally, Uzun and Hüküm (ibid.) indicates that literature is a field of art accompanying individuals' problem of existence on earth. Humans' process of making sense of themselves and the world does not have a structure that progresses merely through science. In this respect, it should also be added that literature is a field of the education of emotions.

The fundamental driving force behind the formation of reading culture is literary works; therefore, it is important to reveal students' perceptions towards literary works. However, the publications considered as course books do not have a purpose of developing the consciousness of existing with aesthetic pleasure or developing language consciousness in people (Uzun & Hüküm, 2014, p. 80). Furthermore, it should be remembered that such publications within the scope of literary works are read as a consequence of necessity rather than choice aiming at pleasure and gaining the habit of reading.

Additionally, in their study concerning the adaptation and orientation processes of 9th-grade high school students, Çeçen and Deniz (2015, p. 204) have also demonstrated that teachers and friends negatively impact their academic achievements and attitudes towards reading. They have concluded that the 10th-grade students' attitudes towards reading are low as they are still under the influence of adolescence and their education fields are not certain. Furthermore, it has been observed that students with the highest reading attitude are the 11th-grade students. Students who have overcome the negative effects of adolescence; determined their education fields; got used to their schools, teachers, and friends do not have university exam anxiety. It is evident that exam anxiety and psychological changes depending on age negatively impact reading habit and reading culture, which constitutes the ground for literary curiosity.

Upon reviewing the related literature, Arslan and Şimşek (2018)'s study concerning the development of the scale for secondary education students' attitudes towards the Turkish language and literature was the closest study to the present study. This scale consisted of 28 items and was conducted on 171 students. Therefore, it was thought that it would be helpful to first identify students' attitudes towards the course at the beginning of the Turkish language and literature education in secondary education institutions. In this way, the students with negative attitudes would be identified, and they would be provided with information, skills, and values necessary for a positive change in a planned way. Moreover, such a study can also support higher-level outcomes within a shorter time frame (Arslan & Şimşek, 2018, p. 111).

Similarly, Can (2016) conducted a 22-item attitude scale development study concerning secondary education students' participation in Turkish language and literature. The purpose of this study was to develop a scale to reveal the attitudes of secondary education students (9th, 10th, and 11th grades) towards their curiosity and interest in literature (literary world).

Consequently, from the studies reviewed above, there was a necessity to develop a scale concerning the topic. For this purpose, a study has been carried out to develop a literary curiosity scale for secondary education students. Even though the pilot study was conducted in three different high schools in the 2018-2019 academic year, the scale can also be applied to secondary school and university students. Additionally, Turkish language and literature teachers can also use the scale to measure students' attitudes towards the course, and academics could use it in scientific studies.

As a result of the literature review, no studies have been found concerning curiosity in literature or literary curiosity. Therefore, identifying students' literary curiosity levels will particularly guide in preparing the course content for Turkish language and literature courses and other general courses.

2. Method

This study is an attitude scale development study carried out to reveal high school students' literary curiosity. The preliminary survey for the exploratory factor analysis of the scale was conducted on 522 students studying in 9th, 10th, and 11th grades in three different secondary education institutions in Istanbul during the fall semester of the 2018-2019 academic year. Comrey and Lee (1992) emphasised that a sample consisting of 500 people is "very good" for factor analysis.

| Groups | Frequency (n) | Percentage (%) |
|--------------------------------|---------------|----------------|
| Gender | · · · · | |
| Female | 187 | 35.8 |
| Male | 335 | 64.2 |
| Class | Class | |
| 9 | 222 | 42.5 |
| 10 | 138 | 26.4 |
| 11 | 162 | 31.0 |
| Socio-economic Level | | |
| Very low | 7 | 1.3 |
| Low | 34 | 6.5 |
| Middle | 402 | 77.0 |
| High | 70 | 13.4 |
| Very high | 9 | 1.7 |
| Mothers Education Level | | |
| Primary school and below | 183 | 35.1 |
| Secondary school | 210 | 40.2 |
| High school | 118 | 22.6 |
| Associate degree | 4 | 0.8 |
| Undergraduate degree and above | 7 | 1.3 |
| Fathers Education Level | | |
| Primary school and below | 129 | 24.7 |
| Secondary school | 229 | 43.9 |
| High school | 139 | 26.6 |
| Associate degree | 10 | 1.9 |
| Undergraduate degree and above | 15 | 2.9 |

Table 1. Exploratory Factor Analysis Study Group

When the students are examined, the distribution is as follows: in terms of gender, 187 (35.8%) are female, 335 (64.2%) are male; in terms of class level, 222 (42.5%) are 9th, 138 (26.4%) are 10th, 162 (31.0%) are 11th grade; in terms of socioeconomic levels, 7 (1.3%) have very low, 34 (6.5%) have low, 402 (77.0%) have middle, 70 (13.4%) have high, and 9 (1.7%) have a very high socioeconomic level.

When the students' mothers' levels of education are examined, 183 (35.1%) are primary school (or below) graduates, 210 (40.2%) are secondary school graduates, 118 (22.6%) are high school graduates, 4 (0.8%) have

an associate degree, and 7 (1.3%) have an undergraduate degree or above. The distribution in terms of father education level is as follows: 129 (24.7%) are primary school (or below) graduates, 229 (43.9%) are secondary school graduates, 139 (26.6%) are high school graduates, 10 (1.9%) have an associate degree, and 15 (2.9%) have an undergraduate degree or above.

The preliminary survey for the confirmatory factor analysis of the scale was conducted on 465 students studying in 9th, 10th, and 11th grades in three different secondary education institutions in Istanbul during the fall semester of the 2019-2020 academic year.

| Groups | Frequency (n) | Percentage (%) |
|--------------------------|---------------|----------------|
| Gender | | |
| Female | 170 | 36.6 |
| Male | 295 | 63.4 |
| Class | | |
| 9 | 191 | 41.1 |
| 10 | 112 | 24.1 |
| 11 | 162 | 34.8 |
| Socio-economic Level | | |
| Low | 37 | 8.0 |
| Middle | 362 | 77.8 |
| High | 66 | 14.2 |
| Mothers Education Level | | |
| Primary school and below | 165 | 35.5 |
| Secondary school | 185 | 39.8 |
| High school and above | 115 | 24.7 |
| Fathers Education Level | | |
| Primary school and below | 116 | 24.9 |
| Secondary school | 203 | 43.7 |
| High school and above | 146 | 31.4 |

Table 2. Confirmatory Factor Analysis Study Group

When the students are examined, the distribution is as follows: in terms of gender, 170 (36.6%) are female, 295 (63.4%) are male; in terms of class level, 191 (41.1%) are 9th, 112 (24.1%) are 10th, 162 (34.8%) are 11th grade; in terms of socioeconomic levels, 37 (8.0%) have low, 362 (77.8%) have middle, and 66 (14.2%) have a high socioeconomic level.

When the students' mothers' levels of education are examined, 165 (35.5%) are primary school (or below) graduates, 185 (39.8%) are secondary school graduates, 115 (24.7%) are high school or above graduates. On the other hand, the distribution in terms of the fathers' education level is as follows: 116 (24.9%) are primary school (or below) graduates, 203 (43.7%) are secondary school graduates, and 146 (31.4%) are high school or above graduates.

The items used in the scale were analysed in terms of content and clarity by three Turkish language and literature teachers and two experts of curriculum and instruction, and revisions were made. Each statement in the scale was designed on a 5-point Likert-type scale, including the options "never", "rarely", "sometimes", "often", and "always".

2.1. Statistical Analysis of the Data

The data obtained in the research were analysed by using SPSS (Statistical Package for Social Sciences) for Windows 22.0 and AMOS software. Kurtosis and skewness analysis was performed to determine the normal distribution of the scale items.

In the related literature, the results concerning the kurtosis and skewness values of variables are considered normal distribution when they are between +1.5 and -1.5 (Tabachnik & Fidell, 2013) and +2.0 and -2.0 (George & Mallery, 2010).

| | Kurtosis | Skewness | |
|-----|----------|----------|--|
| M1 | 891 | .401 | |
| M2 | 491 | .301 | |
| M3 | .142 | .989 | |
| M4 | 317 | .706 | |
| M5 | 828 | .205 | |
| M6 | 934 | 012 | |
| M7 | 784 | .053 | |
| M8 | -1.103 | .053 | |
| M9 | 586 | .591 | |
| M10 | 423 | .543 | |
| M11 | 275 | .682 | |
| M12 | 635 | .477 | |
| M13 | 657 | .416 | |
| M14 | 603 | .592 | |
| M15 | 116 | .926 | |
| M16 | -1.095 | .188 | |
| M17 | 358 | .659 | |
| M18 | 560 | .574 | |
| M19 | -1.134 | .244 | |
| M20 | 648 | .599 | |
| M21 | 529 | .748 | |
| M22 | -1.041 | .315 | |
| M23 | -1.292 | .181 | |
| M24 | -1.114 | .144 | |
| M25 | 781 | .383 | |
| M26 | 406 | .643 | |
| M27 | 159 | .891 | |
| M28 | -1.081 | .267 | |
| M29 | -1.172 | .101 | |
| M30 | -1.147 | .316 | |

Table 3. Normal Distribution

In evaluating the data, reliability analysis, item analysis, exploratory factor analysis, confirmatory factor analysis, independent sample t-test, and dependent group t-test were used.

3. Findings

In this part, the data analysis findings gathered from the participating student's scales are presented to solve the research problem. Explanations and comments were made based on the findings.

3.1. Reliability Analysis

Reliability analysis was applied in the study to determine the internal consistency of the literary curiosity scale. Reliability analysis shows whether the scale items are consistent with each other and the overall scale. At the same time, it determines whether the participants understood the items in the scale the same way. Thus, reliability is the consistency among the responses the participants give for the items in the scale (Büyüköztürk, 2011, p. 169). Cronbach's Alpha coefficient commonly determines the reliability of the scale (internal consistency) in the literature. The evaluation criteria in the evaluation of Cronbach's Alpha coefficient are as follows: "If $0.00 \le \alpha < 0.40$ then the scale is not reliable", "If $0.40 \le \alpha < 0.60$ then the scale has low reliability", "If $0.60 \le \alpha < 0.80$ then the scale is rather reliable", "If $0.80 \le \alpha < 1.00$ then the scale is highly reliable" (Özdamar, 2004).

| Table 4. Scale Items |
|--|
| M1 There are authors and poets that I admire. |
| M2 I am curious about the events or situations that take place in literary works. |
| M3 I also research an author's or poet's other works that I have not read. |
| M4 I have an ongoing plan concerning the works I will read. |
| M5 I think literary works are enjoyable. |
| M6 I consider myself a good reader. |
| M7 I consider literary culture among my competencies (desired maturity) and my qualifications (being sufficient). |
| M8 I select the works I will read among good examples of the genre in terms of language, narration, and content. |
| M9 I research the lives of literary authors. |
| M10 I question the place of literary texts in history. |
| M11 I try to learn about the social, political features that influenced the literary world in the period that the text was |
| written. |
| M12 An author's literary personality and understanding of art are among the things I should know. |
| M13 I pay attention to the distinctive features of literary periods. |
| M14 I know the prominent authors of literary genres. |
| M15 I try to create literary works. |
| M16 I like spending time in the library. |
| M17 I look for the presence of national and universal values in literary texts. |
| M18 I spend time understanding literary art activities. |
| M19 I work and try to develop my writing skill. |
| M20 I follow current books and literary journals. |
| M21 I try not to miss book fairs and autograph sessions. |
| M22 The expression of feelings in the works arouses curiosity in me. |
| M23 I cannot stop reading suspenseful works. |
| M24 I can easily talk about the books I read in social environments. |
| M25 I like to analyse literary works and express my opinions about them. |
| M26 I give examples from literary works while I am talking. |
| M27 I attend literary interviews and conferences. |
| M28 I am interested in different figures of speech. |
| M29 I am careful about punctuation rules while I am trying to write. |
| M30 While reading a book, I use a dictionary for the words I do not know. |

The reliability analysis for the literary curiosity scale was conducted, and the reliability of 30 items was found to be Alpha=0.945. The item analysis concerning the effect of items on the internal consistency is presented below.

Table 5. Literary Curiosity Scale Item Analysis

| | Scale mean if item | Scale variance if item | Corrected item – total | Cronbach's alpha if |
|-----|--------------------|------------------------|------------------------|---------------------|
| | deleted | deleted | correlation | item deleted |
| M1 | 73.39 | 503.174 | .593 | .943 |
| M2 | 73.42 | 508.935 | .592 | .943 |
| M3 | 74.02 | 505.708 | .612 | .943 |
| M4 | 73.90 | 508.382 | .572 | .943 |
| M5 | 73.27 | 505.036 | .608 | .943 |
| M6 | 73.04 | 512.459 | .461 | .944 |
| M7 | 73.20 | 510.213 | .524 | .943 |
| M8 | 73.20 | 504.258 | .571 | .943 |
| M9 | 73.81 | 504.810 | .632 | .942 |
| M10 | 73.75 | 506.619 | .616 | .943 |
| M11 | 73.84 | 506.446 | .617 | .943 |
| M12 | 73.59 | 501.535 | .680 | .942 |
| M13 | 73.68 | 505.314 | .644 | .942 |
| M14 | 73.78 | 505.244 | .608 | .943 |

| M15 | 74.03 | 505.803 | .605 | .943 | |
|-----|-------|---------|------|------|--|
| M16 | 73.32 | 504.183 | .570 | .943 | |
| M17 | 73.86 | 504.837 | .652 | .942 | |
| M18 | 73.76 | 503.234 | .661 | .942 | |
| M19 | 73.37 | 503.221 | .571 | .943 | |
| M20 | 73.79 | 503.782 | .623 | .942 | |
| M21 | 73.92 | 509.928 | .507 | .944 | |
| M22 | 73.39 | 500.696 | .623 | .942 | |
| M23 | 73.25 | 501.326 | .571 | .943 | |
| M24 | 73.28 | 504.879 | .549 | .943 | |
| M25 | 73.58 | 502.658 | .652 | .942 | |
| M26 | 73.85 | 507.328 | .599 | .943 | |
| M27 | 74.02 | 510.798 | .507 | .944 | |
| M28 | 73.41 | 505.969 | .532 | .943 | |
| M29 | 73.19 | 504.267 | .553 | .943 | |
| M30 | 73.40 | 505.273 | .520 | .944 | |
| | | | | | |

When the table is analysed, no item is observed to affect the scale's internal consistency negatively. The invariance of the scale scores against time was analysed by conducting a test-retest with 35 people at two weeks interval. It was observed that scale items showed consistency according to the test-retest analysis (p>0.05).

| M | Test | | Retest | Retest | | | |
|--------------|-------|-------|--------|--------|----|--------|-------|
| Measurements | Mean | Sd | Mean | Sd | п | t | р |
| M1 - T1 | 2.340 | 1.056 | 2.229 | 1.087 | 35 | 1.000 | 0.324 |
| M2 - T2 | 2.460 | 1.010 | 2.257 | 0.980 | 35 | 1.484 | 0.147 |
| M3 - T3 | 1.710 | 0.893 | 1.657 | 0.906 | 35 | 0.813 | 0.422 |
| M4 - T4 | 1.890 | 1.132 | 1.857 | 1.115 | 35 | 0.274 | 0.786 |
| M5 - T5 | 2.230 | 1.140 | 2.114 | 1.132 | 35 | 0.941 | 0.353 |
| M6 - T6 | 2.660 | 1.110 | 2.543 | 1.146 | 35 | 1.276 | 0.211 |
| M7 - T7 | 2.600 | 0.976 | 2.400 | 1.006 | 35 | 1.484 | 0.147 |
| M8 - T8 | 2.830 | 1.043 | 2.600 | 1.063 | 35 | 1.756 | 0.088 |
| M9 - T9 | 1.800 | 0.964 | 1.857 | 1.089 | 35 | -0.495 | 0.624 |
| M10 - T10 | 1.860 | 0.912 | 1.829 | 0.985 | 35 | 0.442 | 0.661 |
| M11 - T11 | 1.660 | 0.765 | 1.629 | 0.808 | 35 | 0.298 | 0.768 |
| M12 - T12 | 2.000 | 0.907 | 1.914 | 0.919 | 35 | 0.770 | 0.447 |
| M13 - T13 | 1.890 | 1.022 | 2.000 | 1.029 | 35 | -1.675 | 0.103 |
| M14 - T14 | 1.830 | 0.891 | 1.857 | 0.912 | 35 | -0.298 | 0.768 |
| M15 - T15 | 1.690 | 0.963 | 1.743 | 0.980 | 35 | -0.813 | 0.422 |
| M16 - T16 | 2.260 | 1.172 | 2.114 | 1.207 | 35 | 1.537 | 0.134 |
| M17 - T17 | 1.710 | 0.957 | 1.857 | 0.974 | 35 | -1.712 | 0.096 |
| M18 - T18 | 1.970 | 1.043 | 2.114 | 1.022 | 35 | -1.712 | 0.096 |
| M19 - T19 | 2.170 | 1.071 | 2.229 | 1.060 | 35 | -1.000 | 0.324 |
| M20 - T20 | 1.570 | 0.739 | 1.629 | 0.770 | 35 | -0.813 | 0.422 |
| M21 - T21 | 1.890 | 1.078 | 1.800 | 0.994 | 35 | 0.683 | 0.499 |
| M22 - T22 | 2.110 | 1.301 | 2.000 | 1.237 | 35 | 1.160 | 0.254 |
| M23 - T23 | 2.140 | 1.141 | 2.143 | 1.141 | 35 | 1.974 | 0.057 |
| M24 - T24 | 2.540 | 1.094 | 2.371 | 1.165 | 35 | 0.298 | 0.768 |
| M25 - T25 | 2.140 | 1.089 | 2.114 | 1.132 | 35 | 1.000 | 0.324 |
| M26 - T26 | 2.030 | 1.124 | 1.971 | 1.124 | 35 | 1.000 | 0.324 |
| M27 - T27 | 1.890 | 1.051 | 1.800 | 1.052 | 35 | 0.349 | 0.729 |
| M28 - T28 | 2.200 | 1.106 | 2.143 | 1.004 | 35 | 1.030 | 0.310 |
| M29 - T29 | 2.230 | 1.190 | 2.057 | 0.998 | 35 | 0.813 | 0.422 |
| M30 - T30 | 2.090 | 0.919 | 2.029 | 0.954 | 35 | 0.000 | 0.000 |

Table 6. Test-Retest Analysis

3.2. Validity Analysis

Exploratory factor analysis was performed to assess the construct validity of the scale. As a result of the Bartlett test (X²=7151,655; df=435; p=0.000<0.05), a relationship was found between the variables included in the factor analysis. As a result of the test (KMO=0.955>0,60), the sample size was sufficient for the application of factor analysis. By choosing the varimax method in applying factor analysis, the structure of the relationship between the factors was kept the same. As a result of the factor analysis, the variables were gathered under four factors with a total explained variance of 52.664%. The factor structure of the scale is presented in the table below:

| Dimension | Factor Load |
|---|-------------|
| (Eigenvalue=11.695; Explained Variance=17.417; Alpha=0.901) | |
| M15 | 0.711 |
| M17 | 0.710 |
| M11 | 0.609 |
| M10 | 0.595 |
| M27 | 0.594 |
| M18 | 0.582 |
| M21 | 0.573 |
| M13 | 0.561 |
| M20 | 0.553 |
| M9 | 0.549 |
| <u>M14</u> | 0.503 |
| M26 | 0.473 |
| (Eigenvalue=1.575; Explained Variance=13.786; Alpha=0.859) | |
| M2 | 0.742 |
| M5 | 0.622 |
| M1 | 0.606 |
| M3 | 0.591 |
| <u>M12</u> | 0.507 |
| M4 | 0.468 |
| M7 | 0.453 |
| M25 | 0.451 |
| (Eigenvalue=1.476; Explained Variance=11.182; Alpha=0.778) | |
| M16 | 0.618 |
| M23 | 0.606 |
| M6 | 0.587 |
| M8 | 0.569 |
| M19 | 0.449 |
| M24 | 0.445 |
| (Eigenvalue=1.053; Explained Variance=10.279; Alpha=0.760) | |
| M28 | 0.743 |
| M30 | 0.670 |
| M29 | 0.626 |
| M22 | 0.450 |
| Total Variance=%52.664; Overall Reliability (Alpha)=0.945 | |

Table 7. The Factor Structure of the Literary Curiosity Scale

"In determining the number of factors in the scale, highly-accelerated decreases in the eigenvalue scree plot are taken into consideration. The factors in which the decreases are horizontal are considered to have less contribution to the variance" (Ebadi, 2020, p. 93). The scree plot concerning the scale factors is presented below.

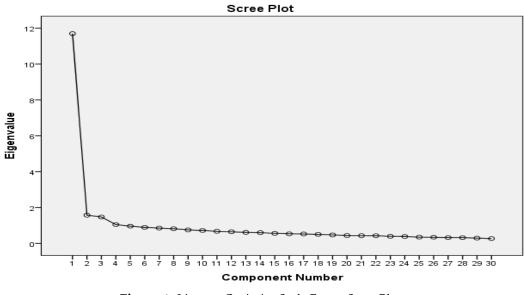


Figure 1. Literary Curiosity Scale Factor Scree Plot

In the factor scree plot, it was determined that the scale showed a breakpoint after the first factor; and thus, it was detected that the scale has a single factor structure. The exploratory factor structure of the scale was tested through confirmatory factor analysis on 465 people. The confirmatory factor analysis diagram is presented below:

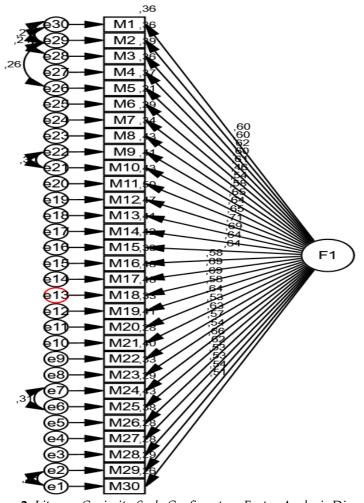


Figure 2. Literary Curiosity Scale Confirmatory Factor Analysis Diagram

The goodness of fit measures for confirmatory factor analysis is presented in the table below:

| uere er Enter ur g | f euricerry seare conjuniar | 01 y 1 110101 1 111111 y 516 1111105 1 1111 | |
|--------------------|-----------------------------|---|--------------------------|
| Index | Normal Value* | Acceptable Value ** | Literary Curiosity Scale |
| χ2/df | <2 | <5 | (1281.44/399) 3.21 |
| GFI | >0.95 | >0.90 | 0.90 |
| AGFI | >0.95 | >0.90 | 0.90 |
| CFI | >0.95 | >0.90 | 0.90 |
| RMSEA | < 0.05 | <0.08 | 0.07 |
| RMR | < 0.05 | <0.08 | 0.08 |

Table 8. Literary Curiosity Scale Confirmatory Factor Analysis Index Values

*, ** (Şimşek, 2007; Hooper & Mullen, 2008; Schumacker & Lomax, 2010; Waltz, Strcikland & Lenz 2010; Wang & Wang, 2012; Sümer, 2000; Tabachnick & Fidel, 2007).

The analysis results show that the fit statistics calculated by the confirmatory factor analysis were fit at an acceptable level with the scale's factor structure previously determined. Furthermore, the standardised factor loads, t values, and the explanatorily (R^2) value constituted of the items are presented below:

| Items | | Factor | β | Std. β | S.Error | t | р | R^2 |
|-------|---|--------|-------|--------|---------|--------|---------|-------|
| M30 | < | F1 | 1.000 | 0.512 | | | | 0.411 |
| M29 | < | F1 | 1.030 | 0.542 | 0.086 | 11.995 | p<0.001 | 0.488 |
| M28 | < | F1 | 1.000 | 0.533 | 0.104 | 9.590 | p<0.001 | 0.436 |
| M27 | < | F1 | 0.893 | 0.530 | 0.094 | 9.551 | p<0.001 | 0.442 |
| M26 | < | F1 | 1.002 | 0.620 | 0.095 | 10.536 | p<0.001 | 0.533 |
| M25 | < | F1 | 1.125 | 0.659 | 0.103 | 10.908 | p<0.001 | 0.451 |
| M24 | < | F1 | 1.011 | 0.538 | 0.105 | 9.642 | p<0.001 | 0.444 |
| M23 | < | F1 | 1.145 | 0.574 | 0.114 | 10.060 | p<0.001 | 0.469 |
| M22 | < | F1 | 1.181 | 0.631 | 0.111 | 10.641 | p<0.001 | 0.574 |
| M21 | < | F1 | 0.910 | 0.525 | 0.096 | 9.494 | p<0.001 | 0.412 |
| M20 | < | F1 | 1.112 | 0.644 | 0.103 | 10.769 | p<0.001 | 0.426 |
| M19 | < | F1 | 1.098 | 0.578 | 0.109 | 10.100 | p<0.001 | 0.500 |
| M18 | < | F1 | 1.152 | 0.694 | 0.103 | 11.222 | p<0.001 | 0.470 |
| M17 | < | F1 | 1.111 | 0.690 | 0.099 | 11.191 | p<0.001 | 0.410 |
| M16 | < | F1 | 1.066 | 0.575 | 0.106 | 10.069 | p<0.001 | 0.416 |
| M15 | < | F1 | 1.081 | 0.645 | 0.100 | 10.777 | p<0.001 | 0.569 |
| M14 | < | F1 | 1.085 | 0.640 | 0.101 | 10.734 | p<0.001 | 0.477 |
| M13 | < | F1 | 1.100 | 0.686 | 0.099 | 11.152 | p<0.001 | 0.482 |
| M12 | < | F1 | 1.196 | 0.707 | 0.106 | 11.331 | p<0.001 | 0.611 |
| M11 | < | F1 | 1.054 | 0.652 | 0.097 | 10.849 | p<0.001 | 0.415 |
| M10 | < | F1 | 1.032 | 0.642 | 0.096 | 10.745 | p<0.001 | 0.514 |
| M9 | < | F1 | 1.083 | 0.654 | 0.100 | 10.860 | p<0.001 | 0.533 |
| M8 | < | F1 | 1.070 | 0.580 | 0.106 | 10.116 | p<0.001 | 0.569 |
| M7 | < | F1 | 0.900 | 0.540 | 0.093 | 9.667 | p<0.001 | 0.547 |
| M6 | < | F1 | 0.792 | 0.457 | 0.092 | 8.619 | p<0.001 | 0.555 |
| M5 | < | F1 | 1.040 | 0.610 | 0.100 | 10.435 | p<0.001 | 0.544 |
| M4 | < | F1 | 0.977 | 0.599 | 0.095 | 10.319 | p<0.001 | 0.521 |
| M3 | < | F1 | 1.038 | 0.624 | 0.098 | 10.574 | p<0.001 | 0.533 |
| M2 | < | F1 | 0.927 | 0.600 | 0.090 | 10.333 | p<0.001 | 0.574 |
| M1 | < | F1 | 1.089 | 0.596 | 0.106 | 10.287 | p<0.001 | 0.544 |

Table 9. Literary Curiosity Scale Factor Loads and Regression Coefficients of the Items

When the standardised coefficients were analysed, it was found out that the factor loads were high, standard error values were low, **t** values were significant (p<0.001), and R^2 values were high. These results confirm the construct validity of the factor structure that was previously determined.

The discrimination of the scale and the test-retest findings are presented below:

0.000

-41.775

| | Jerences in Dollom 27 / | o - 10p 27 7 | o Test-Relest Groups | in the Literary C | Luriosity Scule | |
|--------|-------------------------|--------------|----------------------|-------------------|-----------------|----|
| Cuerra | Bottom 27% | | Top 27% | | | 10 |
| Groups | Mean | Sd | Mean | Sd | t | Р |

3.466

| Table 10. Differences in Bottom 27% - Top 27% Test-Retest Groups in the Literary C | Curiosity Scale |
|--|-----------------|
|--|-----------------|

0.334

Scale scores differed in the bottom 27% and top 27% groups (p<0.05). According to these results, it was found that the scale could make sensitive measurements to distinguish the differences.

0.422

4. Conclusion and Recommendations

Literary Curiosity

1.574

As can be seen from the literature review, there is no specific study on the relationship between secondary education and literary curiosity. The studies that have been conducted in different disciplines are generally in the context of motivation, attitude, and special interest in a topic and are limited. For instance, the Motivation for Reading Questionnaire (MRQ) designed by Wigfield and Guthrie (1997) is related to curiosity; however, a concept of motivation was not used in depth. In most of the studies, motivation is considered a significant research topic of educational psychology. On the other hand, motivation for reading is considered in terms of native language and foreign language education. However, although many studies conducted in Turkey are concerning motivation, the studies on reading motivation (Unsal Batum, 2015) and reading curiosity or literary curiosity have been limited to interest, a dimension of motivation.

In his study on literary texts and their features, Aktaş (2009, p. 197) indicates that a literary text is a completed construction that gives aesthetic pleasure to the reader and states that the themes in literary texts are common states of human life and knowledge. Moreover, literary texts include features that can be helpful for other courses as they have rich connotations and are constructed in a way that produces new meanings every time they are read (Aktaş, 2009, p. 199).

With the idea that curiosity emerges from knowledge and that interpreting them as different types of information can reveal different curiosities (Altun, 2016, p. 390), this study aimed to contribute to the buried theory process concerning history curiosity, and a history curiosity classification was made. This study pointed out that Turkish literature was not sufficient for curiosity in undergraduate students.

Arici (2008, p. 96)'s study based on interviews concerning why university students dislike reading has affirmed that eager students, who are curious about learning new things, enjoy reading. He also indicated that people feel the need to read to increase their knowledge, have a good time, be curious, get away from real life for some time, enrich their vocabulary, and develop their world of emotions and thoughts.

Únsal Batum (2015) has asserted that the feeling of curiosity is a piston that triggers the individual, which is important in being motivated for reading. In his dissertation, which included the relationship of curiosity and motivation, he argued that there are items carrying features such as self-efficacy, interest, curiosity, research, questioning, and reading culture at an individual's internal level of reading motivation (Unsal Batum, 2015, p. 4). Furthermore, Batum (2015, p. 16) has also stated that students can read a book they are not interested in because they are curious about it or for social reasons and has added that reading motivation lies behind this. Therefore, reading interest is a dimension included in being motivated for reading, and this dimension is positioned under the internal motivation title. While the studies in the field are analysed under the themes of reading motivation, reading curiosity, interest in reading, etc., it has been observed that no studies have been carried out on the literary curiosity title.

Kashdan, Rose, and Fincham (2010, p. 303) developed the curiosity and exploration inventory using five independent samples comprising two dimensions. They suggest that curiosity is related to almost every aspect of humans. They also stated that this inventory would be separated from its counterparts (regarding education and psychology), and individual differences concerning curiosity will be considered in the future.

Their study on the relationship between mathematical curiosity and learning, Renesse and Ecke (2017, p. 149) have stated that psychologists have put forward evidence showing that curiosity develops learning. Furthermore, in the light of this evidence, they have found that students become more open to learning when their curiosity about the world around them increases.

Schmitt and Lahroodi (2008) have revealed how valuable curiosity is for knowledge and argued that the feeling of curiosity creates an original desire to know, which provides motivation. In the same study, they have also added that the feeling of curiosity deepens knowledge; it is independent from our fields of interest and widens our knowledge by keeping our attention stable on objects. At the end of their study, they have concluded that curiosity makes education and research easier. The individuals' success in learning and exploration depends on their level of feeling of curiosity. Thus, the idea that curiosity is necessary for education, research, and knowledge can be possible if teachers prefer techniques that arouse curiosity.

In her master's thesis on the problems encountered in Turkish literature and language, and expression courses along with their solutions, Bayazıt (2012) has suggested that the literary texts included in the course books should be selected among the works of prominent authors (which reflect the characteristics of the genre and can arouse curiosity in students).

In this respect, in the present scale development study, the item analyses were examined, and confirmatory factor analysis was performed by examining the scale's factor structure. Additionally, the regression coefficients for the factor loads of the scale and items were presented, and the differences in the bottom 27% and top 27% groups were examined. It was found that the scale could make sensitive measurements to distinguish the differences.

The final form of this scale which was developed to reveal secondary education students' literary curiosity, consists of 30 items, and the responses are scored between 1-5. The score obtained from the scale ranges between 1 and (30*5) 150. An increase in the score indicates an increase in the level of literary curiosity. It is recommended that in academic research, the score determined in this study should be used. At the end of the study, the opinions and assistance of experts in the field (language) and Turkish language and literature teachers should be sought concerning the curiosity score.

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