

The interplay between university students' needs, maturity levels (personal, familial, and social), and life satisfaction

Ahmet Mutlu Akyüz¹, İbrahim Durmuş^{2*}

¹Gumushane University, Faculty of Economics and Administrative Sciences, Department of Human Resources Management, Gümüşhane, Türkiye

²Bayburt University, Vocational School of Social Sciences, Department of Transportation Services, Bayburt, Türkiye

ARTICLE HISTORY

Received: Apr. 3, 2024

Accepted: Feb. 25, 2025

Keywords:

Maslow's hierarchy of needs,
Life satisfaction,
Adolescent maturity,
Turkish adolescents.

Abstract: It is essential for young Turkish individuals (university students) to rapidly develop their skills and abilities to take on leadership roles in society. To become well-equipped individuals who contribute to societal welfare and development, these young adults must undergo a healthy adolescent maturity process. Therefore, providing a supportive environment for Turkish adolescents during their maturation is crucial. This study investigates how fulfilling all hierarchical needs (PSN, LBN, ESAN) affects Turkish adolescents' life satisfaction (LS) and their personal (PM), familial (FM), and social (SM) maturity levels. The study sample consists of 397 Turkish university students. The proposed research model was tested using PLS-SEM analysis. The findings indicate that fulfilling all hierarchical needs positively affects life satisfaction. Additionally, life satisfaction serves as a mediator between the fulfillment of hierarchical needs and maturity levels. However, the most fundamental physical and security needs are not adequately met, hindering personal maturity. Furthermore, love and belonging needs and esteem and self-actualization needs positively impact all maturity levels.

1. INTRODUCTION

University and college students represent a crucial stage of comprehensive exploration regarding maturity (Nevill & Super, 1988). Adolescents who effectively understand and manage their emotions and behaviors are better equipped to maintain social relationships, leading to increased social cohesion and overall societal well-being. A society's well-being depends not only on governmental policies but also on the efforts and actions of its young members. Adolescent maturity significantly contributes to societal well-being. Emotionally healthy adolescents with high well-being levels exhibit self-esteem, educational achievement, social cohesion, problem-solving skills, social competence, and a sense of purpose in leading a productive life (Morgan *et al.*, 2008). By developing their skills and abilities, adolescents enhance productivity in education and work, preparing them for leadership roles and contributing to their society's overall progress. This fosters a thriving and dynamic society

*CONTACT: İbrahim DURMUŞ ✉ ibrahimdurmus@bayburt.edu.tr 📍 Bayburt University, Vocational School of Social Sciences, Department of Transportation Services, Bayburt, Türkiye

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capable of addressing its members' needs and challenges. As adolescents mature, they gain independence and take on responsibilities such as pursuing careers, starting families, and managing finances. Providing a supportive environment helps adolescents develop into mature, capable individuals who contribute positively to society.

This study claims that Turkish youth with higher life satisfaction levels exhibit more mature and responsible behaviors, benefiting societal well-being. Additionally, Turkish youth have diverse physical, emotional, and social needs that must be met to enhance life satisfaction and effectively cope with adolescent challenges. This study argues that fulfilling Turkish adolescents' needs positively impacts their life satisfaction throughout their education by promoting physical and emotional well-being, fostering a supportive learning environment, and enhancing social and emotional development.

A critical factor influencing societal happiness is social cohesion, the capacity to foster unity and solidarity among members (Delhey & Dragolov, 2016). Adolescence now extends into the mid-to-late twenties, with increasingly complex pathways to adulthood. The future well-being of a nation relies on raising skilled, competent, and responsible adults. Understanding adolescents' perspectives, wishes, and expectations is crucial in analyzing factors that influence them positively and negatively. The literature highlights that university students' maturity is influenced by academic and external factors (Munro & Pooley, 2009). Needs, along with individual desires, motivate and provide resources for human behavior (Wubbolding *et al.*, 2004). Maslow's hierarchy of needs theory remains influential in this context. The theory explains young individuals' maturation processes (Frame, 1996). The perception of need continuously contributes to the emergence of higher needs. Additionally, individuals' varying needs and perspectives across different life stages influence their preferences and development. This evolution shapes maturity, indicating that needs affect maturity levels.

Life satisfaction reflects individuals' emotional responses to life stages (Ullah *et al.*, 2024). Enhancing young individuals' life satisfaction depends on family dynamics and social support mechanisms (Almeida *et al.*, 2024). For example, university students' satisfaction with family and friend relationships significantly impacts life satisfaction (Bailey & Miller, 1998). Life satisfaction influences university students' future activities, expectations, and desires.

This research aims to identify factors affecting university students' maturity levels by emphasizing personal, familial, and social maturity. The study incorporates Maslow's hierarchy of needs, analyzing university students' physiological and security needs, love and belonging, esteem, and self-actualization needs. Additionally, students' financial and moral concerns are considered, incorporating life satisfaction into the research model as a variable. This study examines university students' maturity levels within the framework of their needs and life satisfaction. The literature review and hypothesis development stages are outlined as follows.

1.1. Adolescent Maturity

Maturity is a fundamental aspect of life (Singh *et al.*, 2014). Various biological benchmarks indicate maturity, such as puberty, often seen as the transition to adulthood. However, the definition of maturity evolves with societal needs (Johnson *et al.*, 2009). In education, different types of maturity are discussed. For example, psychosocial maturity involves individual, interpersonal, and social competence (Greenberger *et al.*, 1975). Additionally, maturity has physical, psychological, and social dimensions (Kumar & Ritu, 2013). Maturity is not easily measurable and is not solely an age-related concept. For example, imposing a minimum age for university admission remains debatable (Manning, 2013). Maturity is relevant in religion, psychology, education, and law, serving as a unifying framework across disciplines. It is a prerequisite for a productive life and effectiveness in leadership, teaching, and counseling. Ethically, maturity integrates self-interest with social responsibility (Dowson & Miner, 2012).

Personal development is the first step in growth, essential for young people. Individuals shape their future careers based on personal development, followed by personal maturation,

encompassing intellectual, emotional, social, and spiritual growth. Accepting personal responsibility fosters career success beyond ambition (Dowson & Miner, 2012). Adolescents' moral reasoning stems from interpersonal relationships and societal roles. Their concern for peer perception influences moral maturity (Hazen *et al.*, 2008). Social maturity reflects adolescents' ability to align with societal expectations regarding understanding, emotions, and skills. Social maturity also involves acts of kindness that require self-interest compromises, which may sometimes be socially maladaptive (McClelland, 1982). Family maturity involves the lifelong development of parenting skills and intergenerational learning. However, scientific studies on family maturity remain scarce (Hankey, 2016).

1.2. Hierarchy of Needs Theory

Needs help individuals organize their capabilities efficiently and shape external reality (Maslow, 1970). Maslow's hierarchy of needs includes physiological needs, safety needs, love and belonging, esteem, and self-actualization needs. Meeting physiological needs, such as food and shelter, is crucial (Jackson & Marks, 1999). Security involves protection from physical and social threats (Aruma & Hanachor, 2017). Maslow (1943) asserts that unmet needs drive behavior, shaping thought and action systems.

University students have diverse backgrounds, educational levels, and needs (McKenzie & Schweitzer, 2001). They may struggle to access necessary resources for life satisfaction (Freitas & Leonard, 2011). Maslow's theory suggests that meeting basic needs is essential for maturity development. University students cannot achieve academic goals without fulfilling basic needs (Broton *et al.*, 2014). Turkish university students must first satisfy their physiological and security needs to focus on academic success and personal growth.

An individual must meet their basic needs, such as food, water, and fresh air, to sustain their life (Milheim, 2012). Some studies suggest that failing to meet these fundamental needs can hinder students' ability to focus on learning (Burlison & Thoron, 2014). In this context, Turkish higher education students must first fulfill their physiological and safety needs to concentrate, at the very least, on their short-term academic goals. Turkish adolescents who have their basic needs met are more likely to be well-adjusted, confident, and capable of realizing their full potential. Conversely, those who do not have their basic needs fulfilled may experience emotional and psychological difficulties, which can impede their development of maturity.

1.3. Adolescents' Life Satisfaction

Life satisfaction is defined as the general cognitive evaluation of an individual's quality of life (Paschali & Tsitsas, 2010). Individuals with low life satisfaction may experience mental health disorders, arrogance, suicidal ideation, and aggressive behaviors. Due to their negative thoughts, they may disregard adult guidance and struggle to accept the realities of life (Ahamed & Ghosh, 1996). In contrast, individuals with high life satisfaction are more likely to adopt positive thinking, accept life's realities, consider guidance, and develop healthier relationships with their environment.

Universities should provide education that enhances students' life satisfaction, boosts their self-esteem, and strengthens family relationships (Garnique-Hinostroza *et al.*, 2024). To maintain harmony and achieve a high level of life satisfaction in the future, university students must align their current behaviors with their long-term goals (Cabras & Mondo, 2017). In other words, Turkish adolescents should regulate their behaviors within the framework of their future aspirations. It is essential to recognize that their life satisfaction will be shaped by the sum of the activities they engage in while considering their future.

1.4. Development of the Hypothesis

A review of the literature suggests that unmet needs among university students may lead to self-harming behaviors, low academic performance and motivation, and unsatisfactory social relationships (Faulkner & Burdinski, 2011). Therefore, addressing the needs of young

adolescents is crucial for enhancing both their life satisfaction and their overall level of maturity. Maslow emphasized that fulfilling a need and subsequently recognizing the next unmet need contributes to a more conscious and goal-directed life (Maslow, 1943). The extent to which Turkish adolescents' needs are met can significantly enhance their satisfaction, strengthen their personal, familial, and social relationships, and promote overall maturity.

A well-structured and conscious life fosters life satisfaction, healthy development, and maturity. Maslow (1970) asserted that when individuals' needs are fulfilled, their potential for self-actualization, self-fulfillment, and self-realization increases, ultimately contributing to their overall maturation. (For clarification: self-actualization refers to achieving one's potential and personal growth, self-fulfillment emphasizes living in alignment with one's values and finding satisfaction, and self-realization encompasses a broader process of self-discovery, understanding, and connection to a greater context.) Hinton *et al.* (2011) highlighted that internal factors play a significant role in shaping individual behavior and that internal motivation is more effective in fulfilling needs than external control. They also stated that adolescent behaviors are guided by the distinction between what they want and what they need. Furthermore, an adolescent student's overall behavior is influenced by their actions, thoughts, emotions, and physiological state. Based on these considerations, the following hypotheses were formulated:

H₁: The fulfillment of physical and safety needs among young Turkish individuals positively influences their personal maturation levels.

H₂: The fulfillment of love and belonging needs among young Turkish individuals positively influences their personal maturation levels.

H₃: The fulfillment of esteem and self-actualization needs among young Turkish individuals positively influences their personal maturation levels.

Singh *et al.* (2014) found that the type of family in which young individuals are raised significantly influences their social and emotional maturity. Kaur and Kalaramna (2004) emphasized that socioeconomic status and home environment positively impact the social intelligence levels of young individuals. Similarly, Rawat and Singh (2017) revealed that adolescents from extended joint families demonstrate greater emotional resilience, social adaptability, independence, and more well-rounded personalities compared to those from nuclear families. Singh *et al.* (2014) further found that adolescents from higher-income families tend to be more socially adaptable and independent than those from lower-income backgrounds. Their findings highlight a significant positive correlation between social maturity and family economic status. Moreover, Kusum *et al.* (2023) asserted that emotionally mature young individuals are better equipped to make informed decisions regarding their social interactions and life choices. Based on these findings, the following hypotheses were developed:

H₄: The fulfillment of physical and safety needs among young Turkish individuals positively influences their familial maturation levels.

H₅: The fulfillment of love and belonging needs among young Turkish individuals positively influences their familial maturation levels.

Gough (1966) suggested that social maturity is characterized by an individual's openness to change and innovation. Pedrini and Pedrini (1966) emphasized that individuals from lower socioeconomic backgrounds or culturally disadvantaged family structures are less likely to develop social maturity, whereas those from higher socioeconomic backgrounds or culturally enriched environments are more likely to do so. Similarly, Adıgüzel (2012) found that as the innovativeness levels of adolescent students increase, their moral maturity also improves. Radul *et al.* (2020) highlighted that social maturity in young adolescents is a prerequisite for self-realization. Based on these considerations, the following hypotheses were developed:

H₆: The fulfillment of esteem and self-actualization needs among young Turkish individuals positively influences their familial maturation levels.

H₉: The fulfillment of esteem and self-actualization needs among young Turkish individuals positively influences their social maturation levels.

Fulfilling basic needs contributes to the development of social maturity. In their study, Lester (1990) found that as individuals' fundamental needs are met, their levels of neuroticism—manifested as emotional emptiness and insecurity—decrease. Diener *et al.* (2003) emphasized that subjective well-being is closely linked to the fulfillment of universal human needs. Similarly, Loyd (2005) pointed out that failure to meet students' needs can lead to destructive and self-destructive behaviors, low academic motivation, poor performance, and unsatisfactory social relationships. Burdenski and Faulkner (2010) asserted that meeting individuals' basic needs is essential for fostering self-esteem. Their research further revealed that students whose basic needs are met are better prepared for personal and social development, both inside and outside the classroom. Faulkner and Burdenski (2011) also demonstrated that students who have their fundamental needs satisfied experience greater academic and social growth. Moreover, Kumar and Ritu (2013) stated that social maturity plays a key role in shaping an individual's personality, fostering traits such as competence, honesty, foresight, creativity, innovation, intelligence, fairness, openness, and broad-mindedness. Based on these insights, the following hypotheses were formulated:

H₇: The fulfillment of physical and safety needs among young Turkish individuals positively influences their social maturation levels.

H₈: The fulfillment of love and belonging needs among young Turkish individuals positively influences their social maturation levels.

Meeting the needs of young Turkish individuals can significantly contribute to their life satisfaction. Oishi *et al.* (1999) stated that there is a strong relationship between the degree to which people's needs and values are met and their overall life satisfaction. Maslow (1948) emphasized that as needs become more specific and diversified, they influence individuals' well-being in different ways. While fulfilling lower-level needs (such as security) may provide a sense of comfort, it does not necessarily generate enthusiasm or happiness in terms of overall satisfaction. Additionally, higher-level needs, such as self-actualization, play a crucial role in achieving a more enriched life.

Lester *et al.* (1983) revealed that students with a strong belief in internal locus of control tend to experience high satisfaction with their physiological and safety needs, as well as their needs for belonging, respect, and self-actualization. Conversely, those who believe their lives are controlled by external factors tend to have lower satisfaction in these areas. Pettijohn and Pettijohn (1996) found that love and belongingness needs significantly contribute to the happiness of university students. Diener and Seligman (2004) argued that life satisfaction is influenced not only by the fulfillment of physical needs but also by subjective well-being, suggesting that income alone does not guarantee happiness.

Arslan *et al.* (2010) emphasized that university students' ability to express their thoughts and emotions contributes positively to their lives. Similarly, Capan (2010) stated that achieving personal standards leads to increased life satisfaction among university students. Cao *et al.* (2013) demonstrated that fulfilling social needs enhances individuals' satisfaction levels. Furthermore, Tian (2016) found that students with a strong belief in a just world tend to report higher life satisfaction. In this context, it can be argued that as Turkish university students' needs are increasingly met, their perception of fairness in the world will also strengthen. Based on these findings, the following hypotheses were developed:

H₁₀: The fulfillment of physical and safety needs among young Turkish individuals positively influences their life satisfaction levels.

H₁₁: The fulfillment of love and belonging needs among young Turkish individuals positively influences their life satisfaction levels.

H₁₂: The fulfillment of esteem and self-actualization needs among young Turkish individuals positively influences their life satisfaction levels.

There is a strong relationship between life satisfaction and the level of maturity in young Turkish individuals. Diener and Diener (1995) found that in collectivist cultures, family and friendship relationships are strong predictors of life satisfaction. Ahamed and Ghosh (1996) suggested that in addition to guidance and counseling services, providing university students with proper accommodation, a supportive social environment, and an effective learning experience contributes to their moral values, social maturity, and overall life satisfaction.

Bailey and Miller (1998) revealed that family is one of the most significant factors affecting university students' life satisfaction. Genia and Cooke (1998) found that spiritual maturity, particularly among women with a developmental orientation, is associated with higher life satisfaction. Conversely, Johns *et al.* (2016) reported a negative relationship between life satisfaction and emotional immaturity among students. Behera and Rangaiah (2017) further supported this, showing that emotional maturity is strongly linked to higher life satisfaction. Similarly, Schnettler *et al.* (2017) found a positive relationship between family life and university students' life satisfaction. Morales-Vives and Dueñas (2018) also confirmed that life satisfaction and maturity levels are positively correlated among students. Based on these insights, the following hypotheses were formulated:

H₁₃: The life satisfaction levels of young Turkish individuals positively influence their personal maturation levels.

H₁₄: The life satisfaction levels of young Turkish individuals positively influence their familial maturation levels.

H₁₅: The life satisfaction levels of young Turkish individuals positively influence their social maturation levels.

As the extent to which Turkish university students' needs are met increases, their overall life satisfaction is expected to rise accordingly. This, in turn, enhances their adaptation to university life, positively influencing their success in future academic and social activities and facilitating their journey toward personal maturity. Sharma (2012) found that first-year university students exhibit lower levels of emotional maturity compared to their senior counterparts and often struggle with adapting to university life. Moreover, it has been emphasized that students experience emotional instability when adjusting to new behavioral patterns and social expectations.

Fink *et al.* (2013) revealed that social maturity in an educational context enables young students to display competent behaviors and become well-regarded among their peers. Similarly, Talla *et al.* (2019) emphasized that university administrations should enhance their internal performance and increase efforts to improve students' perceived satisfaction levels. Abbas (2020) argued that universities should not only focus on academic activities but also encourage students to engage in recreational activities, as this fosters their competitive nature and contributes to the development of their personality traits. Additionally, the organization of sports activities has been suggested as a means to promote both academic and social development. Given these findings, it is evident that fulfilling the socio-cultural needs of university students plays a crucial role in enhancing both their life satisfaction and their overall maturity levels.

Deniz (2006) found that university students with low life satisfaction face significant challenges in coping with their problems. Burdenski and Faulkner (2010) emphasized that reducing rigid institutional policies and providing students with more autonomy in academic activities could enhance their sense of independence and fulfillment. Gobin *et al.* (2012) highlighted that self-actualization is among the most dominant needs of university students, and despite having unmet lower-level needs, many still strive for ambitious goals in life. Kong *et al.* (2012) found that university students with high emotional intelligence are better able to manage their

emotions, leading to increased self-esteem, improved social support, and greater life satisfaction.

Manju (2016) suggested that social maturation is a long-term process and that students need exposure to socially mature individuals to foster their personal development. Support from family members and other responsible individuals plays a crucial role in facilitating this growth. Bukhari and Saba (2017) found that anxiety, depression, and stress levels among university students are negatively correlated with their life satisfaction. In this regard, the inability to meet students' needs may contribute to psychological distress.

Campbell *et al.* (2018) observed that during exam periods, university students experience a decline in the fulfillment of their basic needs. During these stressful times, students tend to spend excessive time on social media and engage in compensatory behaviors in an attempt to satisfy their unmet psychological and social needs. Based on these considerations, the following hypotheses were developed:

H₁₆: Life satisfaction mediates the relationship between fulfilling the physical and security needs of young Turkish individuals and their personal maturation levels.

H₁₇: Life satisfaction mediates the relationship between fulfilling the love and belonging needs of young Turkish individuals and their personal maturation levels.

H₁₈: Life satisfaction mediates the relationship between fulfilling the needs of respect and self-actualization of young Turkish individuals and their personal maturation levels.

H₁₉: Life satisfaction mediates the relationship between fulfilling the physical and security needs of young Turkish individuals and their familial maturation levels.

H₂₀: Life satisfaction mediates the relationship between fulfilling the love and belonging needs of young Turkish individuals and their familial maturation levels.

H₂₁: Life satisfaction mediates the relationship between fulfilling the needs of respect and self-actualization of young Turkish individuals and their familial maturation levels.

H₂₂: Life satisfaction mediates the relationship between fulfilling the physical and security needs of young Turkish individuals and their social maturation levels.

H₂₃: Life satisfaction mediates the relationship between fulfilling the love and belonging needs of young Turkish individuals and their social maturation levels.

H₂₄: Life satisfaction mediates the relationship between fulfilling the needs of respect and self-actualization of young Turkish individuals and their social maturation levels.

2. METHOD

This research was conducted in Türkiye between 2022 and 2023. The study population consisted of approximately 21,300 students enrolled at a Turkish state university, Gumushane University. The university provides educational opportunities to students from various regions of Türkiye and offers associate, undergraduate, and graduate programs. Most students pursuing their education reside in either public or private dormitories. Given this context, Gumushane University presents an ideal research setting for examining the relationships between students' maturity levels, needs, and life satisfaction, as outlined in the research model.

A review of the literature suggests that a sample size of 380 is sufficient for a population of 30,000 (Krejcie & Morgan, 1970). In this study, voluntary participation was secured from 397 actively enrolled Turkish university students, indicating that the required sample size suggested in the literature was met. Additionally, Evans and Mathur (2005) emphasized that electronic questionnaires offer extensive accessibility while being cost-effective. Considering this, electronic questionnaires were utilized in data collection. These questionnaires were distributed to participating students through approximately 80 supervisors, including professors, associate professors, assistant professors, and lecturers from various departments within the university.

2.1. Development of Research Scales

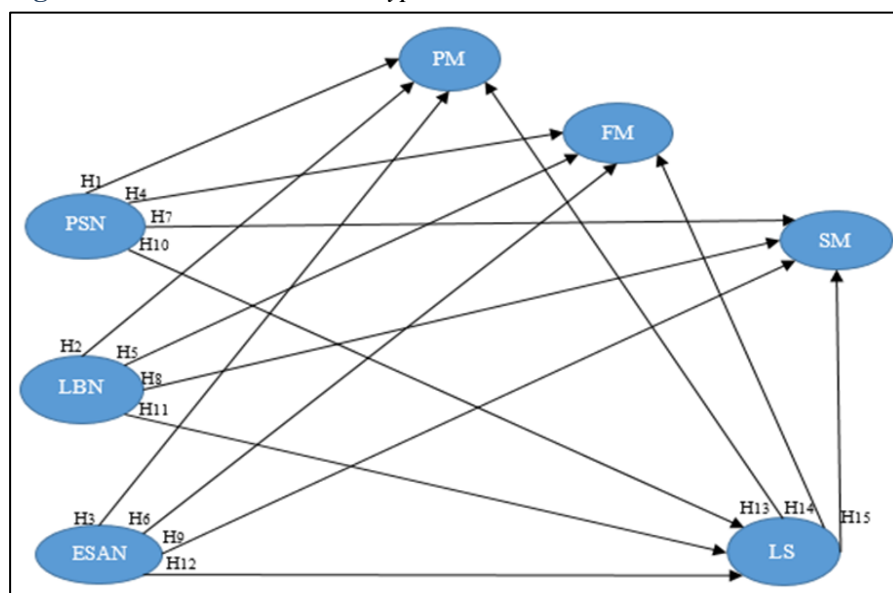
To measure the needs, life satisfaction, and maturity levels of Turkish university students, specific scale questions were developed based on the variables included in the research model. Ethical approval for the use of these scales was obtained before the administration of the questionnaires. The development of the scales incorporated insights from both previous studies and feedback from Turkish university students. In this context, scale items proposed by Lester (1990) and Taormina and Gao (2013) were reviewed. Drawing from these studies, a 14-item scale was designed to assess university students' needs. This scale comprises six items for measuring physiological and safety needs, three items for assessing love and belonging needs, and five items for evaluating esteem and self-actualization needs.

Life satisfaction among Turkish university students was measured using a four-item scale, derived from the Life Satisfaction Scale developed by Diener *et al.* (1985). Additionally, a 14-item scale was employed to assess students' personal, familial, and social maturity levels. In developing this scale, questions used in previous studies by Doll (1935), Peterson *et al.* (2007), and McElroy (2013) were examined. Of the 14 items included, six measured personal maturity, four assessed familial maturity, and four evaluated social maturity. Notably, familial maturity—considered an essential component of Turkish students' overall maturity—was included in the research model. Unlike personal and social maturity, which are frequently discussed in the literature, familial maturity is a relatively less explored concept, thus warranting its inclusion as a variable in this study. During the scale development process, the psycho-social characteristics of university students, their general behavior both in and outside of class, and their reactions to their environment were carefully examined. Additionally, feedback was obtained from randomly selected students to refine the scale items further and ensure their relevance and applicability.

2.2. Designed Research Model and Research Hypothesis

The designed research model is shown in Figure 1, and the hypotheses that make up the model are as follows:

Figure 1. Research model and hypotheses.



Variables in the Research Model:

PSN: Physiological and Safety Needs, LBN: Love and Belonging Needs, ESAN: Esteem and Self-Actualization Needs, LS: Life Satisfaction, PM: Personal Maturity, FM: Familial Maturity, SM: Social Maturity

Hypotheses Regarding Direct Effects:

H ₁ : PSN → PM	H ₆ : ESAN → FM	H ₁₁ : LBN → LS
H ₂ : LBN → PM	H ₇ : PSN → SM	H ₁₂ : ESAN → LS
H ₃ : ESAN → PM	H ₈ : LBN → SM	H ₁₃ : LS → PM
H ₄ : PSN → FM	H ₉ : ESAN → SM	H ₁₄ : LS → FM
H ₅ : LBN → FM	H ₁₀ : PSN → LS	H ₁₅ : LS → SM

Hypotheses Regarding Mediator Effects:

H ₁₆ : PSN → LS → PM	H ₁₉ : PSN → LS → FM	H ₂₂ : PSN → LS → SM
H ₁₇ : LBN → LS → PM	H ₂₀ : LBN → LS → FM	H ₂₃ : LBN → LS → SM
H ₁₈ : ESAN → LS → PM	H ₂₁ : ESAN → LS → FM	H ₂₄ : ESAN → LS → SM

3. RESULTS

The results of the research analysis are presented under the following sections.

3.1. Analysis of Demographic Data

The demographic characteristics of the participants were analyzed using the SPSS statistical package. According to the results, the majority of participants were female students (259 students, 65.2%). Most of the respondents were between the ages of 19 and 21 (268 students, 67.5%). In terms of financial status, the majority of Turkish students reported an income of \$250 or less (247 students, 62.2%). Regarding education level, associate degree students constituted the largest group (233 students, 58.7%) (Table 1).

Table 1. Demographic data.

Gender	<i>f</i>	%	Education	<i>f</i>	%
Woman	259	65.2	Associate	233	58.7
Man	138	34.8	Bachelor	156	39.3
Total	397	100.0	Master's	8	2.0
			Total	397	100.0
Age	<i>f</i>	%	Income	<i>f</i>	%
18 or under	30	7.6	250\$ or under	247	62.2
19-21	268	67.5	251-500\$	62	15.6
22-24	76	19.1	501-750\$	30	7.6
25-27	8	2.0	751-1000\$	16	4.0
28-30	4	1.0	1001\$ or above	42	10.6
31 or above	11	2.8	Total	397	100.0
Total	397	100.0			

3.2. Analysis of the Measurement Model of Research

The research model was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), also known as PLS Path Modeling, which is a widely used multivariate data analysis method in business and social sciences. PLS-SEM is particularly suitable for analyzing models that include latent variables. Since its rapid development, PLS-SEM has gained significant popularity among researchers and students, particularly since the early 2000s (Memon *et al.*, 2021). For this study, the SmartPLS software was used for PLS-SEM analysis. SmartPLS is a scientific, research-based software that applies algorithms and statistical models validated in peer-reviewed academic journals. Its primary objective is to ensure full transparency in the calculation of results, thus enabling the reproducibility of findings. Additionally, the software is designed to be highly user-friendly, making it accessible for both beginners and experienced researchers conducting scientifically rigorous PLS-SEM analyses (Sarstedt & Cheah, 2019).

The evaluation of PLS-SEM results follows a two-stage approach: (1) the evaluation of measurement models and (2) the evaluation of the structural model (Chin, 2010; Hair *et al.*, 2017b). To assess the overall applicability of the research model, the results related to both the external (measurement model) and internal (structural model) aspects were analyzed. First, the reliability and validity of the measurement model were examined using the SmartPLS software. Reliability was assessed through Cronbach's alpha and composite reliability values (ρ_a and ρ_c). To evaluate convergent validity, the Average Variance Extracted (AVE) values were calculated. Additionally, discriminant validity was tested using the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio. Following the measurement model evaluation, structural model analyses were conducted. Factor analysis was employed to test the scale items of the variables, and Variance Inflation Factor (VIF) values were calculated to assess potential multicollinearity issues. Furthermore, effect sizes were determined using f^2 and R^2 values. The overall model fit was evaluated using Standardized Root Mean Square Residual (SRMR), d_{ULS} , d_G , chi-square, and Goodness-of-Fit (GoF) indices. The final analysis results provided insights into the structural model, which was tested based on the research hypotheses. The findings were interpreted and discussed in relation to the existing literature.

The evaluation of the measurement model (external model) involves assessing the convergent and discriminant validity of the measurements, as well as the reliability of individual indicators and the reliability of each construct's measurement components (Hair *et al.*, 2012). Among the reliability coefficients, Cronbach's alpha typically yields slightly lower values than composite reliability (Dijkstra & Henseler, 2015). The Average Variance Extracted (AVE) represents the proportion of variance explained by the indicators of a given construct relative to the total variance of those indicators (Henseler *et al.*, 2015). According to the literature, for a scale to be considered reliable in analyses conducted using SmartPLS, Cronbach's alpha values should exceed .7. Additionally, an AVE value above .5 is required to ensure the validity of the data (Albetris *et al.*, 2022). Moreover, studies emphasize that composite reliability values should not be lower than .6 (Henseler *et al.*, 2009). An examination of the research findings indicates that all scales satisfy the required reliability thresholds, and their contribution to the average explained variance is high (Table 2).

Table 2. Reliability and AVE values of scales used in the study.

Variables	Cronbach's Alpha	Composite Reliability (ρ_a)	Composite Reliability (ρ_c)	AVE
PSN	.847	.856	.886	.564
LBN	.834	.839	.900	.751
ESAN	.823	.865	.873	.589
LS	.792	.802	.865	.615
PM	.874	.885	.904	.611
FM	.854	.882	.900	.692
SM	.777	.792	.856	.599

Fit Criteria Resource: Cronbach's Alpha $\geq .70$ and $\leq .95$ (Legate *et al.*, 2021); $\rho_a > .70$ (Hair *et al.*, 2011); CR $> .70$ (Hair *et al.*, 2011); AVE $> .50$ (Sarstedt *et al.*, 2011).

Validity control was conducted in two stages: convergent validity and discriminant validity. Convergent validity was assessed using two key indicators: outer loadings and Average Variance Extracted (AVE) values. For discriminant validity, three methods were applied (Rasoolimanesh, 2022). The first method is the Fornell-Larcker criterion (Hair *et al.*, 2014), the second involves examining cross-loadings, and the third is the Heterotrait-Monotrait Ratio (HTMT) criterion.

According to the Fornell-Larcker criterion, the AVE of each latent variable should be greater than the squared correlations of all other latent variables to confirm discriminant validity. This

ensures that each latent variable explains more variance than any other construct in the model (Henseler *et al.*, 2009). As shown in Table 3, all values meet the criteria for discriminant validity.

Table 3. *Fornell-Larcker Criterion convergent validations.*

Factors	ESAN	FM	LBN	LS	PM	PSN	SM
ESAN	.767						
FM	.229	.832					
LBN	.474	.317	.866				
LS	.592	.369	.581	.784			
PM	.459	.509	.389	.487	.782		
PSN	.504	.240	.409	.531	.197	.751	
SM	.365	.459	.512	.511	.544	.282	.774

Fit Criteria Resource: Diagonal (italic) values > Diagonal values (Lowry & Gaskin 2014).

In the literature, it is emphasized that HTMT coefficients within the measurement model should be below .90 for conceptually similar constructs and below .85 for distinct constructs. Additionally, the confidence interval should not include the value of 1 (Hair *et al.*, 2017a). As a result of this research, the findings presented in Table 4 indicate that all values were below .85, thereby confirming discriminant validity and meeting the required confidence interval criteria.

Table 4. *HTMT coefficients of research scales.*

Factors	ESAN	FM	LBN	LS	PM	PSN	SM
ESAN							
FM	.257						
LBN	.545	.362					
LS	.710	.421	.706				
PM	.479	.609	.449	.560			
PSN	.616	.261	.477	.634	.221		
SM	.417	.562	.627	.632	.670	.324	

Fit Criteria Resource: HTMT<.85 (Legate *et al.*, 2021).

3.3. Analysis of the Structural Model of the Research

The literature suggests that the measurement model must demonstrate acceptable reliability and validity values before evaluating the goodness of fit of the structural model (Henseler *et al.*, 2016). Upon examining the measurement model results of this study, it is evident that all values meet the required reliability and validity standards. Studies indicate that the variance inflation factor (VIF) can be used to assess whether there is a multicollinearity problem. It is generally recommended that the VIF value should be less than 5 (Hair *et al.*, 2011). However, some studies suggest that VIF values should be below 3 in the structural model (Legate, 2021). As shown in Table 5, all scale-related items exhibit values below 3, confirming the absence of multicollinearity issues.

An examination of the factor analysis results presented in Table 5 reveals that all scale items are correctly clustered under their respective factors, with any items loading onto different scales having been removed. Evaluating each scale in terms of factor loadings, the highest factor loading for the PSN (Physical and Security Needs) scale corresponds to students' perceptions of their living environment as being sufficiently safe for them to continue their lives (PSN3/.798). In the LBN (Love and Belonging Needs) scale, the highest factor loading reflects students' feelings that the people around them make them feel highly valued (LBN3/.893). Within the ESAN (Esteem and Self-Actualization Needs) scale, the highest factor loading is

associated with students' belief that they have the opportunity to pursue their future goals as they desire (ESAN4/.856).

Table 5. Factor analysis results and VIF values.

Scale	Items	PSN	LBN	ESAN	LS	PM	FM	SM	VIF
Physiological and Safety Needs (PSN)									
PSN1	In my daily life, I easily meet my consumption such as eating and drinking.	.793							2.113
PSN2	I meet my communication needs (phone, internet, etc.) in my daily life.	.743							1.825
PSN3	The place where I live is quite safe for me to continue my life.	.798							2.007
PSN4	The climate and characteristics of the place where I live, contribute to my comfortable life.	.661							1.637
PSN5	I can easily meet my expenses such as transportation, heating and accommodation where I live.	.742							1.745
PSN6	I have the necessary facilities to spend the pleasant time I want.	.761							1.665
Love and Belonging Needs (LBN)									
LBN1	I feel loved by the people around me.		.842						1.804
LBN2	I think that the people around me treat me very respectfully.		.863						1.943
LBN3	The people around me make me feel that I am very valuable to them.		.893						2.137
Esteem and Self-Actualization Needs (ESAN)									
ESAN1	I have all the opportunities to improve myself in terms of my education.			.464					1.227
ESAN2	I have the financial and moral means to do many things I want to do.			.800					1.871
ESAN3	I have the opportunity to act quite freely for my future goals.			.807					1.772
ESAN4	I have the opportunity to do what I want for my future goals.			.856					2.185
ESAN5	I can easily achieve most of my dreams.			.838					2.097
Life Satisfaction (LS)									
LS1	I am very satisfied with the education I have received.				.768				1.527
LS2	I am satisfied with the material and spiritual pleasures that life offers me.				.838				1.763
LS3	Material or spiritual things that I cannot have in my life do not upset me.				.732				1.466
LS4	I am satisfied with the environment I live in and the people around me.				.796				1.620
Personal Maturity (PM)									
PM1	I am quite confident in my decisions about my future goals.					.820			2.079
PM2	My decisions for the future guide me to realize myself.					.756			1.657
PM3	I always accept myself as I am and act accordingly.					.778			1.931
PM4	I am aware of my responsibilities for the future.					.762			1.996
PM5	I think I have a strong character.					.807			2.487
PM6	I struggle with life's challenges like a mature person.					.762			1.997

Table 5. *Continues.*

Familial Maturity (FM)			
FM1	I have warm-hearted relations with my family.	.834	1.679
FM2	I always support my family within the framework of my financial and moral possibilities.	.838	2.182
FM3	I do not hesitate to take on new roles and duties in order to be more useful to my family.	.824	2.140
FM4	I am ready to make any sacrifice for my family.	.831	2.134
Social Maturity (SM)			
SM1	I have a sociable nature in my relationships with the people around me.	.736	1.346
SM2	I am very confident in my emotions in my communication with other people.	.718	1.468
SM3	I adopt the common culture and values of the society I live in.	.790	1.668
SM4	I try to be in harmony and close relations with the society and people around me.	.846	1.789

For the LS (Life Satisfaction) scale, the highest factor loading corresponds to students' satisfaction with the material and spiritual pleasures their lives offer (LS2/.838). In the PM (Personal Maturity) scale, the highest factor loading is related to students' confidence in their decisions about their future goals (PM1/.820). The FM (Familial Maturity) scale exhibits its highest factor loading in students' statements that they always support their families financially and morally to the best of their ability (FM2/.838). Lastly, the highest factor loading in the SM (Social Maturity) scale pertains to students' efforts to maintain harmony and close relationships with society and the people around them (SM4/.846).

The literature indicates that the f^2 value reflects the effect sizes of the variables within the model (Yahaya *et al.*, 2019). Additionally, the R^2 value represents the variance in the endogenous variables explained by the structural model. In other words, the R^2 value is a key measure of the model's overall quality (Ringle *et al.*, 2014). The ratios of f^2 and R^2 values are presented in Table 6. Upon examining these values, it can be concluded that the research model demonstrates a high level of quality in terms of both effect sizes and explanatory power.

Table 6. *Predictive power coefficients.*

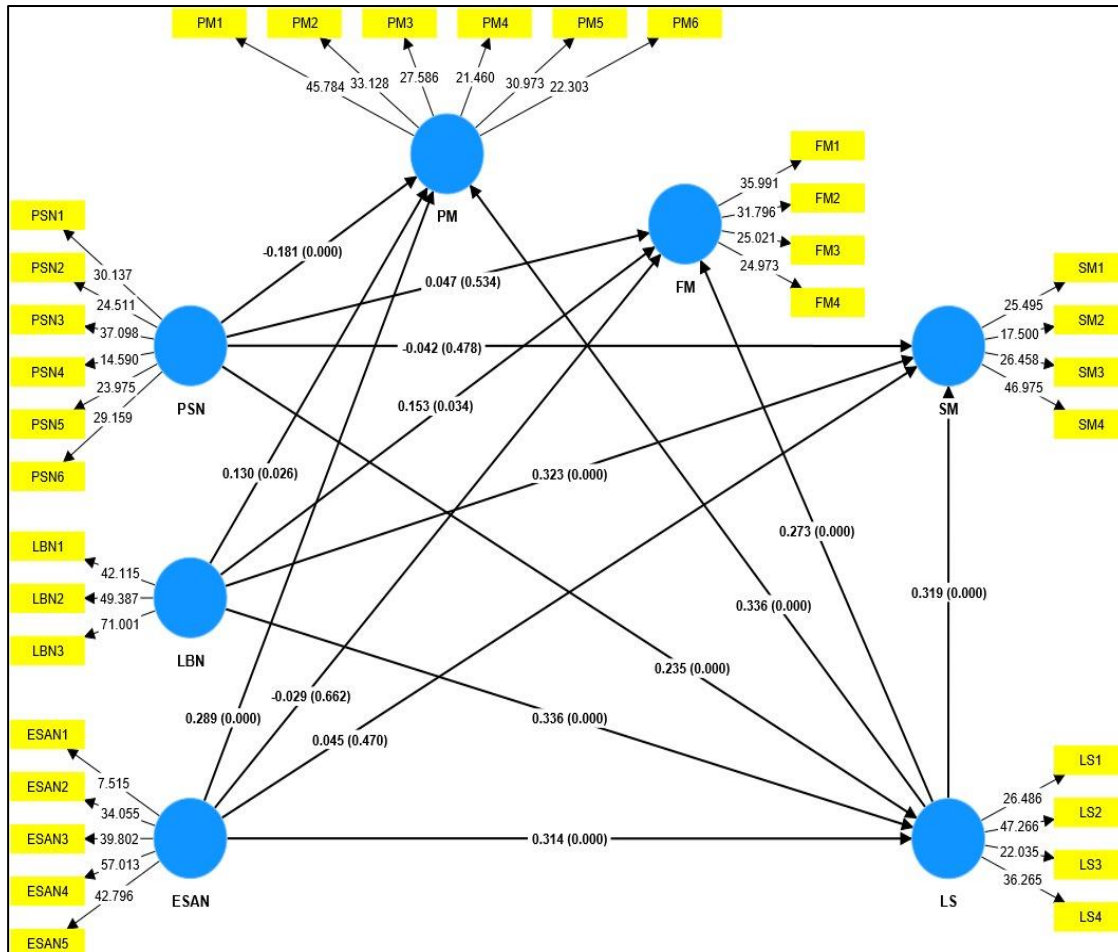
f^2 Values	ESAN	FM	LBN	LS	PM	PSN	SM	R^2 Values	R^2	R^2 Adjusted
ESAN		.001		.132	.071		.002	ESAN		
FM								FM	.154	.145
LBN		.017		.168	.016		.099	LBN		
LS		.043			.081		.075	LS	.506	.502
PM								PM	.312	.305
PSN		.002		.079	.031		.002	PSN		
SM								SM	.333	.326

Fit Criteria Resource: $f^2 = .02-.15$ (weak), $.15-.35$ (medium), $>.35$ (large effect) (Henseler *et al.*, 2009); $R^2 = \geq .25$ (weak), $\geq .50$ (moderate), $\geq .75$ (substantial) (Hair *et al.*, 2011).

Considering the direct and significant results of the research, as illustrated in Figure 2, the structural model reveals key relationships among the variables. The findings indicate that the extent to which Turkish university students' physiological and safety needs are met negatively affects their personal maturity levels. In contrast, the fulfillment of love and belonging needs has a positive impact on their personal maturity. Similarly, meeting students' needs for esteem and self-actualization positively influences their personal maturity. Furthermore, the fulfillment

of love and belonging needs contributes positively to familial maturity, while it also enhances social maturity. The results also demonstrate that meeting physiological and safety needs positively affects students' life satisfaction. Additionally, fulfilling love and belonging needs contributes to higher life satisfaction levels. Likewise, the satisfaction of esteem and self-actualization needs has a positive impact on life satisfaction. Finally, life satisfaction among Turkish university students positively influences their personal, familial, and social maturity levels.

Figure 2. Structural model results.



In studies conducted using PLS-SEM, it is stated that the critical t-values for a two-tailed test should be at least 1.96 at the 5% significance level when calculating path coefficients for the variables in the structural model (Hair *et al.*, 2011). Accordingly, the research analyses were conducted under the assumption that t-values greater than 1.96 indicate statistical significance at the 5% level. Table 7 presents the t-values and the results of all tested hypotheses. Upon examining the analysis results of the research model, it was determined that 19 out of the 24 hypotheses formulated in the model were accepted, while 5 were rejected. The findings from the direct effect analysis are as follows:

- H₁: PSN has a negative (-.181) and significant ($p < .001$) direct effect on PM (Accepted).*
- H₂: LBN has a positive (.130) and significant ($p = .026$) direct effect on PM (Accepted).*
- H₃: ESAN has a positive (.289) and significant ($p < .001$) direct effect on PM (Accepted).*
- H₄: PSN has no significant ($p = .534$) direct effect on FM (Rejected).*
- H₅: LBN has a positive (.153) and significant ($p = .034$) direct effect on FM (Accepted).*
- H₆: ESAN has no significant ($p = .662$) direct effect on FM (Rejected).*

H₇: PSN has no significant ($p=.478$) direct effect on SM (Rejected).

H₈: LBN has a positive (.323) and significant ($p <.001$) direct effect on SM (Accepted).

H₉: ESAN has no significant ($p=.470$) direct effect on SM (Rejected).

H₁₀: PSN has a positive (.235) and significant ($p <.001$) direct effect on LS (Accepted).

H₁₁: LBN has a positive (.336) and significant ($p <.001$) direct effect on LS (Accepted).

H₁₂: ESAN has a positive (.314) and significant ($p <.001$) direct effect on LS (Accepted).

H₁₃: LS has a positive (.336) and significant ($p <.001$) direct effect on PM (Accepted).

H₁₄: LS has a positive (.273) and significant ($p <.001$) direct effect on FM (Accepted).

H₁₅: LS has a positive (.319) and significant ($p <.001$) direct effect on SM (Accepted).

When the results concerning the mediating hypotheses are examined, it is observed that all formulated hypotheses are accepted. This indicates that life satisfaction (LS) has a positive and significant ($p <.001$) mediating effect in all relationships. The detailed results are presented in the table below.

Table 7. Path coefficients and the results of the hypotheses in the structural model.

Direct Effects	Effect	O	M	SD	t	p	Results of the Hypotheses
H ₁ : PSN->PM	(+)	-.181	-.179	.051	3.557	<.001	Not supported
H ₂ : LBN->PM	(+)	.130	.131	.058	2.233	.026	Supported
H ₃ : ESAN->PM	(+)	.289	.291	.063	4.604	<.001	Supported
H ₄ : PSN->FM	(+)	.047	.051	.076	0.622	.534	Not supported
H ₅ : LBN->FM	(+)	.153	.153	.072	2.117	.034	Supported
H ₆ : ESAN->FM	(+)	-.029	-.031	.067	0.437	.662	Not supported
H ₇ : PSN->SM	(+)	-.042	-.037	.059	0.710	.478	Not supported
H ₈ : LBN->SM	(+)	.323	.324	.065	4.967	<.001	Supported
H ₉ : ESAN->SM	(+)	.045	.044	.062	0.722	.470	Not supported
H ₁₀ : PSN->LS	(+)	.235	.237	.048	4.908	<.001	Supported
H ₁₁ : LBN->LS	(+)	.336	.335	.049	6.863	<.001	Supported
H ₁₂ : ESAN->LS	(+)	.314	.315	.053	5.875	<.001	Supported
H ₁₃ : LS->PM	(+)	.336	.336	.072	4.653	<.001	Supported
H ₁₄ : LS->FM	(+)	.273	.274	.075	3.636	<.001	Supported
H ₁₅ : LS->SM	(+)	.319	.317	.072	4.425	<.001	Supported
Mediator Effects		O	M	SD	t	p	Results of the Hypotheses
H ₁₆ : PSN->LS->PM		.079	.025	.025	3.209	.001	Supported
H ₁₇ : LBN->LS->PM		.113	.112	.027	4.142	<.001	Supported
H ₁₈ : ESAN->LS->PM		.106	.106	.030	3.563	<.001	Supported
H ₁₉ : PSN->LS->FM		.064	.064	.021	3.035	.002	Supported
H ₂₀ : LBN->LS->FM		.092	.092	.028	3.268	.001	Supported
H ₂₁ : ESAN->LS->FM		.086	.087	.030	2.849	.004	Supported
H ₂₂ : PSN->LS->SM		.075	.075	.021	3.564	<.001	Supported
H ₂₃ : LBN->LS->SM		.107	.107	.030	3.563	<.001	Supported
H ₂₄ : ESAN->LS->SM		.100	.100	.031	3.260	.001	Supported

O = Original sample; M = Sample mean; SD = Standard deviation; $t = t$ statistics ($|O/SD|$)

Considering the statistical assumptions and solution techniques used in the research, it has been observed that university students' needs and life satisfaction levels significantly impact their maturity levels. Numerous meaningful relationships were identified among the variables included in the research model, leading to the acceptance of the majority of the hypotheses tested. In practical terms, life satisfaction was found to have a positive mediating effect on the

relationship between students' needs and their maturity levels. The findings indicate that the developed research model yields statistically significant results. This outcome provides a more holistic understanding of the close relationships between university students' (or young individuals') needs, life satisfaction, and maturity levels, reinforcing the relevance and applicability of the research.

4. DISCUSSION and CONCLUSION

The findings obtained from the analysis of the research model using the advanced statistical analysis program Smart-PLS enabled valid and reliable results to be presented. It was found that the population and sample representation were sufficient to clarify the research problem. As a result of these valid and reliable findings, it can be predicted that the relationships in the hypotheses included in the research will find their place in discussions in the literature.

In this context, the results of the research show that the personal, familial, and social maturity levels of Turkish university students are affected by their needs and life satisfaction levels. The fact that Turkish university students exhibit mature behaviors will lead to more positive and effective outcomes in their individual, familial, and social environments. Based on the results of the research, the success of Turkish university students in meeting their mid- and high-level needs, in general, contributes more to their personal, familial, and social maturity. In addition, the life satisfaction of Turkish students is the variable that contributes the most to their maturity level. In this sense, meeting Turkish students' need for love and belonging contributes the most to their life satisfaction. In particular, the variable that contributes the most to Turkish students' personal maturity is their life satisfaction. When the mediating hypotheses are examined, it is observed that life satisfaction is the most significant contributing factor in the relationship between the need for love and belonging and the personal maturity variables.

In the study, we emphasized that the extent to which Turkish university students' needs for love and belonging are met positively affects their level of personal maturation. This result indicates that when young individuals feel loved and have a sense of belonging, this situation contributes to their personal maturity. In the literature, Erwin (1983) emphasizes that university students' maturity develops continuously throughout their education. This suggests that the needs of Turkish students may change over time depending on their level of maturity. On the other hand, Berzonsky and Kuk (2005) state that students who exhibit a knowledge-intensive attitude demonstrate greater personal maturity. This indicates a relationship between Turkish students' educational and informational needs—one of their most fundamental needs—and their level of personal maturation.

Maslow (1970) claimed that self-actualization, one of the fundamental human needs, could contribute to personal maturity. In addition, Lester (1990), referring to Maslow, states that university students can experience self-actualization needs, though not fully. In a study, Reay (2002) emphasized that one of the purposes of attending university is to fulfill the self-actualization needs of students who exhibit a higher level of maturity. Our research also found that the fulfillment of Turkish university students' needs for respect and self-actualization has a positive effect on their level of personal maturation. This is evidence that feeling respected in one's environment and engaging in self-actualization activities contribute to personal maturation.

The research findings showed that meeting Turkish students' need to feel loved and have a sense of belonging contributes to their familial maturity. Wubbolding *et al.* (2004) emphasized that people's needs influence their behaviors. Aruma and Hanachor (2017) stated that individuals' needs for love and belonging may be related to their close environment, including family and friendships.

Faulkner and Burdenski (2011) pointed out in their study that university students might experience dissatisfaction in social relationships when they are unable to meet their needs. One

of these needs is the need to feel loved and to belong. This study revealed that the level of satisfaction with the need for love and belonging has a positive effect on the social maturation level of university students. This suggests that Turkish students' ability to act freely and comfortably with their peers is a key factor in the development of mature attitudes in their social environment.

Maslow (1948) stated that meeting lower-level needs, such as security, can provide a sense of comfort but will not necessarily lead to enthusiasm or happiness. Diener and Seligman (2004) emphasized that individuals' life satisfaction may be related to the fulfillment of their physical needs and desires, which in turn contributes to happiness. Loyd (2005) revealed that when students are unable to adequately meet their needs, they are more likely to engage in destructive and harmful behaviors and form unsatisfactory social relationships. Our research findings indicate that fulfilling Turkish university students' physiological and safety needs has a positive effect on their life satisfaction levels. This suggests that meeting basic needs such as nutrition, shelter, sexuality, and a sense of security contributes positively to their life satisfaction.

Pettijohn and Pettijohn (1996) stated that meeting university students' need for love contributes to their happiness. Oishi *et al.* (1999) argued that individuals' life satisfaction levels are related to their ability to uphold their values and meet their needs. Cao *et al.* (2013) emphasized that meeting social needs further increases life satisfaction. Our findings align with these studies, confirming that the fulfillment of the need for love and belonging has a positive effect on life satisfaction.

The fulfillment of university students' needs for respect and self-actualization has also positively contributed to their life satisfaction. When students receive respect from their surroundings and engage in self-actualization activities, it strengthens their overall life satisfaction. Maslow (1948) emphasized that fulfilling higher-level needs results in greater life satisfaction. Supporting this view, our research concludes that respect and self-actualization needs contribute significantly to life satisfaction. Lester *et al.* (1983) noted that students with a strong belief in internal control feel more satisfied in fulfilling their hierarchy of needs. Our findings indicate that, overall, meeting hierarchical needs has a positive contribution to life satisfaction.

Students' life satisfaction levels have also positively contributed to their maturity. This finding suggests that life satisfaction plays a significant role in fostering maturity. Johns *et al.* (2016) stated that there is a negative relationship between students' life satisfaction and emotional immaturity. Behera and Rangaiah (2017) found significant relationships between emotional maturity and life satisfaction. Our research similarly found significant and positive relationships between life satisfaction and personal maturity. Morales-Vives and Duenas (2018) also noted that life satisfaction is positively correlated with overall maturity levels.

The life satisfaction levels of university students have also positively contributed to their familial maturity. Students can reach familial maturity, and their life satisfaction has played an effective role in this process. Moreover, students' life satisfaction has positively influenced their social maturity. Pedrini and Pedrini (1966) stated that family and socio-economic structures affect social maturity. Diener and Diener (1995) emphasized that in collectivist cultures, family and friendship relationships have a strong association with life satisfaction. Considering the collectivist cultural characteristics of Turkish society, our research findings support the idea that life satisfaction contributes to familial and social maturity. Schnettler *et al.* (2017) state that university students' satisfaction with family life is positively associated with their overall life satisfaction. Similarly, Almeida and Nunes (2024) demonstrate significant relationships between university students' family climate and their life satisfaction.

In this study, life satisfaction has had a mediating effect on the relationships between all the variables. In this regard, life satisfaction plays a key role in shaping university students' needs and maturity. Students' needs have influenced their behaviors, life satisfaction levels, and

maturity levels. Our findings suggest that life satisfaction positively mediates the relationship between students' physiological and safety needs and their social maturity levels. Ahamed and Ghosh (1996) emphasized that university students' access to various resources contributes to both their life satisfaction and social maturity.

Burdenski and Faulkner (2010) highlighted that students whose basic needs are met are better prepared to develop both academically and socially, and they generally experience greater well-being. Hinton *et al.* (2011) stated that students' behaviors are shaped by their emotions, thoughts, actions, and physiological states. Huliaieva and Poltavska (2024) pointed out that young individuals with underdeveloped social maturity struggle to meet their needs, exhibit low self-awareness, and fail to develop essential life skills. In this regard, the development of social maturity plays a crucial role in enabling students to achieve their future goals.

The education young individuals receive within their families significantly influences their opportunities for self-development and their overall outlook on life. In particular, the dialogues they establish with both their close and distant social circles reflect the education and developmental experiences they acquire within the family. This study reveals that life satisfaction levels have a positive and significant mediating effect on the relationship between university students' needs for respect and self-actualization and their social maturity. This suggests that the fulfillment of respect and self-actualization needs contributes to social maturity, with life satisfaction serving a complementary role. Singh *et al.* (2014) stated that family structure plays a key role in shaping young individuals' social maturity. Radul *et al.* (2020) emphasized that the ability of young individuals to realize their potential depends on their level of social maturity. Ullah *et al.* (2024) highlighted that, in general, university students' mental health is a key determinant of their life satisfaction levels.

When the needs outlined in Maslow's hierarchy are fulfilled for young Turkish adolescents, they can experience positive impacts on their life satisfaction and maturity. First, meeting physiological needs such as food, water, sleep, and healthcare is essential for their overall well-being. When these needs are adequately met, Turkish adolescents tend to have better physical health, higher energy levels, and improved cognitive functioning, all of which can positively influence their life satisfaction and personal growth. Additionally, feeling secure and safe is crucial for young Turkish adolescents to develop a sense of stability and trust in their environment. However, challenges in meeting physiological needs can affect adolescents' personal maturation process. Physiological needs, including food, water, sleep, shelter, healthcare, and sexual well-being, are fundamental for survival and proper functioning. Adolescence is a period marked by rapid physical growth and intense hormonal changes, leading to increased physiological demands. At times, adolescents may struggle to meet these needs. In Türkiye, socio-cultural and economic factors can hinder young people's ability to fulfill these basic necessities. Economic hardships, inadequate nutrition, sleep problems, and limited access to healthcare can make it difficult for young Turkish individuals to satisfy their physiological needs. Consequently, their health, energy levels, concentration abilities, and overall well-being may be compromised. It is important to note that each young person's experience is unique, and unmet physiological needs do not always have the same degree of impact on personal maturity. Other factors, such as family support, education, social relationships, personal experiences, and intrinsic motivation, play significant roles in shaping the maturation process. In addition to physiological needs, Turkish adolescents have a strong need for social connection, acceptance, and positive relationships. A sense of belonging within their families, peer groups, and communities contributes positively to their emotional well-being and overall life satisfaction. Meeting these needs allows Turkish adolescents to develop strong social skills, empathy, and a sense of identity, all of which are crucial for their personal, familial, and social maturity. Meeting esteem needs—including recognition, respect, and self-worth—is also vital for the personal and social development of young Turkish adolescents. When their achievements and efforts are acknowledged and they receive support from others,

their self-confidence and self-esteem are enhanced. This, in turn, positively affects their motivation, decision-making abilities, and capacity to contribute to their communities, leading to higher levels of life satisfaction and personal maturity. Finally, self-actualization, the highest level in Maslow's hierarchy, involves realizing one's full potential and pursuing meaningful goals. When young Turkish adolescents have their lower-level needs met, they are better positioned to engage in self-exploration, personal growth, and the pursuit of their passions. This contributes to a greater sense of fulfillment, higher life satisfaction, and increased levels of maturity.

Based on the study's findings and supported by the relevant literature, the scales used to assess university students' needs, maturity levels, and life satisfaction yielded valid and reliable results (Appendix A1). The findings of this research provide valuable insights that can guide future studies aimed at strengthening the literature and enhancing our understanding of the hierarchical needs of adolescents and their role in maturity. However, maturity is a complex and multifaceted concept influenced by various social, emotional, cognitive, and environmental factors. Meeting hierarchical needs is just one component within a broader set of influences on adolescent maturity. For instance, individual differences and contextual factors can shape the relationship between the fulfillment of hierarchical needs and maturity. In this regard, particular attention should be given to social factors. Family and broader social environments play a crucial role in shaping adolescent behavior and maturity. While positive role models can offer guidance and encouragement, negative peer influences may hinder maturity. Therefore, future research should focus on examining the impact of social factors on adolescent maturity to gain a deeper understanding of these dynamics. Overall, our study highlights that fulfilling Turkish university students' needs—ranging from physiological to self-actualization—significantly contributes to their life satisfaction and maturity. Future research should further explore the role of social and environmental factors in adolescent development, particularly focusing on family, peer influences, and socio-economic conditions.

Declaration of Conflicting Interests and Ethics

The authors declare no conflict of interest. This research study complies with research publishing ethics. The scientific and legal responsibility for manuscripts published in IJATE belongs to the authors. **Ethics Committee Number:** Gumushane University Scientific Research and Publication Ethics Committee, 2021/8 on 29/12/2021. 95674917-108.99-71601.

Contribution of Authors

All stages of the study were conducted with equal contribution from both authors.

Orcid

Ahmet Mutlu Akyüz  <https://orcid.org/0000-0002-6406-3284>

İbrahim Durmuş  <https://orcid.org/0000-0002-3872-2258>

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APPENDIX

A1. Scales Measuring University Students' Needs, Maturity Levels, and Life Satisfaction

Scale items were developed taking into account research in literature.

Physiological and Safety Needs (PSN)

In my daily life, I easily meet my consumption such as eating and drinking.

I meet my communication needs (phone, internet, etc.) in my daily life.

The place where I live is quite safe for me to continue my life.

The climate and characteristics of the place where I live, contribute to my comfortable life.

I can easily meet my expenses such as transportation, heating and accommodation where I live.

I have the necessary facilities to spend the pleasant time I want.

Love and Belonging Needs (LBN)

I feel loved by the people around me.

I think that the people around me treat me very respectfully.

The people around me make me feel that I am very valuable to them.

Esteem and Self-Actualization Needs (ESAN)

I have all the opportunities to improve myself in terms of my education.

I have the financial and moral means to do many things I want to do.

I have the opportunity to act quite freely for my future goals.

I have the opportunity to do what I want for my future goals.

I can easily achieve most of my dreams.

Life Satisfaction (LS)

I am very satisfied with the education I have received.

I am satisfied with the material and spiritual pleasures that life offers me.

Material or spiritual things that I cannot have in my life do not upset me.

I am satisfied with the environment I live in and the people around me.

Personal Maturity (PM)

I am quite confident in my decisions about my future goals.

My decisions for the future guide me to realize myself.

I always accept myself as I am and act accordingly.

I am aware of my responsibilities for the future.

I think I have a strong character.

I struggle with life's challenges like a mature person.

Familial Maturity (FM)

I have warm-hearted relations with my family.

I always support my family within the framework of my financial and moral possibilities.

I do not hesitate to take on new roles and duties in order to be more useful to my family.

I am ready to make any sacrifice for my family.

Social Maturity (SM)

I have a sociable nature in my relationships with the people around me.

I am very confident in my emotions in my communication with other people.

I adopt the common culture and values of the society I live in.

I try to be in harmony and close relations with the society and people around me.
