



Examining the Factors Contributing to Students' Life Satisfaction

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Abstract

In this study, the authors examined the relationship between students' life satisfaction, school engagement, and confidence in the classroom. An analysis was performed of how students' life satisfaction differs according to their housing, school type, and classroom level. The multidimensional student satisfaction scale, confidence scale in the class, and school engagement scale were used to collect data from a sample of 287 high school students. In this study, Pearson correlation coefficient, path analysis, *t*-test, Welch test, and Tamhane's T2 test were used to analyze the data. Goodness-of-fit indices concerning the path analysis demonstrate how variables such as school engagement and confidence in the classroom predict students' life satisfaction, indicating that the model is acceptable. The model can sufficiently explain the relationship between the observed and implied variables ($\chi^2 = 209.69$, $df = 60$, $\chi^2/df = 3.49$, $p = 0.00$, RMSEA = .09, NFI = .92, NNFI = .93, CFI = .94, IFI = .94, RFI = .90, GFI = .88, AGFI = .82, and SRMR = .07). The results indicated that the life satisfaction of high school students decreases as the grade level increases. It was found that students who live in school dormitories have higher life satisfaction than those who reside with their families. In addition, it was found that students who study at fine arts high schools and sports high schools have higher life satisfaction than those who study at regular high schools.

Keywords

Students' Life Satisfaction, School Engagement, Confidence in the Classroom, Path Analysis.

Recently, the concept of subjective well-being has become a field of interest in positive psychology. Psychologists have shifted their attention from negative or unpleasant emotional experiences, such as depression and anxiety, to positive feelings and psychological well-being in general (Van Hoorn, 2007). Seligman and Csikszentmihalyi (2000), in their inspiring study, have described this general shift and delineated the function and merits of this approach, which they label "positive

psychology:" a science of positive subjective experience, positive individual traits, and positive institutions that promises to improve quality of life and prevent the pathologies that arise when life is barren and meaningless. Life satisfaction affects subjective well-being and is a judgmental process; it is a cognitive evaluation of the quality of life that individuals form, based on their own standards (Shin & Johnson, 1978). We can see that people who have high levels of life satisfaction

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are more successful in their relationships with people, at work, and in terms of their own physical functions. In addition, they live longer, make more money, and cope better with illnesses (Lewis, 2010). We can approach life satisfaction globally (one-dimensional) or in a single field (multidimensional). The global approach is that in which life satisfaction is measured by evaluating it overall, without focusing on any particular field ("I love life"). However, when we choose a certain field, we discuss specific aspects of life satisfaction one by one. For young people, these fields might include self, family, friends, school, and the environment.

School life satisfaction comprises students' perceptions of their relationship with school climate. In one study, a small, but significant, relationship was found between life satisfaction and relationships with other students at school (Leung & Zhang, 2000). Another study found that middle and high school students who have higher life satisfaction have positive attitudes toward their teachers and school (Gilman & Huebner, 2006). Students spend majority of their school time in classrooms. If the period spent with their teachers and other students comprises meaningful and enjoyable events, then it is probable that their attitudes toward the school in general will also be positive. Students' perceptions of the quality of the classroom environment play a decisive role in their views on school life satisfaction, as proved by scientific studies (Mok & Flynn, 2002). School engagement occurs in two ways: behavioral and emotional. The behavioral aspect involves the student attending school regularly and participating in activities. The students' sense of belonging and caring about school results requires emotional engagement (Finn, 1993).

It has been argued that parent and peer relationships, school success, and engagement influence the life satisfaction of adolescents (Proctor, Alex Linley, & Maltby, 2009). Studies of adolescent students suggest that there is a positive relationship between school success, behavioral engagement, and academic results. When a students' behavioral engagement is problematic, it can affect success levels and, ultimately, could even lead to the student dropping out of school (Alexander, Entwisle, & Horsey, 1997). In this manner, school engagement plays a significant role in influencing progression and results, including academic performance. Studies indicate that behavioral engagement is a consistent predictor of academic success and that when students feel close to school, they are more

likely to stay there (Finn, 1989). Students who feel close or emotionally attached to their schools demonstrate less problematic behavior than those who do not because they are more willing to accept school rules and make an effort to meet the expectations of teachers and peers (Hirschi, 1969; Resnick et al., 1997). A behavioral study has revealed that emotional engagement leads to a decrease in inappropriate behaviors such as misuse of alcohol and drugs, smoking, and violence (Shochet, Dadds, Ham, & Montague, 2006).

Moreover, relationships with others in the classroom influence students' life satisfaction. Schools seek to encourage students to become self-aware and to learn to act independently, take personal responsibility, improve on their talents, and become creative and flexible as part of the education process. To gain these qualities, the school and classroom atmosphere must be suitable. According to a study, students study more effectively and feel safer in a democratic and humane atmosphere (Şahin & Özbay, 1999). The school atmosphere should have three basic elements, which are present in a psychological consultancy: Consistency (e.g., how the individual is perceived by others), empathetic understanding (understanding the other person according to that person's perception, and reflecting this), and unconditional acceptance (attitudes based on loving care, free from judgment and not oriented toward personal satisfaction) (Motschnig-Pitrik & Mallich, 2004). According to a study by Elmore and Huebner (2010), there is a positive relationship between students' life satisfaction at school and the relationships they build with peers. Empathy, which is a determinant for effective communication, plays a significant role in the attitudes of students toward each other as it reduces undesirable behavior. In the studies by Kandemir and Özbay (2009), bullying was found to decrease in situations where there is an empathetic atmosphere.

Previous studies have indicated that students' life satisfaction influences their subjective well-being (Shin & Johnson, 1978) and their success in relationships with other people, their work, and their own physical functions (Lewis, 2010). Moreover, it influences their relationships with other students (Leung & Zhang, 2000) and their attitudes toward their teachers and school (Gilman & Huebner, 2006; Mok & Flynn, 2002). Furthermore, students' life satisfaction may affect their mental health, academic motivation, academic performance, peer relationships. This study extends previous studies

by assessing the relationship between students' life satisfaction and their school engagement, as well as between their life satisfaction and their confidence in the classroom. Drawing on previous studies (Elmore & Huebner, 2010; Gilman & Huebner, 2006; Leung & Zhang, 2000; Lewis, 2010; Mok & Flynn, 2002; Proctor et al., 2009; Shochet et al., 2006), we hypothesize that school engagement and confidence in the classroom can affect students' life satisfaction positively. This study examines the relationship between students' life satisfaction and school engagement as well as students' life satisfaction and classroom confidence to determine the variables affecting their relationship.

In this study, students' life satisfaction was examined in relation to their housing, type of school, and classroom level. The most important factors are school engagement, and confidence in the classroom, both of which are important for academic success and for preventing students from dropping out of school. In this study, an attempt will be made to try to answer the question of how these variables predict and/or explain students' life satisfaction.

Method

Research Model

Structural equation modeling (SEM) and inferential statistics were used in this study, and students' opinions on life satisfaction, school engagement, and confidence in the classroom were reviewed. In this context, path analysis—a new statistical technique being used increasingly to examine the comparative strength of direct and indirect relationships among variables (Lleras & Enns, 2005)—was used to examine the relationships between the variables in the study. In addition to path analysis, *t*-test, Welch test, and Tamhane's *T*2 test were used in the study.

Participants

The sample of this study comprised 287 high school students, of whom 145 (50%) attended fine arts or sports high schools and 142 (49%) attended Anatolian high schools. Within the sample, 75 (26.1%) of students were in ninth grade, 100 (34.8%) were in tenth grade, 56 (19.5%) were in eleventh grade, and 56 (19.5%) were in twelfth grade. Of these, 74 lived in student dormitories, while 213 (74.2%) lived with their families.

Instruments

Multidimensional Student Satisfaction Scale (MSSS): Huebner (1994) developed the original version of this scale and Çivitiçi (2007) adapted it for use in Turkey. Both the original and the adapted form of the scale comprised five sub-dimensions that included family, friends, school, self, and environment. The factor analysis of the scale comprised six items and five elements with a factor load between 0.34 and 0.81. The explained total variance is 44.5%. The common variance of the factors is between 0.16 and 0.69. To test the concordance validity of the scale, the authors examined it in relation to the depression scale for children. The correlation of depression scores with MSSS total scores was found to be -0.59. Cronbach's alpha was 0.79 for environment sub-scale of MSSS; 0.74 for the family sub-scale; 0.70 for the self sub-scale, 0.85 for the friend sub-scale, and 0.76 for the school sub-scale, and 0.87 in total. The test repetition reliability parameters, which were obtained by applying the scale to 78 students, two weeks apart, were 0.75 for the environment sub-dimension, 0.86 for the family sub-dimension, 0.79 for the self sub-dimension, 0.70 for the friend sub-dimension, 0.81 the for school sub-dimension, and 0.83 in total. The points obtained from the scale are high, indicating that life satisfaction is good.

Confidence Scale in the Class: Akbaş (2005) developed the scale using data obtained from 209 students (112 female, 97 male) at Kırıkkale High School during the academic year 2004–2005. The questionnaire, comprising 34 items, was a Likert-type scale with scores as “strongly agree, agree undecided, disagree, and strongly disagree.” The results of item analysis performed to determine the validity of this questionnaire highlighted three main factors: basic confidence, perception of threat, and freedom of speech. The first factor comprised 25 items, whereas the second and third factors comprised 5 and 4 items, respectively. These three factors explained 42.83% of the total variance. Cronbach's alpha was 0.92 in both applications of the questionnaire.

School Engagement Scale: Arastaman (2006) developed the scale and the sample constituted 140 students (75 female, 65 male) from three schools in Ankara city. In the factor analysis, five factors were found. The range of the factor loads for the student's internal engagement sub-scale varied between 0.48 and 0.72 and it explained 14.72% of the qualities that were to be measured; Cronbach's alpha was 0.82. The range of factor loadings in the sub-scale,

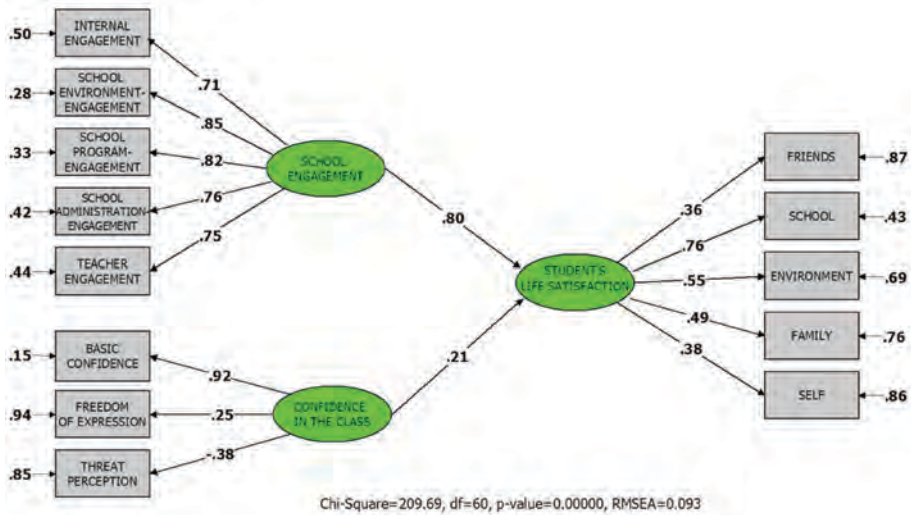


Figure 1: Path diagram of students' life satisfaction, school engagement, and confidence in the classroom.

which included the relationship between school environment and engagement, varied between 0.52 and 0.69, explaining 11.70% of the scale. Cronbach's alpha was 0.78. The range of factor loads of the sub-scale, which included the relationship between school schedule and engagement, varied between 0.61 and 0.74, explaining 9.52% of the scale. Cronbach's alpha was 0.75. The range of factor loads of the sub-scale, which included the relationship between school administration and engagement, varied between 0.45 and 0.74, explaining 8.66% of the scale. Cronbach's alpha was 0.65. The range of factor loadings for the sub-scale, which included the relationship between teacher and school engagement, varied between 0.66 and 0.77, explaining 7.94% of the scale. Cronbach's alpha was 0.92.

Process

The three scales were applied to high school students in guidance lessons. All the participants participated in the study voluntarily. The data was collected and analyzed anonymously. Before the analysis of data, 37 missing data were deleted. Path analysis was used to examine how school engagement and confidence in class can be used to predict students' life satisfaction. The maximum likelihood estimation method was also used in this analysis. Furthermore, to examine mean differences between groups, the *t*-test for independent samples and one-way ANOVA procedures were used after determining the homogeneity of variance. To identify sources of significant F values, Tamhane's

T2 test was used for groups without homogeneity of variance.

In this context, *t*-test was applied to determine whether students' life satisfaction differs according to school type and housing. The Welch test was used to determine whether students' life satisfaction differs according to the classroom environment. Tamhane's T2 test was then performed on the results of the Welch test to determine which classes had significant differences between them. The relationships between the variables were examined using the parameters of Pearson product moments correlation. Students' life satisfaction, confidence in classroom, and school engagement are continuous variables, but students' housing situation, grade level, and school types are categorical variables. Linearity analysis demonstrated a linear relationship between students' life satisfaction and school engagement (R^2 Linear = 0.321), and between students' life satisfaction and confidence in the classroom (R^2 Linear = 0.251). The possible relationships between the variables in the study and the students' life satisfaction were analyzed using SPSS for Windows.

Findings

Structural Equation Modeling

This study tested how students' life satisfaction can be predicted using path analysis to measure school engagement and confidence in the classroom. The results are presented in Figure 1.

Using structural equation modeling, the authors obtained fit indices indicating that the model provides a good fit ($\chi^2 = 209.69$, $df = 60$, $\chi^2/df = 3.49$, $p = 0.00$, $RMSEA = 0.09$, $NFI = 0.92$, $NNFI = 0.93$, $CFI = 0.94$, $IFI = 0.94$, $RFI = 0.90$, $GFI = 0.88$, $AGFI = 0.82$, and $SRMR = 0.07$). When Figure 1 was examined, it was found that school engagement (0.80) and confidence in the classroom (0.21) predict students' life satisfaction positively, with all paths being meaningful. Schermelleh-Engel, Moosbrugger, and Müller (2003) stated that reasonable fit indices for a model range between $2 \leq \chi^2/df \leq 3$ for χ^2/df , $0.01 \leq p \leq 0.05$ for p , $0.05 \leq RMSEA \leq 0.10$ for root mean square error of approximation, and $0.05 \leq SRMR \leq 0.10$ for standardized root mean square residual. Adjusted goodness of fit (AGFI) values typically range between zero and one, with larger values indicating a better fit. In this regard, the results indicated that this model has acceptable fit indices.

Differences in Terms of the Classroom

The authors used the Welch test to examine how students' life satisfaction differs according to the classroom environment. It was found that levels of life satisfaction differed significantly for ninth-, tenth-, eleventh- and twelfth-grade students [$F(3,137) = 14.07$, $p < .001$]. Using Tamhane's T2 test, students' life satisfaction in relation to their grade levels was then measured. The results are presented in Table 1.

Table 1
Tamhane's T2 Test Results Regarding Students' Life Satisfaction According to the Classroom Environment

Class Level	9th Grade	10th Grade	11th Grade	12th Grade
9th Grade	-	11.19*	8.99*	10.50*
10th Grade	-	-	2.21	.69
11th Grade	-	-	-	1.52
12th Grade	-	-	-	-

* $p < 0.05$

When the results in Table 1 were examined, a significant differentiation was found between ninth grade ($\bar{X} = 116.93$) and other grades (tenth grade $\bar{X} = 105.74$; eleventh grade $\bar{X} = 107.95$; twelfth grade $\bar{X} = 106.43$) in terms of students' life satisfaction. It was found that the life satisfaction of ninth-grade students is higher. After the life satisfaction averages were evaluated in terms of grade levels, it was found that, students' life satisfaction decreases as the class level increases. There was no significant difference found within other dual comparisons.

Differences in Terms of Housing

The authors used the t -test to compare the life satisfaction levels of high school students who live in student dormitories with those who live with their parents. The average of students' life satisfaction points and standard deviations are presented in Table 2, alongside the findings regarding the t value.

Table 2
The Means, Standard Deviations, and t Values of the Life Satisfaction Points of High School Students According to their Housing Type

Housing Type	N	M	SD	T
Student Dormitory	74	112.74	13.61	
Family	101	108.01	15.68	2.31*

* $p < 0.05$, $df = 285$

As indicated in Table 2, it was found that high school students' life satisfaction points are significantly different when compared in terms of housing type ($t = 2.31$, $p = 0.02$). The life satisfaction mean of students who stay in student dormitories ($\bar{X} = 112.74$) is higher than the life satisfaction average of students who live with their families ($\bar{X} = 108.01$).

Differences in Terms of School Type

The authors used the t -test to compare the life satisfaction levels of students at fine arts high schools with those of sports high schools and regular high schools. The average of students' life satisfaction points and standard deviations, as well as the findings regarding the t value, are presented in Table 3.

Table 3
The averages, standard deviations and t value of the life satisfaction points of high school students according to school type

School Type	N	M	SD	t
Fine Arts and Sports High School	145	112.02	13.17	
Regular High School	142	106.38	16.76	3.17*

* $p < 0.05$, $df = 285$

As indicated in Table 3, high school students' life satisfaction differs significantly according to the type of school they attend ($t = 3.17$, $p = 0.002$). The life satisfaction of students at fine arts and sports schools ($\bar{X} = 112.02$) is higher than that of regular high school students ($\bar{X} = 106.38$).

Discussion

One of the main aims of this study was to explore the relationship between students' life satisfaction, their school engagement, and their confidence levels in class. The results indicated that school engagement and confidence in class predicted

students' life satisfaction in a positive way. School engagement was the most important predictor of students' life satisfaction. It was found that students' life satisfaction was positively related to school engagement, confidence in class, between school environment and engagement, school curriculum and engagement, school administration and engagement, teacher and school engagement, and basic confidence variables, and it had a negative relation with perceptions of threat.

The results obtained support the findings of the study by Lee et al. (2012). In this study, students' life satisfaction predicted school engagement significantly and mutually. It was demonstrated that students are affected by their physical environment. According to Tapien, the physical environment of the school influences how much students like being at school, and the quality of teaching and learning also affects results (cited in Aydoğan, 2012). In the study by Sarı (2007), the schools in which student life quality was found to be low had a poor environment, and where student life quality was high, the situation was quite the opposite (for example, where there were more trees, the students were more satisfied). In the same study, it was found that if a student has a positive feeling about the school, it increases their life quality and thus improves their satisfaction with the school. A positive physical environment is the most important variable as it engages the students with school and thus affects their life satisfaction.

One of the variables that can predict school engagement is the school curriculum. In a study of Scottish students by Karatzias, Power, and Swanson (2001), the quality of the school curriculum was found to be one of the key indicators leading to a satisfactory school life. In another study by Ainley, Foreman, and Sheret (1991), the perception that students had of their curriculum was found to be an important factor in the development of a positive attitude toward school. Another factor that influences students' life satisfaction indirectly is the students' perceptions of their teachers (Sarı, 2007). It has been shown that where students are satisfied with their teachers, their perceptions of school are positive (Sarı, 2006). School administration is also an important variable in predicting students' life satisfaction (Sarı, 2012; Sarı, Ötünç, & Erceylan, 2007). These findings have shown that students' engagement with their schools increased in schools that are physically attractive, well managed, have a well-planned and stimulating curriculum, and where communication with teachers is good.

This study has found that the most important dimension in life satisfaction for students is the extent to which they feel secure at school, as students who feel safe in class have higher levels of confidence, leading to a higher life satisfaction. Other studies support this finding. According to Sarı (2006), the class environment in which students spend most of their school time influences their life satisfaction. If the time they spend with their teachers and friends in class includes valuable and entertaining events, then their attitudes toward school will be positive, thus constituting a decisive factor in their perceptions of life quality. In another study, Sarı (2007), reached the conclusion that friendships are both related to, and predictors of, students' life satisfaction. Bilgiç (2009) reached a similar conclusion in her study that engagement with friends is related to and predicts a students' life quality. Mok and Flynn's (2002) study indicates that relationships in class are the most important determinant of students' life satisfaction and that the class atmosphere has a direct influence on relationships within the class. Johnson and Stevens (2001) examined the relationships between students in safe environments as being a variable of school life quality.

The results of all these studies indicate that the school environment and school friendships influence students' life satisfaction. Students want friendships and physically attractive schools. Self, environment, and family sub-dimensions influence students' life satisfaction equally. A student that feels safe and engaged experiences an increase in life satisfaction. Confidence in class can be used to predict students' life satisfaction to a medium level although to a lesser extent than engagement. We can therefore conclude that schools that are physically attractive, having well-functioning groups of management and teaching staff, and which have safe environments lead to higher life satisfaction of the students. When building schools and scheduling lessons the student viewpoint should be considered.

In the study, the authors found a significant difference in life satisfaction for ninth, tenth, eleventh, and twelfth grade students. In particular, students' life satisfaction is significantly different in the ninth grade, where student life satisfaction is greater. The evaluation indicates that as the grade level increases, students' life satisfaction decreases, but there is no significant difference in other dual comparisons. These differences in satisfaction levels may result from concerns regarding examinations,

which increase in each grade, and from students feeling uncertain and anxious about their futures (finding an occupation; becoming independent).

It was found that high school students' life satisfaction differs significantly when studied alongside their housing arrangements. The average life satisfaction points for students living in dormitories were higher than the average for students who live with their families. It is possible that the basic social needs of the students who live in dormitories are met to a greater degree than is the case with students who live with their families. The fact that students who live in dormitories spend more time in the school environment provides them with the opportunity to share more time with their school friends and teachers in comparison with those who live with their families, which may increase their ability to adapt to school life, thus increasing their life satisfaction. The authors found that students' life satisfaction differs significantly according to school type, with students at fine arts and sports schools having a higher life satisfaction than regular high school students. This may be because students at fine arts and sports schools receive an education specific to their talents and interests and have the opportunity to participate in activities they enjoy and in which they are interested.

The results suggest that, given that the physical structure and the environment of schools make a positive contribution to students' school engagement and life satisfaction, school environments should be planned according to students' developmental characteristics. Another important finding of the study here is that school

programs have a strong impact on students' life satisfaction. In this regard, when school programs are planned, students' needs should be considered. Another point raised by the study is that students' confidence levels affect their life satisfaction scores. A negative relationship between a feeling of threat and life satisfaction was also found, indicating that schools should provide safe environments to improve students' life satisfaction.

The findings of this study are encouraging in terms of continued investigation into how school engagement and confidence in class relate to students' life satisfaction. Despite these promising results, there are important limitations to our study. We relied solely on reports from our participants. Therefore, future studies should collect the perspectives of others, including teachers, staff, peers, and families, to further our understanding of the relationship between school engagement, confidence in class, and students' life satisfaction. Social support received from peers, families, significant others, and teachers may increase well-being and happiness, thus increasing students' life satisfaction. Future studies should focus, therefore, on various aspects of social support that may affect students' life satisfaction positively. Research should be conducted to explore the relationships between children's life satisfaction, school environment, and developmental characteristics. Furthermore, future research in this field should also focus on academic support, intimate relationships, peer support, examination anxieties, worries about the future, stress due to academic expectations, and social media use.

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