International Journal of Contemporary Educational Research

Volume 13, Number 2, June 2026, Page 91-106 Article Type: Research Article

Perceived University Support and Students' Motivation for Higher Education: The Parallel Mediating Roles of Leisure Time Management and Academic Reputation

Vildan Burulday | | vburulday@bingol.edu.tr
Bingöl University, Solhan Vocational School of Health Services, Department of Child Development, Bingöl, Türkiye

Abstract
The purpose of this study is to examine the relationships among perceived university support, leisure time management, academic reputation perception, and students' reasons for pursuing higher education within the framework of the Social Exchange Theory. In addition, the parallel mediating roles of leisure time management and academic reputation perception in the relationship between perceived university support and reasons for pursuing higher education were tested. The study was conducted using a quantitative research design, and the data were obtained from 406 students studying at Bingöl University. The data were collected through self-report scales with established validity and reliability and analyzed using structural equation modeling (SEM). The results of the mediation analysis revealed that this relationship was fully mediated by leisure time management and academic reputation perception, indicating a full mediation structure in the model.
Overall, the findings suggest that university support influences students' motivations not directly, but through behavioral and perceptual processes. By offering a process-oriented perspective within the context of higher education, this study contributes to the literature and provides practical implications.

Keywords: Perceived university support, Leisure time management, Academic reputation perception, Reasons for pursuing higher education, Parallel mediation

Citation
Burulday, V. (2026). Perceived university support and students' motivation for higher education: the parallel mediating roles of leisure time management and academic reputation. *International Journal of Contemporary Educational Research, 13*(2), 91-106. https://doi.org/10.52380/ijcer.2026.13.2.998

Received	08.01.2026
Accepted	24.05.2026
Publication	25.06.2026
Peer-Review	Double anonymized - Double Blind
Plagiarism Checks	Yes - iThenticate
Complaints	editor@ijcer.net
AI Disclosure	The authors confirm that any artificial intelligence (AI) tools used during the preparation of the manuscript were used only in an ethical and transparent manner. The authors further confirm that all references, citations, and bibliographic information were checked and verified by the authors, and that no fabricated or non-existent sources were generated using AI tools.
Copyright & License	Authors publishing with the journal retain the copyright to their work licensed under the **CC BY-NC 4.0**.

Introduction

Higher education is regarded as an important stage of education that shapes individuals' future life opportunities and supports their academic, professional, and personal development. For this reason, the factors influencing students' preferences for higher education institutions have become a significant area of inquiry in educational research in recent years (Özkan & Gizir, 2013). A review of the literature indicates that students' reasons for pursuing higher education are generally shaped by various factors such as future expectations, social environmental influences, economic conditions, and educational opportunities (Bataeineh, 2022). In this process, students' motivational dynamics are also emphasized as an important determinant of university choice. Indeed, Jackson et al. (2023) stated that personal expectations, career development opportunities, and the desire to gain social status play important roles among students' reasons for choosing university education. Similarly, Seksan et al. (2025) revealed that students' learning motivations influence their perceptions of higher education and their level of attachment to the university. Taken together, these findings suggest that students' reasons for pursuing higher education are largely associated with individual motivational processes.

Reasons for preferring higher education constitute a multidimensional structure that encompasses a wide range of factors, from individual demands to socioeconomic conditions. Students' orientation toward university education may be influenced by the quality of the academic environment they experience as well as the academic support and institutional services they perceive within that environment (Duong et al., 2023). Therefore, examining institution-based and psychosocial factors that shape students' decision-making mechanisms is considered an important necessity in higher education research (Perna, 2006; Paulsen & St. John, 2002).

University life is a multidimensional experience that encompasses not only students' academic development but also their psychological and social adjustment processes (Öztürk, 2020). In this context, how students perceive the university environment emerges as one of the fundamental factors determining the quality of the higher education experience (Avcı & Doğan, 2020). The academic, social, and psychological support provided by universities can facilitate students' adaptation to university life and positively influence their academic achievement (Bayar & Tuzgöl Dost, 2018; Eker et al., 2020). Accordingly, perceived university support is considered a critical variable shaping students' higher education experiences.

The concept of perceived university support is grounded in social support and institutional support approaches. While social support is defined as the individual's perception of the social, emotional, and psychological assistance received from the environment (Yıldırım, 1997), within the university context this concept refers to how students perceive the support provided in academic and administrative processes (Avcı & Doğan, 2020). The literature indicates that perceived university support is associated with students' psychological resilience, life satisfaction, motivation, and academic adjustment (Bayar & Tuzgöl Dost, 2018; Eker et al., 2020).

To explain these relationships, the theoretical framework of the present study is based on Social Exchange Theory (Blau, 1964). Social Exchange Theory suggests that relationships between individuals and institutions are shaped by reciprocal benefits and expectations (Cropanzano & Mitchell, 2005). According to this theory, when individuals perceive the support provided by an institution positively, they tend to develop more positive attitudes and behaviors in return (Eisenberger et al., 1986). In this context, it is assumed that students' perceived university support may influence their behavioral and cognitive processes. From the perspective of Social Exchange Theory, perceived university support is expected to affect students' leisure time management skills and academic reputation perceptions. Indeed, it has been reported that the support provided by universities shapes how students organize their time and form perceptions about their universities (Amado et al., 2023; Lepp et al., 2014).

Leisure time management is defined as an individual's ability to use time outside of mandatory responsibilities in a planned and purposeful manner (Demir & Alpullu, 2020). During university years, students' increasing academic and social responsibilities make the effective use of time even more important (Aeon et al., 2021). The literature has demonstrated that leisure time management is associated with individuals' academic achievement, motivation, and various behavioral tendencies (Arslankoç & Koçak, 2023; Akıncı, 2025). In this regard, leisure time management is considered to play an important role in students' evaluations of higher education.

Another important variable is academic reputation perception. Academic reputation refers to the overall evaluation formed by stakeholders regarding a university's academic performance, educational quality, and institutional strength (Herman, 2018). The academic reputation of a university is regarded as an important determinant in students' evaluations of their university experiences and their perceptions of higher education (Miotto et al., 2020).

A review of the literature indicates that studies directly examining the effect of perceived university support and structure on students' reasons for pursuing higher education are limited. In particular, there appears to be insufficient research explaining this relationship through leisure time management and academic reputation perception. This situation highlights the need to address these variables within a holistic model.

Accordingly, the present study examines the effect of perceived university support on students' leisure time management skills and academic reputation perceptions, as well as the role of these variables in explaining students' reasons for pursuing higher education. From the perspective of Social Exchange Theory, it is assumed that the academic and social support provided by universities may influence students' behavioral and perceptual processes, which in turn may shape their motivations for pursuing higher education.
Within this framework, the study investigates the direct and indirect effects of perceived university support on students' reasons for pursuing higher education and tests whether leisure time management and academic reputation perception serve as parallel mediators in this relationship.
In this respect, the study aims to contribute to the literature by examining the effect of perceived university support on motivations for pursuing higher education not only through direct relationships but also through students' behavioral and perceptual processes, addressing these variables within a holistic model framework.

Theoretical Background and Hypotheses

Social Exchange Theory is a theory suggesting that individuals maintain relationships based on the principle of reciprocity and evaluate benefits and costs throughout this process. According to the theory, individuals tend to respond to positive, supportive, and trustworthy behaviors with similar attitudes and behaviors. Cropanzano and Mitchell (2005) argued that social relationships become stronger over time through mutual trust and commitment, and that increases in perceived support significantly shape individuals' attitudes and behaviors.

Perceived University Support and Leisure Time Management
Perceived university support is considered an important variable shaping students' behavioral patterns within university life. From the perspective of Social Exchange Theory, when individuals perceive the institutional support provided to them positively, they tend to develop more positive behaviors in return (Blau, 1964; Gouldner, 1960; Cropanzano & Mitchell, 2005). In addition, perceived institutional support plays an important role in individuals' processes of regulating their behaviors and organizing their daily lives (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). It has been suggested that the academic and social support provided by universities may influence how students plan and manage their time (Astin, 1984; Kahu & Nelson, 2017). In this context, perceived university support is expected to influence students' leisure time management skills.

H^1. *Perceived university support positively affects leisure time management.*
Perceived University Support and Academic Reputation Perception
Perceived university support is an important factor shaping students' evaluations and perceptions of their universities. When students believe that they receive sufficient academic and institutional support from their universities, they tend to develop more positive evaluations toward their institutions. Indeed, it has been demonstrated that the quality of services and student support elements provided in higher education directly affect student satisfaction, and that this satisfaction shapes students' overall perceptions of the institution (Bahadur et.al., 2024). The academic and administrative support services offered by universities increase students' levels of satisfaction, which in turn strengthens their perceptions of the university's academic reputation (Amado et al., 2024). Furthermore, it is emphasized that students' perceptions of their university experiences are closely related to the quality of institutional services provided, and that these experiences play a decisive role in the formation of university reputation (Amado et al., 2023). Accordingly, perceived university support is expected to positively influence academic reputation perception.

H^2. *Perceived university support positively affects academic reputation perception.*
Leisure Time Management and Reasons for Pursuing Higher Education
Leisure time management is defined as an individual's ability to use time in a planned and purposeful manner (Aeon et al., 2021). Recent studies have demonstrated that time management and self-regulation skills are strongly associated with students' academic achievement, motivation, and goal-oriented behaviors (Broadbent & Poon, 2015). In particular, self-regulation-based time management skills are reported to increase students' active participation in learning processes and strengthen their orientation toward academic goals (Panadero, 2017; Wong et al., 2021). Effective time management helps students establish a balance between academic and social responsibilities and contributes to their engagement in higher education in a more conscious and goal-oriented manner (Kahu & Nelson, 2017). Moreover, students with strong time management skills tend to focus more effectively on their academic goals, demonstrate higher intrinsic motivation, and possess clearer educational

objectives (Aeon et al., 2021; Richardson et al., 2012). In this context, leisure time management skills are expected to influence students' reasons for pursuing higher education.

Students who manage their leisure time effectively can allocate more time and effort to activities that support their educational and career goals. Time management and self-regulation skills have been associated with academic motivation, goal commitment, and purposeful behaviour among university students (Panadero, 2017; Aeon et al., 2021). In addition, students' reasons for pursuing higher education are shaped by educational aspirations, career expectations, and personal development goals (Bogler & Somech, 2002; Jackson et al., 2023). Effective leisure time management may help students maintain a stronger focus on these goals and increase the importance they attribute to higher education as a means of achieving them.

H^3. ***Leisure time management positively affects reasons for pursuing higher education.***

Academic Reputation Perception and Reasons for Pursuing Higher Education

Academic reputation refers to the overall evaluation formed by stakeholders regarding a university's academic performance, educational quality, and institutional strength (Herman, 2018). Recent studies have shown that students' perceptions of a university's academic reputation significantly influence their institutional commitment, satisfaction, and motivation (Amado et al., 2023; Amado et al., 2024). University reputation is regarded as a determining factor in students' processes of choosing higher education institutions and shaping their educational expectations (Pucciarelli & Kaplan, 2016). Furthermore, a strong academic reputation contributes to students' ability to define their educational goals more clearly and develop stronger reasons for pursuing higher education (Amado et al., 2024). Accordingly, academic reputation perception is expected to influence students' reasons for pursuing higher education.

H^4. ***Academic reputation perception positively affects reasons for pursuing higher education.***

The Mediating Role of Leisure Time Management and Academic Reputation Perception

Within the framework of Social Exchange Theory, it is suggested that indirect relationships exist between the level of support individuals perceive and the attitudes and behaviors they develop (Blau, 1964; Cropanzano & Mitchell, 2005). Recent studies have demonstrated that perceived institutional support in higher education indirectly influences students' self-regulation skills, academic engagement, and learning processes (Kahu & Nelson, 2017; Wong et al., 2018). When students perceive themselves as being supported by their universities, this perception contributes primarily to the development of time management and self-regulation skills while simultaneously shaping their perceptions of the university in a positive manner (Broadbent & Poon, 2015; Panadero, 2017).

Furthermore, it has been shown that university experiences and perceived value create indirect effects through students' evaluations of university reputation, with student satisfaction and experience playing mediating roles in this process (Amado et al., 2024). These processes emerge as fundamental mechanisms shaping students' reasons for pursuing higher education. Accordingly, it is assumed that the effect of perceived university support on students' reasons for pursuing higher education may occur through leisure time management and academic reputation perception.

H^5. ***Leisure time management mediates the relationship between perceived university support and reasons for pursuing higher education.***

H^6. ***Academic reputation perception mediates the relationship between perceived university support and reasons for pursuing higher education.***

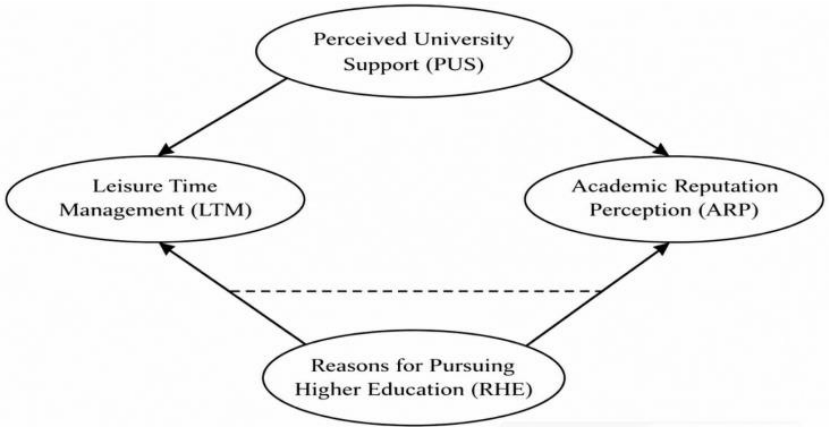

Figure 1. Conceptual model

Method

Research Design

In this study, a quantitative research design was employed to examine the relationships among perceived university support, leisure time management, academic reputation perception, and reasons for pursuing higher education. Quantitative research is defined as a systematic approach that enables the testing of relationships among variables through statistical methods (Fraenkel et al., 2012). Accordingly, structural equation modeling (SEM) was used in the present study to examine the direct and indirect relationships among the variables.

Research Model

In this study, the relationships among perceived university support, leisure time management, academic reputation perception, and reasons for pursuing higher education were examined within the framework of structural equation modeling. The research model was developed based on Social Exchange Theory (Blau, 1964; Cropanzano & Mitchell, 2005).

Within the model, the effects of perceived university support on students' leisure time management skills and academic reputation perceptions, as well as the effects of these variables on reasons for pursuing higher education, were investigated.

The research model assumes that leisure time management and academic reputation perception play parallel mediating roles in the relationship between perceived university support and reasons for pursuing higher education. Accordingly, the indirect effects among the variables were examined, and the relationships were tested within a holistic framework.

Population and Sample

The study was conducted with undergraduate students enrolled at Bingöl University and participants were selected using a stratified sampling approach. The adequacy of the sample size was evaluated with respect to the complexity of the structural equation model. The proposed model consisted of four latent constructs represented by a total of 11 observed indicators. To obtain a more parsimonious and stable measurement model, a parceling approach was employed during the analysis process. Previous research has suggested that sample size adequacy in structural equation modeling should be evaluated by considering model complexity, the number of observed indicators, and the number of estimated parameters (Wolf et al., 2013). Accordingly, the final sample of 406 participants was considered adequate for testing the proposed model.

Data Collection Instruments

In this study, four different scales were used as data collection instruments: perceived university support, leisure time management, academic reputation perception, and reasons for pursuing higher education. The scales were selected from instruments with established validity and reliability in the literature.
It was observed that some of the confirmatory factor analyses of the scales used in the study did not achieve the expected fit values; therefore, a parceling approach was adopted during the analysis process. Within this scope, observed variables were created by combining the subdimensions of each construct.

Leisure Time Management Scale
The Leisure Time Management Scale was developed by Wang et al. (2011) and adapted into Turkish by Akgül and Karaküçük (2015). The scale consists of 15 items and four subdimensions: goal setting, attitude, technique, and scheduling. A five-point Likert-type scale (1 = Strongly disagree, 5 = Strongly agree) is used. The items in the scheduling subdimension are reverse-coded. Higher scores obtained from the scale indicate that individuals manage their leisure time more effectively. In the present study, the Cronbach's alpha coefficient of the scale was found to be .85. In the Turkish adaptation study, confirmatory factor analysis revealed that the four-factor structure demonstrated acceptable fit indices ($\chi^2/df = 1.44$, GFI = .90, CFI = .97, NFI = .90, NNFI = .96, SRMR = .076, RMSEA = .056) (Akgül & Karaküçük, 2015).

Reasons for Pursuing Higher Education Scale
The Reasons for Pursuing Higher Education Scale was developed by Shapira and Eva Etzioni-Halevy (as cited in Bogler & Somech, 2002) and adapted into Turkish by Özkan (2011). The scale consists of 9 items and three

subdimensions: educational, instrumental, and social. Responses are rated on a five-point Likert scale. In the Turkish adaptation study, construct validity was examined through principal component factor analysis. The KMO value was reported as .823 and Bartlett's Test of Sphericity was found to be significant. The three-factor structure explained 64.75% of the total variance, with factor loadings ranging from .596 to .839. Although confirmatory factor analysis (CFA) fit indices were not reported in the adaptation study, the three-dimensional structure of the scale was retained in the present study and incorporated into the measurement model. Accordingly, the educational, instrumental, and social dimensions were used as indicators of the latent construct representing reasons for pursuing higher education. The Cronbach's alpha coefficient of the scale was calculated as .83 in the current study.

Academic Reputation Perception Scale

The Academic Reputation Perception Scale was developed by Apaydın and Seçkin Kapucu (2017). The scale is administered using a five-point Likert-type rating system and includes the dimensions of academic quality and institutional reputation. In the scale development study, construct validity was examined through exploratory and confirmatory factor analyses, and the two-factor structure was found to demonstrate acceptable fit. The confirmatory factor analysis results indicated the following fit indices: RMSEA = .076, NFI = .98, CFI = .98, GFI = .92, AGFI = .89, SRMR = .049, and RMR = .096. The development study also reported that approximately 60% of the total variance was explained by the scale. Based on the preliminary analyses conducted in the present study, the scale was evaluated using 17 items, and the Cronbach's alpha coefficient was calculated as .95. This value indicates a high level of internal consistency for the scale within the current sample. Academic Reputation Perception was represented in the measurement model by the two theoretically derived subdimensions of the original scale.

Perceived University Support Scale

The Perceived University Support Scale was originally developed by Wintre et al. (2009) and adapted into Turkish by Avcı and Doğan (2020). The scale consists of 21 items, and its original as well as Turkish-adapted versions employ a nine-point Likert-type response format. In the present study, however, a five-point Likert-type format was used to ensure consistency across all measurement instruments included in the survey and to facilitate participant responses. Higher scores obtained from the scale indicate that students perceive the university as a more supportive institution. Although classical CFA fit indices were not reported in the original study, the scale demonstrated satisfactory psychometric properties in the present sample. The Cronbach's alpha coefficient was calculated as .82, while the composite reliability (CR) and average variance extracted (AVE) values were .80 and .57, respectively.

Ethical Considerations

Ethical approval for this study was obtained from the Social and Human Sciences Research Ethics Committee of Fırat University (Approval Date: September 12, 2022; Approval Number: 10441/43). Participation in the study was entirely voluntary, and informed consent was obtained from all participants prior to data collection. Participants were informed about the purpose of the study, the voluntary nature of participation, and the confidentiality of their responses. The study was conducted in accordance with established ethical principles for research involving human participants.

Data Analysis

In this study, the data were obtained through self-report scales. It has been suggested that self-report data may be susceptible to common method bias (Podsakoff & Organ, 1986; Podsakoff et al., 2003). Therefore, Harman's single-factor test was conducted as an initial diagnostic procedure. The results indicated that a single factor accounted for less than 50% of the total variance. However, consistent with recent methodological recommendations, Harman's single-factor test alone is not sufficient to conclusively rule out common method bias. Therefore, although the findings do not indicate the presence of a dominant common factor, the possibility of common method bias cannot be completely excluded given the cross-sectional nature of the study and the use of self-report measures collected from a single source.

During the analysis process, the dataset was first examined for missing data and outliers, and observations that did not meet the analysis assumptions were removed from the dataset (Tabachnick & Fidell, 2013). The normality of the data distribution was evaluated through skewness and kurtosis values. According to the analysis results, the skewness values of the variables ranged between -0.807 and 0.450, while kurtosis values ranged between 0.046

and 1.604. Since these values fall within the acceptable limits recommended in the literature, the data were considered to demonstrate normal distribution (George & Mallery, 2010; Hair et al., 2022). In addition, Q-Q plots were examined, and the data were observed to conform to normal distribution assumptions (Field, 2013).

The multicollinearity problem was evaluated by examining correlations among variables, variance inflation factor (VIF), and tolerance values, and the results indicated that there was no multicollinearity issue among the variables. In the literature, VIF values below 10 and tolerance values above .10 are considered acceptable thresholds (Hair et al., 2022; Kline, 2016).
The reliability of the scales used in the study was evaluated using Cronbach's alpha coefficients, and all scales were found to demonstrate acceptable levels of reliability. Cronbach's alpha coefficients of .70 or higher indicate that scales are reliable (Nunnally & Bernstein, 1994). The structural validity of the scales was tested through confirmatory factor analysis (Brown, 2015; Kline, 2016).

Structural equation modeling (SEM) was employed to examine the relationships among the variables included in the research model. SEM is a powerful statistical technique that allows the testing of relationships among multiple variables within the same model (Kline, 2016; Hair et al., 2022). Within this scope, the measurement model was tested first, followed by the structural model analysis. The model examined the effects of perceived university support on leisure time management and academic reputation perception, as well as the effects of these variables on reasons for pursuing higher education. In addition, indirect effects among the variables were also evaluated.

To assess model fit, the fit indices χ^2/df, RMSEA, CFI, TLI, and SRMR were taken into consideration. The evaluation of these indices was based on threshold values recommended in the literature (Hu & Bentler, 1999; Kline, 2016; Hair et al., 2022). The construct validity of the scales used in the study was evaluated based on the validity findings reported in the related scale development and adaptation studies. In addition, to test the measurement structure within the current sample, a confirmatory factor analysis-based measurement model was examined using parcel indicators. Since some fit problems were observed at the item level in the initial analyses, the parceling approach recommended in the literature was adopted during the structural equation modeling process (Little et al., 2002). Accordingly, the variables were included in the model through subdimension/parcel indicators, and the structural model was subsequently tested.

Results

Descriptive Statistics, CR, AVE, and Correlation Analysis

Table 1. Demographic Characteristics of Participants (N = 406)

Variable	Category	n	%
Gender	Female	275	67.7
	Male	131	32.3
Educational Level	Associate Degree	214	52.7
	Bachelor's Degree	189	46.6
	Graduate Degree	3	0.7
Field of Study	Social Sciences	104	25.6
	Natural Sciences	70	17.2
	Health Sciences	203	50.0
	Sports Sciences	29	7.1
Residence Type	Student House	142	35.0
	Family Home	109	26.8
	State Dormitory (KYK)	134	33.0
	Private Dormitory	21	5.2

The demographic characteristics of the participants are presented in Table 1.

Table 2. Descriptive Statistics and Correlation Values of the Research Variables

Variables	*M*	*SD*	*CR*	*AVE*	1	2	3	4
1. Reasons for Pursuing Higher Education (RPHE)	3.80	0.75	.76	.52	1			
2. Leisure Time Management (LTM)	3.38	0.67	.72	.51	.297**	1		
3. Academic Reputation Perception (ARP)	3.23	0.91	.84	.78	.300**	.314**	1	
4. Perceived University Support and Structure (PUSS)	3.21	0.56	.80	.57	.066	.213**	.458**	1

Note: Since the Academic Reputation Perception variable was represented by a two-indicator structure, CR and AVE values were not additionally reported.

According to the analysis results, the mean scores of reasons for pursuing higher education (M = 3.80, SD = 0.75), leisure time management (M = 3.38, SD = 0.67), academic reputation perception (M = 3.23, SD = 0.91), and perceived university support (M = 3.21, SD = 0.56) were found to be above the moderate level.
The results of the correlation analysis indicated a positive and significant relationship between reasons for pursuing higher education and leisure time management ($r = .297$, $p < .01$). Similarly, a positive and significant relationship was found between reasons for pursuing higher education and academic reputation perception ($r = .300$, $p < .01$). In contrast, the relationship between reasons for pursuing higher education and perceived university support was found to be weak and non-significant ($r = .066$, $p > .05$).

While a positive and significant relationship was identified between leisure time management and academic reputation perception ($r = .314$, $p < .01$), perceived university support was also found to have significant and positive relationships with leisure time management ($r = .213$, $p < .01$) and academic reputation perception ($r = .458$, $p < .01$).

Model Testing

To examine the construct validity of the scales used in the study within the current sample, a confirmatory factor analysis-based measurement model was tested using parcel indicators. Since some fit problems were observed at the item level in the initial analyses, the parceling approach recommended in the literature was adopted (Little et al., 2002). Accordingly, the variables of perceived university support and structure (PUSS), leisure time management (LTM), academic reputation perception (ARP), and reasons for pursuing higher education (RPHE) were included in the model through subdimension/parcel indicators.

The fit indices of the measurement model were found to be $\chi^2 = 214.895$, $df = 39$, $\chi^2/df = 5.51$, CFI = .904, TLI = .865, RMSEA = .105, and SRMR = .084. These values indicate that the measurement model did not demonstrate optimal fit, particularly with respect to RMSEA and TLI. Therefore, the findings should be interpreted with caution. Nevertheless, because the hypothesized relationships were theoretically grounded and the parceling approach was employed to reduce model complexity, the structural model was retained for exploratory examination of the proposed relationships. Consistent with recommendations in the SEM literature, model fit was evaluated by considering multiple fit indices together rather than relying on a single criterion (Hu & Bentler, 1999; Hair et al., 2022; Kline, 2016). Future studies should re-examine the proposed model using item-level indicators and alternative measurement specifications to provide stronger evidence regarding the measurement structure.

As shown in Figure 1, perceived university support had positive and significant effects on leisure time management ($\beta = 0.270$, $p < .001$) and academic reputation perception ($\beta = 0.554$, $p < .001$). In addition, leisure time management ($\beta = 0.236$, $p < .01$) and academic reputation perception ($\beta = 0.349$, $p < .001$) were found to have significant effects on reasons for pursuing higher education.

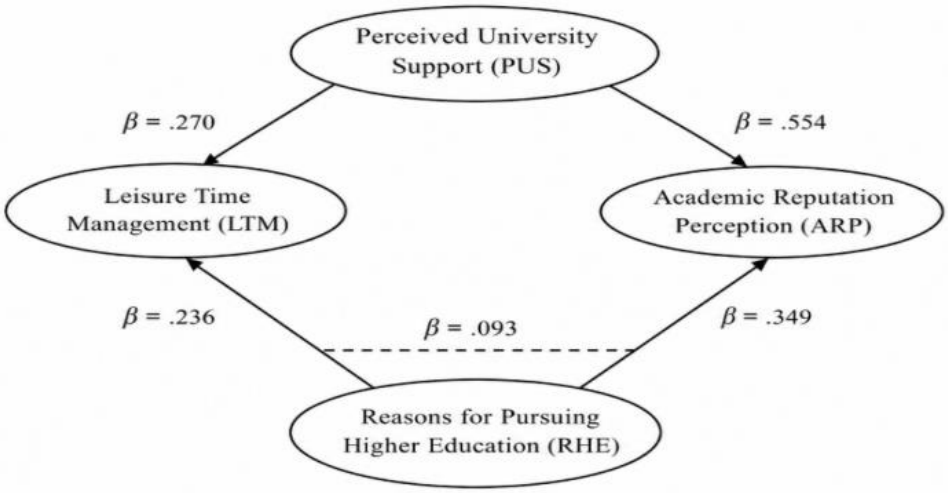

Figure 1. Research model and standardized path coefficients

The path coefficients related to the structural model are presented in Table 3.

Table 3. Structural Path Analysis Results of the Research Model

Path	β	SE	t	p
PUSS → LTM	.270	.057	4.733	<.001
PUSS → ARP	.554	.046	12.143	<.001
LTM → RPHE	.236	.063	3.769	<.001
ARP → RPHE	.349	.066	5.260	<.001
PUSS → RPHE	-.093	.073	-1.278	.201

When the structural model results were examined, perceived university support was found to have positive and significant effects on both leisure time management and academic reputation perception. The findings indicated that the effect of perceived university support on academic reputation perception was stronger ($\beta = .554$, $p < .001$), whereas its effect on leisure time management was at a moderate level ($\beta = .270$, $p < .001$). In addition, leisure time management and academic reputation perception were found to have significant and positive effects on reasons for pursuing higher education. In particular, academic reputation perception demonstrated a stronger effect on reasons for pursuing higher education ($\beta = .349$, $p < .001$).

However, the direct effect of perceived university support on reasons for pursuing higher education was not found to be statistically significant ($\beta = -.093$, $p > .05$). These findings indicate that the effect of perceived university support on reasons for pursuing higher education occurs indirectly through leisure time management and academic reputation perception, suggesting the existence of full mediation relationships within the model.

Mediation Analysis

Bootstrap analysis was conducted to examine the indirect effects of perceived university support on reasons for pursuing higher education. The findings obtained are presented in Table 4.

Table 4. Indirect Effects (Mediation Effects)

Path	β	SE	95% BCI Lower	95% BCI Upper
PUSS → LTM → RPHE	.064	.020	.015	.141
PUSS → ARP → RPHE	.193	.043	.108	.315
Total Indirect Effect	.257	.049	.170	.392

Note. Bootstrap confidence intervals were estimated using 5,000 bootstrap samples. Indirect effects were considered significant when the 95% bootstrap confidence interval did not include zero.

When the indirect effects were examined, the effect of perceived university support on reasons for pursuing higher education was found to be significant through leisure time management and academic reputation perception. The findings indicated that both mediation pathways were statistically significant. In particular, the indirect effect through academic reputation perception was found to be stronger ($\beta = .193$, $p < .001$). In contrast, the indirect effect occurring through leisure time management was determined to be relatively lower ($\beta = .064$, $p < .001$).

The significance of the total indirect effect demonstrates that the effect of perceived university support on reasons for pursuing higher education occurs largely through indirect pathways. These findings support the existence of full mediation relationships within the research model.

Discussion

This study examined the effect of perceived university support on students' reasons for pursuing higher education and evaluated the mediating roles of leisure time management and academic reputation perception in this relationship. The findings suggested that perceived university support was not directly associated with students' reasons for pursuing higher education; rather, the relationship appeared to operate through leisure time management and academic reputation perception. This finding indicates that the association between university support and students' motivational processes may occur through students' behavioral and perceptual processes rather than through a direct pathway.

The literature frequently emphasizes that institutional support is positively associated with student motivation and satisfaction (Amado et al., 2024). However, the present findings demonstrate that this relationship is shaped through indirect mechanisms rather than a direct structure. Students do not transform the support they receive from the university directly into motivation; instead, this support becomes meaningful insofar as it enhances their time management skills and positively shapes their perceptions of the university. In this respect, the findings suggest that the effects of support mechanisms in higher education are more complex and multilayered.

One of the important findings of the study is that perceived university support has a significant and positive effect on students' leisure time management skills. This result indicates that the academic, social, and cultural support provided by universities contributes to students' ability to use their time in a more planned and efficient manner. This finding is also consistent with studies emphasizing the determining role of the university environment in students' academic and social adjustment processes (Schneider & Preckel, 2017).

Similarly, the significant and positive effect of perceived university support on academic reputation perception indicates that students' evaluations of their universities are largely influenced by the support processes they experience. It may be argued that the academic and administrative support provided by universities strengthens students' feelings of trust and belonging, which in turn positively shapes their perceptions of the university's academic reputation (Nguyen & LeBlanc, 2001; Patriche et al., 2025).

The findings of the study also demonstrated that one of the variables influencing reasons for pursuing higher education is leisure time management. Students who are able to use their time in a planned and effective manner appear to develop more conscious and goal-oriented motivations toward higher education (Yuwono & Mastuti, 2025). This finding is consistent with studies emphasizing the role of time management and self-regulation skills in students' academic engagement and motivational processes (Kuykendall et al., 2015; Lepp et al., 2014).

Furthermore, the stronger effect of academic reputation perception on reasons for pursuing higher education indicates that perceptions regarding the university's academic strength and prestige play a determining role in students' motivational processes. When students perceive the university as a reputable and high-quality institution, they tend to attribute greater meaning to their educational experiences and develop stronger motivations toward higher education (Amado et al., 2024; Patriche et al., 2025). This finding is in line with studies emphasizing the influence of university reputation on students' preferences and institutional commitment processes (Brewer & Zhao, 2010; Nguyen & LeBlanc, 2001).

One of the most important contributions of the study emerges from the mediation findings. The results revealed that the relationship between perceived university support and reasons for pursuing higher education occurs entirely through leisure time management and academic reputation perception. The non-significant direct effect and significant indirect effects indicate the existence of a full mediation structure within the model. This finding suggests that university support affects students not by directly generating motivation, but rather by enhancing students' behavioral regulation skills and shaping their perceptions of the university.

These findings provide a meaningful explanation when evaluated within the framework of Social Exchange Theory (Blau, 1964; Cropanzano & Mitchell, 2005). According to Social Exchange Theory, individuals reshape their attitudes and behaviors in response to the support and resources provided to them. In this context, when students perceive themselves as being supported by the university, this support does not directly transform into motivation; instead, it indirectly influences students through internal processes such as time management and institutional perceptions. This finding demonstrates that the principle of reciprocity operates not directly, but through indirect mechanisms.

Practical Implications

The findings of this study reveal several important practical implications for higher education institutions. The results indicate that university support influences students' reasons for pursuing higher education not directly, but indirectly through processes such as leisure time management and academic reputation perception. This finding suggests that the support services provided by universities should not be limited solely to academic areas; rather, they should also be designed to support students' personal development and their perceptions of the university.
Within this scope, making academic advising services more functional, increasing training programs aimed at improving students' time management and self-regulation skills, and expanding practices that encourage participation in social and cultural activities may be beneficial. In particular, practices that support students' active participation in university life may positively influence their motivation toward higher education.

One of the noteworthy findings of the study is the effect of academic reputation perception on students' reasons for pursuing higher education. The findings suggest that when students perceive their university as an academically strong, reliable, and reputable institution, the meaning they attribute to higher education and their motivation become stronger. Therefore, it is important for universities not only to focus on academic achievement but also to create a campus environment that enhances student satisfaction, strengthens the sense of belonging, and supports student–university interaction.

Overall, this study demonstrates that the effect of support provided to students in higher education is shaped not directly, but through students' behavioral and perceptual processes. Accordingly, it may be argued that universities should adopt a more holistic approach when planning student support policies by addressing academic, social, and psychological dimensions together.

Theoretical Implications

This study makes an important contribution to the literature by revealing that the effect of perceived university support on students' reasons for pursuing higher education occurs not directly, but through behavioral and perceptual processes such as leisure time management and academic reputation perception. This finding provides an alternative to the direct-effect approaches frequently assumed in the higher education literature by demonstrating that support mechanisms operate through indirect processes.

In this respect, the study addresses the university–student relationship from a more process-oriented perspective within the framework of Social Exchange Theory and contributes theoretically to the literature.

Limitations

Although this study has several strengths, it also includes certain limitations. First, since the data were collected through self-report scales, participants' responses may have been influenced by subjective evaluations and social desirability tendencies. Although common method bias was tested during the analysis process and found to be at a low level, it is not possible to completely eliminate biases that may arise from such data collection methods.

Another limitation of the study is that the Perceived University Support Scale was administered using a five-point response format rather than the original nine-point format. Although this modification was made to ensure consistency across the measurement instruments included in the survey and the scale demonstrated acceptable psychometric properties in the present sample, the potential influence of this adaptation on participants' response patterns cannot be entirely ruled out.

Another limitation of the study is that the data were collected from a single university. This situation limits the generalizability of the findings. Future studies conducted at different universities and within different socio-cultural contexts may contribute to evaluating the findings within a broader framework.

In addition, the study employed a cross-sectional design. Therefore, although relationships among the variables were identified, causal inferences remain limited. Future longitudinal studies may provide stronger evidence by examining changes in the relationships among variables over time.

The variables included in the study were selected within the framework of a specific theoretical perspective and do not encompass all factors that may influence student motivation. In particular, the exclusion of variables such as academic engagement, psychological well-being, student experience, and perceived value may be considered an important limitation.

Finally, another important limitation of the study concerns the measurement model. Although the parceling approach was employed to reduce model complexity and obtain a more parsimonious representation of the latent constructs, the measurement model did not fully satisfy all recommended fit criteria, particularly with respect to RMSEA and TLI values. Therefore, the findings should be interpreted with appropriate caution, especially when evaluating the mediation relationships identified in the study. Future studies are encouraged to re-examine the proposed model using item-level confirmatory factor analyses and alternative measurement specifications to provide stronger evidence regarding the robustness and stability of the findings. Furthermore, the measurement model demonstrated less-than-optimal fit indices (RMSEA = .105; TLI = .865). Although the model was retained based on theoretical considerations and parcel indicators, these results suggest that the measurement structure should be interpreted cautiously and re-evaluated in future studies using item-level analyses.

Recommendations

Based on the findings of the study, several recommendations can be proposed for both practitioners and researchers. From a practical perspective, the findings suggest that merely increasing the academic and social support services offered to students may not be sufficient. It is also important to consider how these supports are perceived by students and how they are reflected in students' behavioral and perceptual processes. Accordingly, universities should structure support services in ways that are more visible, accessible, and integrated into students' daily lives.

The findings also indicate that academic reputation perception has a strong effect on students' reasons for pursuing higher education. Therefore, universities should focus on strategies aimed at improving educational quality, supporting academic productivity, and increasing the visibility of institutional achievements. Strengthening institutional reputation may positively influence students' perceptions of the university and their motivations.
Furthermore, the finding that leisure time management is a significant predictor highlights the importance of practices aimed at improving students' time management and self-regulation skills. In this regard, training programs and guidance services organized by universities may contribute to students' academic and personal development.

From the perspective of researchers, future studies are recommended to examine the relationship between perceived university support and student motivation through different mediating variables. In particular, including variables such as academic engagement, psychological well-being, and student experience in future models may contribute to a more comprehensive explanation of these relationships. Additionally, studies conducted with longitudinal designs and different samples may enhance the generalizability of the findings.

Conclusion

In this study, the relationships among perceived university support, leisure time management, academic reputation perception, and reasons for pursuing higher education were examined through structural equation modeling. The findings suggested that perceived university support was indirectly associated with reasons for pursuing higher education through leisure time management and academic reputation perception.. This finding indicates that the effect of university support on students' motivation is shaped not directly, but rather through behavioral and perceptual processes.

The results of the study demonstrate that the academic and social support provided by universities alone is insufficient to increase students' motivation toward higher education. The effectiveness of such support is closely related to how students perceive these supports and how they reflect these processes in their own behaviors. In this

context, university support enables students to use their time in a more planned and efficient manner while also positively shaping their perceptions regarding the academic quality of the university. These processes, in turn, indirectly strengthen students' reasons for pursuing higher education.

The findings also indicate that academic reputation perception has a stronger effect on reasons for pursuing higher education. This result demonstrates that institutional prestige, academic quality, and educational opportunities play a determining role in students' evaluations of universities. Perceiving the university as an academically strong and reputable institution contributes to students' attributing greater meaning to their educational experiences and strengthens their motivation toward higher education. In this respect, academic reputation emerges as one of the fundamental factors shaping students' higher education preferences and the meaning they attribute to this process. On the other hand, the significant effect of leisure time management indicates that students' ability to plan and manage their time effectively is important in terms of motivational processes. Students who can manage their time effectively appear to establish a balance between academic and social life, which in turn strengthens their goal-oriented behaviors and reasons for pursuing higher education. This finding suggests that not only academic competencies but also individual life skills play a determining role in higher education processes.

Overall, this study clearly demonstrates that the effect of university support on students occurs through indirect mechanisms rather than direct pathways. This result suggests that higher education research should move beyond the direct-effect approach frequently assumed in the literature and recognize that student motivation is shaped through more complex processes. In this respect, the study contributes to the literature from a more holistic perspective by examining the effect of perceived university support not only through an outcome variable but also through students' behavioral and perceptual processes.

Ethical Approval

Ethical approval (Date and approval number: 12.09.2022, 10441/43) was obtained from the Fırat University Social and Human Sciences Research Ethics Committee for this research.

References

Aeon, B., Faber, A., & Panaccio, A. (2021). Does time management work? A meta-analysis. *PLOS ONE, 16*(1), e0245066. https://doi.org/10.1371/journal.pone.0245066

Akgül, B. M., & Karaküçük, S. (2015). Free time management scale: Validity and reliability analysis. *International Journal of Human Sciences, 12*(2), 1867–1880.

Akıncı, A. Y. (2025). A study on university students leisure time management and entrepreneurship levels. *Journal of Young Sport Academy, 1*(2), 109–126. https://doi.org/10.5281/zenodo.17071680

Amado, M., Guzmán, A., & Juarez, F. (2023). Relationship between perceived value, student experience, and university reputation: Structural equation modeling. *Humanities and Social Sciences Communications, 10*, Article 780. https://doi.org/10.1057/s41599-023-02272-y

Amado, M., Guzman Rincon, A., Juárez Acosta, F., & Ramos-Soler, I. (2024). *Keys to managing university reputation from the students' perspective*. *Heliyon, 10*(21), e39805. https://doi.org/10.1016/j.heliyon.2024.e39805

Apaydın, Ç., & Seçkin, M. (2017). The relationship between university choice decision, academic reputation and social activities: Example of undergraduate students of Akdeniz and Eskişehir Osmangazi Universities. *Educational Administration: Theory and Practice, 23*(2). https://doi.org/10.14527/kuey.2017.007

Arslankoç, S., & Koçak, O. (2023). İstanbul'daki Üniversite Öğrencilerinin Akademik Motivasyon, Boş Zaman Yönetimi ve Karar Vermeyi Erteleme Eğilimleri Arasındaki İlişkinin İncelenmesi. *Batı Anadolu Eğitim Bilimleri Dergisi*, *14*(1), 150-181. https://doi.org/10.51460/baebd.1222538

Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel, 25*(4), 297–308.

Avcı, D., & Doğan, T. (2020). Adaptation of the Perceived University Support and Structure Scale into Turkish and perceived university support among first-year university students. *Kırşehir Education Faculty Journal, 21*(3), 1494–1529. https://doi.org/10.29299/kefad.853994

Bahadur, G. C. S., Gurung, S. K., Poudel, R., Singh Yadav, U., Bhattacharjee, A., & Dhungana, B. R. (2024). *The effect of higher education service quality on satisfaction among business students in India and Nepal*. *Cogent Education, 11*(1), Article 2393521. https://doi.org/10.1080/2331186X.2024.2393521

Bataeineh, M. (2022). Toward a better understanding of prep-year students: What are the primary motives for higher education? *International Journal of Instruction, 15*(4), 1035–1052. https://doi.org/10.29333/iji.2022.15455a

Bayar, Ö., & Tuzgöl Dost, M. (2018). Attachment styles and perceived social support as predictors of self-compassion among university students. *Hacettepe University Journal of Education, 33*(3), 689–704. https://doi.org/10.16986/HUJE.2017029306

Blau, P. M. (1964). *Exchange and power in social life*. Wiley.

Bogler, R., & Somech, A. (2002). Motives to study and socialization tactics among university students. *The Journal of Social Psychology, 142*(2), 233–248. https://doi.org/10.1080/00224540209603897

Brewer, A., & Zhao, J. (2010). The impact of a pathway college on reputation and brand awareness for its affiliated university in Sydney. *International Journal of Educational Management, 24*(1), 34–47. https://doi.org/10.1108/09513541011013033

Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies and academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education, 27*, 1–13. https://doi.org/10.1016/j.iheduc.2015.04.007

Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). Guilford Press.

Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management, 31*(6), 874–900. https://doi.org/10.1177/0149206305279602

Demir, G., & Alpullu, A. (2020). Üniversite öğrencilerinin boş zaman yönetiminin değerlendirilmesi. *Eurasian Research in Sport Science, 5*(1), 94–102. https://dergipark.org.tr/tr/pub/eriss/article/755653

Duong, M.-Q., Nguyen, V.-T., Bach, T.-N.-D., & Lý, N. (2023). Influence of socioeconomic status and university's internal environment factors on university-choice decisions of postgraduate students in Vietnam. *International Journal of Education and Practice, 11*(2), 218–231. https://doi.org/10.18488/61.v11i2.3322

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*(3), 500–507. https://doi.org/10.1037/0021-9010.71.3.500

Eker, H., Taş, İ., & Anlı, G. (2020). Üniversite öğrencilerinde psikolojik sağlamlık ile yaşamın anlamı ve algılanan sosyal destek arasındaki ilişkinin incelenmesi. *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi, 19*(39), 1182–1199. https://doi.org/10.46928/iticusbe.786008

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). SAGE.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2022). *How to design and evaluate research in education* (11th ed.). McGraw-Hill.

Fuller, C. M., Simmering, M. J., Atinc, G., & Atinc, Y. (2016). Common methods variance detection in business research. *Journal of Business Research, 69*(8), 3192–3198. https://doi.org/10.1016/j.jbusres.2015.12.008

George, D., & Mallery, P. (2010). *SPSS for Windows step by step: A simple guide and reference* (10th ed.). Pearson.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25*(2), 161–178. https://doi.org/10.2307/2092623

Hair, J. F., Babin, B. J., Anderson, R. E., & Black, W. C. (2022). *Multivariate data analysis* (8th ed.). Cengage Learning.

Herman, E. (2018). Scholarly reputation. *FEMS Microbiology Letters, 365*(18), fny200. https://doi.org/10.1093/femsle/fny200

Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Jackson, K., Faroa, B. D., & Padmanabhanunni, A. (2023). What motivates South African students to attend university? A cross-sectional study on motivational orientation. *South African Journal of Psychology, 53*(1). https://doi.org/10.1177/00812463231196297

Kahu, E. R., & Nelson, K. (2017). Student engagement in the educational interface: Understanding the mechanisms of student success. *Higher Education Research & Development, 37*(1), 58–71. https://doi.org/10.1080/07294360.2017.1344197

Kuşcu Karatepe, H., Özcan Yüce, U., & Öztürk Yıldırım, T. (2020). Zaman yönetimi: Üniversite öğrencileri üzerinde bir araştırma. *Bartın Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 11*(21), 1–21. https://dergipark.org.tr/en/pub/bartiniibf/article/630924

Kuykendall, L., Tay, L., & Ng, V. (2015). Leisure engagement and subjective well-being: A meta-analysis. *Psychological Bulletin, 141*(2), 364–403. https://doi.org/10.1037/a0038508

Lepp, A., Barkley, J. E., & Karpinski, A. C. (2014). The relationship between cell phone use, academic performance, anxiety, and satisfaction with life in college students. *Computers in Human Behavior, 31*, 343–350. https://doi.org/10.1016/j.chb.2013.10.049

Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling: A Multidisciplinary Journal, 9*(2), 151–173. https://doi.org/10.1207/S15328007SEM0902_1

McMillan, J. H., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry* (6th ed.). Pearson.

Miotto, G., Del-Castillo-Feito, C., & Blanco-González, A. (2020). Reputation and legitimacy: Key factors for higher education institutions' sustained competitive advantage. *Journal of Business Research, 112*, 342–353. https://doi.org/10.1016/j.jbusres.2019.11.076

Nguyen, N., & LeBlanc, G. (2001). Image and reputation of higher education institutions in students' retention decisions. *International Journal of Educational Management, 15*(6), 303–311. https://doi.org/10.1108/EUM0000000005909

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.

Özkan, C., & Gizir, S. (2013). Motives of undergraduate students to study at higher education institutions and their socialization tactics. *Education and Science, 38*(170), 223–236. https://doi.org/10.15390/ES.2013.1198

Öztürk, A. (2020). An investigation the perceived stress, university adjustment levels and academic grade average of freshman nursing university students. *Cyprus Turkish Journal of Psychiatry & Psychology, 2*(3), 211–218. https://doi.org/10.35365/ctjpp.20.03.21

Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology, 8*, Article 422. https://doi.org/10.3389/fpsyg.2017.00422

Patriche, C. C., Stoica, D., Schin, G. C., & Sava, V. (2025). University reputation management: Academic knowledge alchemy. *Management Decision*. Advance online publication. https://doi.org/10.1108/MD-04-2024-0889

Paulsen, M. B., & St. John, E. P. (2002). Social class and college costs: Examining the financial nexus between college choice and persistence. *The Journal of Higher Education, 73*(2), 189–236. https://doi.org/10.1080/00221546.2002.11777141

Perna, L. W. (2006). Studying college access and choice: A proposed conceptual model. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 21, pp. 99–157). Springer. https://doi.org/10.1007/1-4020-4512-3_3

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12*(4), 531–544. https://doi.org/10.1177/014920638601200408

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879–891. https://doi.org/10.3758/BRM.40.3.879

Pucciarelli, F., & Kaplan, A. (2016). Competition and strategy in higher education: Managing complexity and uncertainty. *Business Horizons, 59*(3), 311–320. https://doi.org/10.1016/j.bushor.2016.01.003

Purevsuren, N., Norinpel, E., Nugjgar, P., Dolgor, G.-O., Lkhagvasuren, T., Park, H., Altangerel, A., & Ravdansuren, C. (2025). An analysis of factors affecting university reputation: A case study of Mongolian universities. *Sustainability, 17*(14), 6397. https://doi.org/10.3390/su17146397

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4), 698–714. https://doi.org/10.1037/0021-9010.87.4.698

Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin, 138*(2), 353–387. https://doi.org/10.1037/a0026838

Seksan, J., Kongcharoen, J., Sae-jie, W., Warintarawej, P., & Puttinaovarat, S. (2025). Modeling of learning motivation, satisfaction and loyalty among university students. *International Journal of Innovative Research and Scientific Studies, 8*(6), 1387–1397. https://doi.org/10.53894/ijirss.v8i6.9925

Schneider, M., & Preckel, F. (2017). Variables associated with achievement in higher education: A systematic review of meta-analyses. *Psychological Bulletin, 143*(6), 565–600. https://doi.org/10.1037/bul0000098

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Pearson.

Terzi, E., Isik, U., Inan, B. C., Akyildiz, C., & Ustun, U. D. (2024). University students' free time management and quality of life: The mediating role of leisure satisfaction. *BMC Psychology, 12*, Article 239. https://doi.org/10.1186/s40359-024-01734-6

Wang, W.-C., Kao, C.-H., Huan, T.-C., & Wu, C.-C. (2011). Free time management contributes to better quality of life: A study of undergraduate students in Taiwan. *Journal of Happiness Studies, 12*(4), 561–573. https://doi.org/10.1007/s10902-010-9217-7

Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement, 73*(6), 913–934. https://doi.org/10.1177/0013164413495237

Wong, J., Baars, M., Davis, D., van der Zee, T., Houben, G.-J., & Paas, F. (2019). Supporting self-regulated learning in online learning environments and MOOCs: A systematic review. *International Journal of Human–Computer Interaction, 35*(4–5), 356–373. https://doi.org/10.1080/10447318.2018.1543084

Wintre, M. G., Gates, S., Pancer, W. M., Pratt, M. S., Polivy, J., Birnie-Lefcovitch, S., Adams, G., & Sutherland, A. (2009). The student perception of university support and structure scale: Development and validation. *Journal of Youth Studies, 12*(3), 289–306. https://doi.org/10.1080/13676260902775085

Yıldırım, İ. (1997). Algılanan sosyal destek ölçeğinin geliştirilmesi, güvenirliği ve geçerliği. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 13*(13), 81–87. https://dergipark.org.tr/tr/pub/hunefd/article/102834

Yuwono, M. R., & Mastuti, E. (2025). The influence of intrinsic motivation and free time management on leisure boredom among university students. *Psychopreneur Journal, 9*(2), 102–114. https://doi.org/10.37715/psy.v9i2.5492