International Journal of Innovative Research and Scientific Studies, 8(5) 2025, pages: 615-620

IJIRSS
International Journal of Innovative Research & Scientific Studies

ISSN: 2617-6548

URL: www.ijirss.com

The contribution of successful intelligence in predicting students' orientation toward academic quality of life

Abdulaziz Mohammed Alismail[1*], Mazen Omar Almulla[2], Ibrahiem elsayd iesa ghoniem[3], Mohammed Munahi Alsubaie[4]

[1,2,4]*King Faisal University, Saudi Arabia.*
[3]*Al-Azhar University, Egypt.*

Corresponding author: Abdulaziz Mohammed Alismail (*Email: amaalismail@kfu.edu.sa*)

Abstract

This study investigated the relationship between successful intelligence and the academic quality of life among university students in Saudi Arabia. A descriptive, correlational, and causal-comparative design was employed. The population comprised all undergraduate students at King Faisal University in Al-Ahsa (N = 33,833), across scientific and humanities disciplines. A stratified random sample of 395 students (190 males, 205 females) was selected, and a pilot sample of 100 students was used to validate the study instruments. Two validated instruments were used: the Successful Intelligence Scale Al-Otebi and Al-Qamash [1] and the Academic Quality of Life Scale Abd Elraziq [2] both demonstrating high internal consistency (omega = 0.705–0.909). The findings revealed a statistically significant positive correlation ($p < .01$) between successful intelligence and the total score and dimensions of academic quality of life, with Pearson's r ranging from 0.379 to 0.535. Furthermore, multivariate analysis of variance (MANOVA) showed significant differences based on academic major and the interaction between gender and major, with no differences by gender alone. Independent samples t-tests indicated higher scores for students in scientific majors on both variables. Simple linear regression analysis revealed that successful intelligence significantly predicted academic quality of life ($R^2 = 0.286$, $F = 157.31$, $p < .01$), explaining 28.6% of the variance. These findings highlight the predictive role of successful intelligence in enhancing the academic quality of life and suggest implications for support programs in higher education.

Keywords: Academic quality of life, Gender, Academic major, Predictive relationships, Successful intelligence, University students.

DOI: 10.53894/ijirss.v8i5.8776
Funding This research is supported by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia (Grant number: KFU252361).
History: Received: 29 May 2025 / **Revised:** 7 July 2025 / **Accepted:** 9 July 2025 / **Published:** 22 July 2025

Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.
Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.
Institutional Review Board Statement: The Ethical Committee of King Faisal University, Saudi Arabia has granted approval for this study (Ref. No. KFU-REC-2025-MAY-ETHICS3368).
Publisher: Innovative Research Publishing

1. Introduction

The university stage is one of the most transformative and critical periods in an individual's life. It is not only a time for academic achievement and specialization but also a phase marked by intense personal growth, psychological adjustment, and social development [3]. During this phase, students acquire essential skills for independence, responsibility, and life planning. The university environment becomes a space where students form their identities, navigate diverse challenges, and prepare for future professional roles [4]. As such, higher education institutions are increasingly concerned with fostering not only academic success but also students' overall well-being, a concept closely linked to Quality of Academic Life (QAL).

Academic quality of life is defined as the extent to which a student experiences satisfaction, engagement, and psychological and social balance within the university educational environment [2].

In a broader context, quality of life (QoL) is a broad construct that encompasses an individual's overall well-being in relation to physical, psychological, social, and environmental dimensions. The World Health Organization [5] defines QoL as an individual's perception of their position in life within the context of their culture, values, goals, and concerns. According to the World Health Organization [4], quality of life is divided into four interrelated dimensions. The first is physical health, which reflects the student's ability to carry out daily tasks with energy, maintain good sleep, and resist fatigue, all of which impact academic focus. Then comes psychological health, which includes emotional balance, the ability to cope with academic pressure, and feelings of satisfaction and self-confidence. Social relationships also play a major role, as support networks from peers and faculty help reduce stress and enhance a sense of belonging. Lastly, the environment includes access to university facilities, transportation, safety, and health services. Together, these dimensions form a foundation for academic success and personal development among university students.

When applied to university students, the Quality of Academic Life (QAL) refers to students' subjective evaluation of their educational experiences, including their level of satisfaction with academic services, support systems, classroom engagement, and social connections [6]. Studies have shown that students who report higher levels of academic life satisfaction are more likely to perform well academically, feel loyal to their institutions, and recommend their universities to others [6].

In recent years, researchers have emphasized the importance of exploring psychological and cognitive variables that contribute to students' academic success and life satisfaction. One such variable is successful intelligence, a construct introduced by Sternberg [7], Sternberg [8] and Sternberg [9]. Unlike traditional views of intelligence, which focus narrowly on IQ or academic performance, successful intelligence incorporates three interrelated domains: analytical intelligence (problem-solving and logical reasoning), creative intelligence (innovation and originality), and practical intelligence (real-world application and adaptability) [10]. Together, these components enable individuals to think critically, generate solutions, and navigate real-life challenges effectively.

Furthermore, Akeer and Abu Eidah [11] view successful intelligence as the integration of analytical, creative, and practical abilities, aiming to empower students with academic thinking skills and the capacity to apply these effectively in diverse real-world situations. They also emphasize enhancing metacognitive dimensions such as satisfaction and strategic monitoring, which contribute to effective learning and knowledge application across various contexts.

In this context, the theory of successful intelligence is broader than traditional theories of intelligence, as it defines intelligence in terms of one's ability to achieve the goals one pursues in life within the social and cultural context in which one lives. In contrast, traditional theories focus on the individual's ability to adapt to the environment and learn through experience [6]. Successful intelligence is especially relevant in academic contexts because it equips students with the tools to regulate their behavior, manage their time, and make decisions aligned with academic and personal goals. According to Grigorenko, et al. [12] successful intelligence plays a central role in promoting self-efficacy, motivation, and resilience all of which are essential for maintaining a high quality of academic life. Moreover, Tarawneh [13] found that students with higher levels of successful intelligence tend to exhibit greater engagement, academic perseverance, and problem-solving skills. Supporting this, Al-Otebi and Al-Qamash [1] explored the relationship between successful intelligence and decision-making skills among gifted students in middle and high school, revealing a significant positive relationship. Their findings

showed that high school students performed better in practical and creative intelligence, reinforcing the idea that successful intelligence contributes to autonomy and academic responsibility, key components of academic quality of life. Furthermore, Al-zahrani [14] demonstrated that educational programs based on successful intelligence enhance students' analytical and creative thinking skills, promoting reflective inquiry and real-world application. These results align with Sternberg [15] view that students with successful intelligence can identify and improve upon their strengths and weaknesses, and adapt more effectively to academic and social demands by harmonizing analytical, creative, and practical abilities.

Empirical research supports the contribution of successful intelligence to various academic outcomes. For instance, Bazzi and Panahi [16] found that successful intelligence training significantly enhanced students' academic engagement and resilience. Similarly, Murad [17] confirmed the mediating role of successful intelligence in linking achievement motivation to metacognitive skills and academic performance. Further studies by Khalaf [4] and Shoman [18] demonstrated its effectiveness in improving decision-making, critical thinking, and psychological adjustment, all of which are integral to students' academic satisfaction and well-being.

Despite these promising findings, a notable gap exists in the literature regarding the direct relationship between successful intelligence and the quality of academic life. While a number of studies have explored related variables such as emotional intelligence (e.g., Maalouf, et al. [19]) the role of successful intelligence as a standalone predictor of students' academic life quality remains under-investigated. This gap presents a critical opportunity to examine how cognitive competencies beyond traditional measures can influence students' adaptation, satisfaction, and success in academic settings.

Given this background, the present study aims to fill this research gap by investigating the contribution of successful intelligence in predicting students' orientation toward the academic quality of life. The study is grounded in Sternberg [8] and Sternberg [10] theoretical framework and aims to explore the predictive power of analytical, creative, and practical intelligence dimensions on students' perceived academic quality of life.

2. Research Questions

1. Is there a statistically significant correlation between successful intelligence and the quality of academic life among university students in the Kingdom of Saudi Arabia?
2. Are there statistically significant differences in the levels of successful intelligence and quality of academic life based on gender (male/female), academic major (humanities/sciences), and their interaction?
3. To what extent does successful intelligence (analytical, creative, practical) predict students' orientation toward the academic quality of life?

3. Research Methodology

The researchers employed the descriptive, correlational, and causal-comparative approaches to achieve the objectives of the study and to answer its research questions.

3.1. Second: Population and Sample

3.1.1. Research Population

The population of the study consists of all regularly enrolled students at King Faisal University in Al-Ahsa Governorate, totaling 33,833 male and female students, according to the electronic portal of King Faisal University for the undergraduate level in both scientific and humanities disciplines.

3.2. Research Sample

Based on the characteristics of the population, a probabilistic random sampling method was employed, specifically stratified random sampling based on gender (male and female students) from King Faisal University. This approach was applied to the main sample, on which the research instruments were used with a total of 395 students, an appropriate number according to the Thompson [20] formula. The sample was relatively balanced between genders, consisting of 190 males and 205 females. Regarding the academic specialization of the respondents, 257 were from humanities disciplines and 138 from scientific disciplines.

As for the pilot sample, the research tools were applied to a sample of 100 students, including 39 males and 61 females, in order to verify and validate the psychometric properties of the instruments before applying them to the main sample.

3.3. Research Instruments

The current study relied on two scales:

- Successful Intelligence Scale - Developed by: Al-Otebi and Al-Qamash [1].
- Academic Quality of Life Scale - Developed by: Abdel-Khalek [21].

3.4. Psychometric Properties of the Scales

3.4.1. Internal Consistency

To assess the internal consistency of the two scales, Pearson's correlation coefficient (Pearson-r) was employed to calculate the correlation coefficients between each item's score and the total score of the respective scale. The correlation coefficients among the items of the Successful Intelligence Scale and the total scale score demonstrated positive correlations, ranging from moderate to strong, with values between 0.380 and 0.693. Similarly, the correlation coefficients

among the items of the Academic Quality of Life Scale and the total scale score also indicated positive correlations, ranging from moderate to strong, with values between 0.214 and 0.765. All correlations were statistically significant at the 0.01 level, except for items 15 and 16, which were significant at the 0.05 level. These findings suggest that both scales exhibit internal consistency, indicating that each scale, through its items, measures the same or closely related variables.

3.4.2. Reliability of the Two Scales

The reliability of the two scales was calculated after administering them to a sample of 60 students from Saudi universities. The reliability of the final form of the two scales was then verified using the Omega coefficient. The results are presented as follows:

Table 1.

Omega Coefficient Value	N Statements	Dimension	Scale
0.834	7	Physical Health	Quality of Educational Life
0.705	6	Mental Health	
0.848	3	Social Relationships	
0.815	8	Environment	
0.894	24	Total degree of Quality of Educational Life	
0.909	24	Total degree of Successful Intelligence	

The results in Table 1 show that the Omega reliability coefficients for the dimensions of the Academic Quality of Life Scale ranged between 0.705 and 0.848, and for the scale as a whole, it reached 0.894, all of which are high values. Additionally, the Omega reliability coefficient for the total score of the Successful Intelligence Scale was 0.909, which is also a high value, indicating the reliability and validity of both scales for measurement within the research sample.

4. Study Results

4.1. Answer to the First Question

4.1.1. The First Question States the Following

"Is there a correlational relationship between successful intelligence and academic quality of life among university students in the Kingdom of Saudi Arabia?"

To answer this question, the researchers used Pearson's correlation coefficient. The following Table 2 illustrates this relationship:

Table 2.
Study of the Relationship Between Successful Intelligence and Academic Quality of Life (Total Score and Dimensions) Among University Students.

Measurement	Physical Health	Mental Health	Social Relationships	Environment	Total degree of Quality of Educational Life
Total degree of Successful Intelligence	0.396**	0.459**	0.379**	0.454**	0.535**

Note: **Correlation is significant at the 0.01 level (2-tailed).

It is evident from Table 2 the existence of a statistically significant moderate positive correlation at the 0.01 significance level between the students' scores in the total degree of the Successful Intelligence Scale and the Academic Quality of Life and its dimensions (physical health, mental health, social relationships, environment) among university students, where the correlation values ranged between 0.535 and 0.379.

4.2. Answer To the Second Question

4.2.1. The Second Question States

"Are there differences in the levels of successful intelligence and academic quality of life attributable to gender (male/female), academic major (humanities/sciences), and their interaction among university students?"

To answer this question, the researchers used a two-way (2*2) multivariate analysis of variance (MANOVA) to determine the significance of differences between the means of the research sample regarding the levels of successful intelligence and academic quality of life among university students according to the variables of gender, specialization, and their interaction. The following table illustrates this:

Table 3.
Results of Multivariate Analysis of Variance to Determine the Significance of Differences in the Levels of Successful Intelligence and Academic Quality of Life among University Students According to the Variables of Gender, Specialization, and Their Interaction.

Source	Variables	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Successful Intelligence	2574.105[a]	3	858.0	5.3	0.001
	Quality of Educational Life	11222.844[b]	3	3740.9	25.4	0.000
Intercept	Successful Intelligence	3459150.7	1	3459150.7	21266.4	0.000
	Quality of Educational Life	3536392.95	1	3536393.0	24024.5	0.000
Gender	Successful Intelligence	559.8	1	559.8	3.4	0.064
	Quality of Educational Life	11.8	1	11.8	0.1	0.777
Major for undergraduate students	Successful Intelligence	716.6	1	716.6	4.4	0.036
	Quality of Educational Life	9742.2	1	9742.2	66.2	0.000
Gender * Major for undergraduate students	Successful Intelligence	1641.0	1	1641.0	10.1	0.002
	Quality of Educational Life	1176.9	1	1176.9	8.0	0.005
Error	Successful Intelligence	63599.2	391	162.7		
	Quality of Educational Life	57555.1	391	147.2		
Total	Successful Intelligence	3842916.0	395			
	Quality of Educational Life	3838679.0	395			
Corrected Total	Successful Intelligence	66173.3	394			
	Quality of Educational Life	68777.9	394			

It is evident from Table 3 that there are statistically significant differences between the mean scores of the study sample in terms of Successful Intelligence and Academic Quality of Life among university students according to specialization, and according to the interaction between gender and specialization, where the F-value was statistically significant at the 0.05 significance level.

Meanwhile, it is evident from Table 3 that there are no statistically significant differences between the mean scores of the sample in terms of Successful Intelligence and Academic Quality of Life among university students according to the gender variable, where the F-values were not statistically significant at the 0.05 significance level.

To determine the direction of differences between the mean scores of students according to their specialization (Humanities / Practical) in their responses regarding the level of Successful Intelligence and Academic Quality of Life, the researchers used the independent samples t-test, as shown in the following table:

Table 4.
The "t" Value and Its Statistical Significance for the Differences Between the Mean Scores of the Two Specialization Groups (Humanities/Applied) in Response to Successful Intelligence and Academic Quality of Life.

Variable	Specialization	N	Mean	Std. Deviation	t	df	Sig. 2-Tailed
Total degree of Successful Intelligence	Humanities	257	96.75	12.12	-2.177	393	0.03
	Practical	138	99.71	14.23			
Total degree of Quality of Educational Life	Humanities	257	94.01	11.96	-8.174	393	0.0001
	Practical	138	104.56	12.73			

It is evident from Table 4 that there are statistically significant differences between the mean scores of the two specialization groups (Humanities / Practical) in their responses regarding the levels of successful intelligence and academic quality of life, favoring the Practical specialization group, which scored higher on average. The values of "t" were (-2.177) and (-8.17), both statistically significant at the 0.05 significance level.

4.3. Answer to the Third Question

The third question states the following: "To what extent does successful intelligence contribute to predicting students' orientation toward academic quality of life among university students?"

To answer this question, the researchers used simple linear regression to study the effect of successful intelligence (total score) on the level of academic quality of life (total score). The following Table 5 illustrates this:

Table 5.
Results of Simple Regression Analysis Predicting the Level of Academic Quality of Life through Successful Intelligence.

Predictors: Constant	Dependent Variable	R	R^2	Adjusted R^2	F& Sig.	Constant	B	Beta	t& Sig.
Total degree of Successful Intelligence	Total Degree of Quality of Educational Life	0.535	0.286	0.284	157.31**	46.55	0.524	0.535	12.54**

Note: (**) Significant at the 0.01 level.

It is evident from Table 5 that the following:

The results of the simple regression analysis indicated that successful intelligence makes a statistically significant positive contribution to predicting the level of academic quality of life. The F-value for the significance of prediction was 157.31, which is statistically significant at the 0.01 level, demonstrating the model's significance. The coefficient of determination (R^2) was 0.286, suggesting that 28.6% of the variance in the level of academic quality of life can be explained by the variance in successful intelligence.

Total degree of Successful Intelligence 46.55+ 0.524×Total degree of Quality of Educational Life

This relationship indicates that with an increase of one unit in successful intelligence, the level of academic quality of life among university students increases by 0.524 units, holding other variables constant.

References

[1] S. S. F. Al-Otebi and M. N. M. Al-Qamash, "Successful intelligence and its relation with decision making among the gifted student in the Kingdom of Saudi Arabia," Unpublished Master's Thesis. Al-Balqa Applied University. http://search.mandumah.com/Record/1308301, 2016.

[2] M. Abd Elraziq, "Modeling the relationships between academic quality of life, self regulation, and academic boredom among Al Azhar University students," *Journal of Scientific Research in Education*, vol. 23, no. 10, pp. 1–54, 2022. https://doi.org/10.21608/jsre.2023.178576.1531

[3] H. A. Dalh, "Creative thinking and psychological adjustment," Academic Book Center, 2020. https://www.neelwafurat.com/itempage.aspx?id=lbb307417-296772&search=books

[4] M. Khalaf, "The role of research methodology course in college of education students' acquisition of scientific research skills: The actual reality and the hope," *The Educational Journal of the Faculty of Education in Sohag*, vol. 66, no. 66, pp. 285–334, 2019. https://doi.org/10.21608/edusohag.2019.47187

[5] World Health Organization, *WHOQOL: Measuring quality of life*. Geneva: WHO, 1997.

[6] E. Pedro, J. Leitão, and H. Alves, "Does the quality of academic life matter for students' performance, loyalty and university recommendation?," *Applied Research in Quality of Life*, vol. 11, no. 1, pp. 293-316, 2016. https://doi.org/10.1007/s11482-014-9367-6

[7] R. J. Sternberg, *WICS: A theory of wisdom, intelligence, and creativity, synthesized*. Cambridge, UK: Cambridge University Press, 2003.

[8] R. J. Sternberg, "Assessment of gifted students for identification purposes: New techniques for a new millennium," *Learning and Individual Differences*, vol. 20, no. 4, pp. 327-336, 2010.

[9] R. J. Sternberg, "Successful intelligence: A model for testing intelligence beyond IQ tests," *European Journal of Education and Psychology*, vol. 8, no. 2, pp. 76-84, 2015. https://doi.org/10.1016/j.ejeps.2015.09.004

[10] R. J. Sternberg, "Successful intelligence: Conceptualization, measurement, and educational implications," *Roeper Review*, vol. 43, no. 1, pp. 5–15, 2021.

[11] H. A.-H. A. Akeer and A. M. M. Abu Eidah, "A proposed program based on the successful intelligence theory for developing certain grammatical thinking skills and metamemory dimensions among al-azhar secondary school students," *Al Azhar Journal of Education: A Peer Reviewed Journal for Educational, Psychological, and Social Research*, vol. 44, no. 206, pp. 169-221, 2025. https://doi.org/10.21608/jsrep.2025.437829

[12] E. L. Grigorenko, R. J. Sternberg, and M. E. Ehrman, *Teaching for successful intelligence: Principles, procedures, and practices*. Cambridge, UK: Cambridge University Press, 2022.

[13] M. A. Tarawneh, "The level of successful intelligence among gifted students in Jordan and its relation to some variables," *Journal of Educational and Psychological Sciences, University of Bahrain*, vol. 17, no. 2, pp. 567–592, 2016.

[14] S. A. M. Al-zahrani, "Impact of a successful intelligence based educational program in the development of analytical skills: Experimental middle school study in Jeddah-Saudi Arabia," *Journal of Educational and Psychological Sciences*, vol. 4, no. 15, pp. 156-135, 2020.

[15] R. J. Sternberg, *Adaptive intelligence: Surviving and thriving in times of uncertainty*. Cambridge, UK: Cambridge University Press, 2020.

[16] Z. Bazzi and G. Panahi, "The effectiveness of successful intelligence training on academic engagement and academic resilience in high school students," *Iranian Evolutionary Educational Psychology Journal*, vol. 5, no. 3, pp. 1-15, 2023.

[17] H. F. S. M. S. Murad, "Building a model for the causal relationships between achievement motivation, metacognitive skills, and successful intelligence for a sample of secondary school students," *Arab Studies in Education and Psychology*, vol. 129, pp. 99–150, 2021.

[18] G. S. A. I. Shoman, "The effectiveness of a suggested strategy based on successful intelligence theory to teach curriculum course among preservice math teachers in their retention of learning and developing metacognition skills and critical thinking," *Arab Studies in Education and Psychology*, vol. 108, pp. 20–58, 2019.

[19] E. Maalouf, S. Hallit, and S. Obeid, "Personality traits and quality of life among Lebanese medical students: Any mediating effect of emotional intelligence? A path analysis approach," *BMC Psychology*, vol. 10, no. 1, p. 28, 2022. https://doi.org/10.1186/s40359-022-00739-2

[20] S. K. Thompson, *Sampling*, 3rd ed. Hoboken, NJ: John Wiley & Sons, 2012.

[21] A. M. Abdel-Khalek, "The Arabic version of the world health organization quality of life brief scale: Psychometric results: Preliminary results," *Psychological Studies*, vol. 18, no. 2, pp. 247–257, 2008.