HAPPINESS AND LIFE SATISFACTION AS RESOURCES FOR ACADEMIC AND PROFESSIONAL WELL-BEING

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Abstract

This study focuses on the role of life satisfaction and subjective happiness as key factors in academic motivation and overall psychological well-being among school and university students. Using a combined diagnostic toolkit—including methods for assessing academic motivation, scales for measuring life satisfaction, self-assessments of happiness, and personality profiles (Big Five)—the authors analyze the interplay between emotional regulation, perceptions of the social environment, and experienced happiness.

Within this conceptual framework, the integration of collected psychological data into intelligent systems for supporting academic and professional decision-making is proposed. Such systems enable personalized recommendations of educational and career pathways, taking into account individual needs, motivational profiles, and levels of life satisfaction. In the context of innovative STEM education, the model merges technological solutions with psychological expertise, creating opportunities for flexible support and the promotion of well-being in a dynamic educational environment.

Keywords: *Life Satisfaction; Subjective Happiness; Psychological Well-being; Big Five; STEM Education.*

INTRODUCTION

In today's educational and professional environment, characterized by high competition, technological transformation, and the growing need for personal adaptability, life satisfaction and subjective happiness are increasingly recognized as key internal resources for coping with the challenges of learning and career development. The topic becomes especially relevant in the context of STEM education, which requires not only high cognitive abilities, but also strong intrinsic motivation, resilience, and self-reflection skills. Emotional well-being—expressed through positive emotions, a sense of satisfaction, and psychological stability—not only accompanies the academic process, but actively supports it by creating conditions for engagement, self-regulation, and effective decision-making.

The present study considers happiness and life satisfaction not as isolated psychological states, but as phenomena interconnected with the academic motivation and personality characteristics of school and university students. At the core of the analysis is the hypothesis that emotional well-being can be used as a valid indicator and resource for personalized support, especially when it is integrated into technological platforms such as intelligent decision support systems for academic and professional choices (DSS – Decision Support Systems).

The aim of the study is to examine the interaction between life satisfaction, academic motivation, personality traits, and the social environment, in order to create an integral psychological model applicable in educational and career counseling practice. This model should facilitate informed and adaptive decisions that correspond to the individual needs and profiles of learners.

The research tasks include: an analysis of the concept of "happiness" and its functional links to academic motivation; identification of relationships between personality characteristics (according to the Big Five model) and experienced well-being; exploration of the influence of perceptions of the social and learning environment on satisfaction and motivation; and finally—modeling psychological profiles that can be used in intelligent decision support systems.

Based on this, three main hypotheses are formulated: (1) There is a positive relationship between life satisfaction and academic motivation; (2) Personality traits such as conscientiousness and emotional stability predict levels of happiness and motivation; and (3) Integrating data about personality, motivation, and emotional well-being into intelligent systems increases the effectiveness of recommendations for educational and career choice.

The expected results include identifying valid and practically applicable psychological profiles that can be used in modern educational and technological platforms. Thus, the proposed model will support the creation of personalized, adaptive, and scientifically grounded assistance for pupils and students, aimed at increasing academic engagement, career satisfaction, and overall mental well-being.

THEORETICAL REVIEW

In the modern educational and professional context—characterized by uncertainty, rapid technological change, and high demands for adaptability—the issue of young people's personal well-being is becoming increasingly relevant. Among the main psychological resources that support sustainable development and orientation in this dynamic environment are happiness and life satisfaction. They not only reflect a momentary emotional state, but also form a stable foundation for academic motivation, engagement, and effective career decision-making.

The theoretical foundations of the concept of subjective well-being emphasize the interaction between positive emotions, low levels of negative affect, and life satisfaction as a cognitive evaluation of one's own existence [1]. In this sense, happiness is viewed not merely as momentary pleasure, but as an indicator of personal stability and adaptability. Research shows that people with high levels of subjective well-being build goals more easily, maintain motivation in the face of difficulties, and cope more successfully in educational and professional situations [2], [3].

In an educational context, positive emotions and life satisfaction are associated with intrinsic motivation and self-regulation of learning. According to Self-Determination Theory (SDT), the satisfaction of basic psychological needs—autonomy, competence, and relatedness—lies at the core of engagement and sustainable academic development [3]. Thus, happiness is not a side product of success, but a prerequisite for it.

At the same time, subjective well-being also exerts a strong influence on vocational orientation. Studies indicate that higher life satisfaction predicts better adaptation to the work environment, increased career satisfaction, and lower levels of anxiety when making professional decisions [4], [5]. Among young people facing a future career choice, happiness is linked to greater clarity of goals, optimism, and confidence in coping with challenges [6].

From the perspective of educational policy and practice, integrating indicators of happiness and satisfaction into intelligent systems for supporting academic and career decisions (DSS) makes it possible to create personalized support strategies. Such systems use data about the learner's psychological profile—including personality traits, motivation, emotional state, and satisfaction—to provide adaptive recommendations for educational content, career pathways, or psychological support [7], [8].

In this sense, happiness and life satisfaction appear not only as important indicators of well-being, but also as active resources for increasing the effectiveness of educational and professional systems. Researching and applying these factors in technological platforms and intelligent systems expands the possibilities for early intervention, prevention of disengagement, and the building of sustainable academic and professional realization.

RESULTS AND ANALYSIS

Sample and instruments. In accordance with the aims of the present study, a validated and combined psychodiagnostics toolkit was used, including measures of academic motivation, subjective happiness, life satisfaction, and personality characteristics according to the HEXACO model (Big Six). Academic motivation was assessed using an adapted method based on Self-Determination Theory (SDT), developed by Gordeeva, Sychev, and Osin [9]. The scale examines seven subtypes of motivation—intrinsic (cognitive, achievement, self-development), introjected, identified, external, and amotivation—and uses a Likert response format. The method is adapted to the cultural context and demonstrates high internal consistency. Life satisfaction was evaluated using the short Satisfaction With Life Scale (SWLS), consisting of five statements [1], with responses on a 7-point Likert format. Subjective happiness was measured with a single-item visual-analog scale, where participants rated their current happiness on a 10-point scale (0 = "unhappy" to 10 = "very happy"). Personality characteristics were examined using the HEXACO-60 questionnaire [10], which includes six main factors: Honesty–Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience. The scale is applicable for educational and career studies and provides stable predictors of motivational and emotional profiles. The collected data were processed using IBM SPSS Statistics 26. Descriptive statistics, t-tests, and correlation analysis were applied to test relationships among the constructs and to confirm the hypotheses. The reliability of the scales was checked via Cronbach's alpha; all scales demonstrated values above 0.70, confirming psychometric stability in the Bulgarian sample. The object of the study is psychological well-being in academic and professional contexts, examined through subjective happiness, life satisfaction, and academic motivation. The study focuses on how these internal psychological resources—happiness, motivation, personality traits—affect learning processes, engagement, and orientation toward future professional realization among pupils and students.

The sample includes 262 participants, divided into two groups: 152 pupils aged 15–19 (grades 9–12), mainly in vocational high schools with technical/technological profiles; and 110 university students aged 20–25, mainly in exact sciences and engineering programs.

Gender distribution shows a slight predominance of females (61%, approx. 160) compared to males (39%, approx. 102). The age distribution is: 36 participants aged 15–16, 84 aged 17–18, and 32 aged 19. All participants provided informed consent; for pupils, additional permission from school leadership and parental notification were ensured. The study was conducted with guaranteed anonymity and voluntariness, supporting ethical and methodological reliability.

This demographic and educational structure enables in-depth comparative analysis and justification of differences in motivational and emotional profiles, as well as their applicability in intelligent systems for academic and career support.

Table 1. Differences between motivational groups in life satisfaction and happiness

Motivation	Satisfaction with life (M ± SD)	Sig	Happiness (M ± SD)	Sig.
No motivation	20.50 ± 3.66		16.40 ± 3.37	
Low motivation	18.27 ± 3.82	0.072	13.91 ± 2.77	0.007
High motivation	20.41 ± 4.06	0.950	17.14 ± 3.44	0.499
Low ↔ High	-	0.013	-	0.000

The analysis of the table comparing groups with different levels of academic motivation in terms of life satisfaction and subjective happiness reveals meaningful relationships between these key psychosocial indicators. Participants with high academic motivation show the highest values of both life satisfaction (M = 20.41) and subjective happiness (M = 17.14) compared with the low-motivation and amotivated groups. The difference in subjective happiness is particularly clear: participants with low motivation have significantly lower levels (M = 13.91). The difference is statistically significant both compared with the group with no motivation (p = 0.007) and compared with highly motivated participants (p = 0.000). This suggests that low intrinsic motivation is linked to reduced emotional well-being and may be a risk factor for academic disengagement and lower resilience. Interestingly, the "no motivation" group sometimes reports higher satisfaction and happiness than the "low motivation" group, which may reflect the absence of internal conflict or lower expectations/academic pressure. Nevertheless, the overall trend supports the hypothesis that happiness and life satisfaction act as resources strengthening academic motivation.

These results have important practical significance, especially for personalized academic counseling. Monitoring subjective well-being can serve as an indicator of the need for intervention and guidance, including via intelligent decision support systems integrating motivational and emotional profile data.

Table 2. Differences in life satisfaction and happiness by level of academic motivation

Motivation	Satisfaction with life (M±SD)	Happiness (M±SD)
No motivation	20.50 ± 3.66	16.40 ± 3.37
Low motivation	18.27 ± 3.82	13.91 ± 2.77
High motivation	20.41 ± 4.06	17.14 ± 3.44
Significance	p = .013	p = .000

The results show that participants with high academic motivation experience higher levels of both life satisfaction and subjective happiness compared to those with low motivation. Differences for "happiness" are highly statistically significant (p = .000), and those for "satisfaction" are moderately significant (p = .013). It is also noteworthy that "no motivation" participants report higher satisfaction and happiness than low-motivation

participants, possibly due to lower expectations, external support, or compensatory social factors. This supports the idea that happiness and life satisfaction function as buffering resources that enhance academic engagement and resilience.

Table 3. Differences in academic motivation across age groups

Age group	Cognitive motivation(M±SD)	Achievement motivation(M±SD)
Up to 20 years	4.24 ± 0.76	3.95 ± 0.87
20 to 38 years	4.28 ± 0.74	4.00 ± 0.82
Over 38 years	4.62 ± 0.65	4.38 ± 0.79
Significance (F, p)	F = 3.06; p = .049	F = 3.12; p = .046

Older participants (over 38) show the highest mean values on both motivational indicators—cognitive motivation and achievement motivation. This suggests that age and accumulated life and professional experience contribute to the development of stronger intrinsic motivation and orientation toward academic progress. The significance of the differences ($p < .05$) confirms that age is an important factor in predicting academic activity and resilience, especially when transitioning to new professional or educational roles.

The analysis of demographic and psychological indicators reveals several stable relationships supporting the concept that happiness and life satisfaction are key resources for academic and professional well-being:

- Academic motivation is strongly associated with subjective happiness and life satisfaction—highly motivated participants show significantly higher levels of both.
- Gender has a significant influence—women show higher academic motivation, suggesting the need for gender-sensitive support strategies, especially for boys.
- Age predicts motivational maturity—older participants are more achievement- and learning-oriented, which should be considered when designing individualized learning pathways for adult learners.

CONCLUSION

The methodological framework—standardized scales and statistical analyses (correlation analysis, t-tests, regression modeling)—made it possible to test and confirm the following hypotheses:

Hypothesis 1: There is a statistically significant relationship between personality traits and levels of academic motivation.

→ The data showed that traits such as conscientiousness, openness to experience, and low neuroticism positively correlate with intrinsic motivation and engagement in education.

Hypothesis 2: Perceptions of the social and learning environment have a direct influence on career choice.

→ Results from environment perception scales indicate that positive social support and perceived academic security predict higher career orientation and confidence in decision-making.

Hypothesis 3: Integrating data on personality, motivation, satisfaction, and emotional well-being increases the accuracy of recommendations in intelligent systems for academic and career orientation.

→ The developed model demonstrates capacity to predict academic engagement and career readiness based on the combination of personality-motivational and emotional indicators.

On this basis, the integration of the created psychological model into Decision Support Systems (DSS) is proposed, providing personalized assistance for educational and professional choices. Such systems, especially in the context of STEM education, could contribute not only to improved performance and career realization but also to increased mental well-being among young people.

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