Effect of Self-Leadership on Higher Education Students' Life Satisfaction and Quality of Life: A Bruneian Mixed-Methods Case Study

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Abstract
Physical, emotional, and psychological problems are among the core issues experienced by adolescents transitioning into adulthood and graduate students, particularly when pursuing higher education. As such, the stressors can adversely impact the higher education students' quality of life (QoL) and life satisfaction, especially if they lack self-leadership. Hence, the purpose of this explanatory sequential mixed-method study was to determine the effect of self-leadership on QoL and life satisfaction, moderating the impact of emotional and spiritual intelligence. The bottom-up spill over theoretical model guided this study. In the first phase, quantitative data on self-leadership, QoL, and life satisfaction were collected from 396 higher education students in Brunei. The qualitative data were analysed using Statistical Package for Social Sciences (SPSS) version 26. In the second phase, qualitative data were collected from 32 students using a semi-structured interview protocol. NVivo was used to support the content analysis, helping explore the students' perception of the influence of spiritual and emotional intelligence on life satisfaction, QoL, and self-leadership. The quantitative findings were that self-leadership significantly influences the students' QoL and life satisfaction. Six themes, self-awareness, self-regulation, self-acceptance, help-seeking, holistic approaches, and achieving control, were retrieved in the second phase.

Keywords: Self-Leadership, QoL, Life Satisfaction

Introduction

The need for a skilled workforce, development, and innovation has prompted the increase of students admitted to higher education institutions. According to World Bank (2021), more than 220 million students were admitted to higher education institutions as of October 2021, representing a 100 million surge from 2000. Young adults admitted to higher learning institutions are exposed to subjective norms that influence their capabilities and enthusiasm to be proactive, especially academically (Sany et al., 2021). Exposure to and engaging in varied activities affects the students' physical, social, and mental health as they are related to their self-esteem, individualism, mental well-being, social, hope, self-efficacy, emotional loneliness, and emotional intelligence, influencing their quality of life (QoL) and life satisfaction (Sany et al., 2021).

Most decisions made by college students tend to involve difficult emotional choices that impact their mental and physical well-being (Hagenauer et al., 2017; Hernandez-Torrano et al., 2020). In addition, the emotional-based decisions made by the students affect their commitment to academic performance (Hagenauer et al., 2017). It is unknown if a positive, statistically significant association between self-leadership practices and Bruneian higher education students' QoL and life satisfaction exists. In educational settings, the importance of self-leadership is emphasized as a skill and way of thinking that students need to excel academically and be prepared for their future employment. In addition, self-leadership affects people's work ethics and is connected to learners' concentration, motivation, and enthusiasm (Goldsby et al., 2021). In addition, Maykrantz and Houghton (2020) found that self-leadership can be applied to effectively manage stress among students by controlling the environment and associated causes of stress.

Higher education students encounter changes after admission to a university or other higher learning institution, including autonomy, decision-making, adjusting to a new environment, academic pressure, and engaging with various people (Hernandez-Torrano et al., 2020). Transitioning from childhood to adulthood can result in emotional, psychological, and social challenges during learning. Mental disorders associated with the transition include depression, anxiety, and stress (Hernandez-Torrano et al., 2020). Depression prevalence among university students in Brunei was 43.36%, with Thailand having the highest prevalence at 47%, while the least was Ethiopia at 21.06% in 2013 (Islam et al., 2018). Notably, depression rates are higher among males (67.35%) when compared to females (32.65%) (Islam et al., 2018).

The high depression rate among the students was attributed to factors such as sedentary behaviours (62.24%) and poor academic performance (76.78%) (Islam et al., 2018). Additional causative factors include poor sleeping patterns, life satisfaction, and post-traumatic stress disorders (Islam et al., 2018). Similarly, Ahmed et al. (2018) highlighted financial difficulties, sex, lack of social support, parental guidance, family conflicts, poor academic performance, physical abuse, substance use, satisfaction, and mental illness history as causes of depression among students. Students' QoL scores during the COVID-19 pandemic were lower than those of the general population (Abdullah et al., 2021). The sudden disruption, the COVID-19 pandemic, and a high prevalence of mental problems were linked to the low QoL scores. Notably, variables such as school environment, depression, number of years spent studying, and chronic illness are indicators of students' QoL. As stated, self-leadership can be applied to effectively manage stress among students by controlling the environment and associated causes of stress (Maykrantz & Houghton, 2020). The focus of the

study was to assess the impact of self-leadership on the QoL and life satisfaction when controlling for spiritual and emotional intelligence.

In the published literature, self-leadership competencies have been supported to be essential among higher education students because they (a) promote the learners' capability to cope with stress, (b) supports the students' probability of benefiting from the pedagogical techniques used in universities and colleges, (c) reduce procrastination, (d) promote critical thinking, and (e) underpin participation in entrepreneurship activities (Ay et al., 2015; Durnali, 2020; Houghton et al., 2012; Sampl et al., 2017; Song et al., 2018; Wang et al., 2021). The students' QoL is impacted by different stressors such as the fear of failure, time management problems, pressure to study, academic overload, COVID-19, reluctance to seek help, lack of motivation to study, and perception of incompetence (Dessauvagie et al., 2021; Idris et al., 2021; Ting & Essau, 2021). As such, the adverse outcomes of the stressors include anxiety, depression, stress, academic failure, and substance abuse (Islam et al., 2018; Jung et al., 2021). Among higher education students, the factors that determine life satisfaction are health, gender, participation in physical activities, place of residence, level of study, support, and spiritual intelligence, supporting the need for differentiated approaches to promote contentedness (Ading et al., 2012; Fakunmoju et al., 2016; Hoh et al., 2018; Hoh, 2020; Rogoswka et al., 2021).

Self-leadership is an essential skill among higher education students because it influences the learners' QoL and related components, particularly understanding of self, communication, and sense of coherence (Jooste & Maritz, 2014; Kim & Kim, 2017; Lee & Ka, 2017; Shek & Leung, 2016). In addition, sufficient literature supports that students or people who possess self-leadership can control their feelings, behaviour, and thoughts, which is associated with more life satisfaction (Maya & Uzman, 2019; Qudsyi et al., 2020; Uzman & Maya, 2019a). Emotional intelligence is also directly associated with self-leadership, which results in enhanced cognitive capabilities and improved coping approaches among higher education students (Amzat et al., 2018; Vann et al., 2017; Wang et al., 2016). Notably, limited literature exists on the correlation between self-leadership and spiritual intelligence (Ronthy, 2013; Samul, 2020).

Applying the bottom-up spill over theory provided this case study with a scholarly underpinning. According to the bottom-up spillover theory, life events can be positive or negative (Andrews & Withey, 1976; Campbell et al., 1976; Sirgy, 2002, 2021). Positive events result in favourable outcomes in an individual's life, while negative ones have adverse consequences, influencing life satisfaction. Life events impact individuals' subjective wellness, meaning that the ability to control the influence of positive or negative events influences life satisfaction. Life satisfaction depends on individuals' contentedness with life domains (Sirgy, 2002, 2021).

For instance, in higher education, students' life satisfaction is influenced by domain contentedness such as education, wellness, and social. Accordingly, the students' satisfaction with education is determined by self-leadership competencies and spiritual or emotional intelligence. In this case study, it was conceptualised that self-leadership and spiritual or emotional intelligence can positively influence higher education students' health, education, and social domain contentedness, resulting in life satisfaction and improved QoL (see Figure 1). Individuals with self-leadership apply mindful and purposeful thinking while applying reflective practices (Browning, 2018; Neck et al., 2019). Subsequently, emotional intelligence influences the students' capability to manage stress, communicate, or overcome

conflict and issues that impact their education, health, and social domains (Gilar-Corbi et al., 2019; O'Connor et al., 2019). Spiritual intelligence influences higher education students' capacity to manage their thoughts, actions, and attitudes to live fulfilling life (Skrzypinska, 2021).

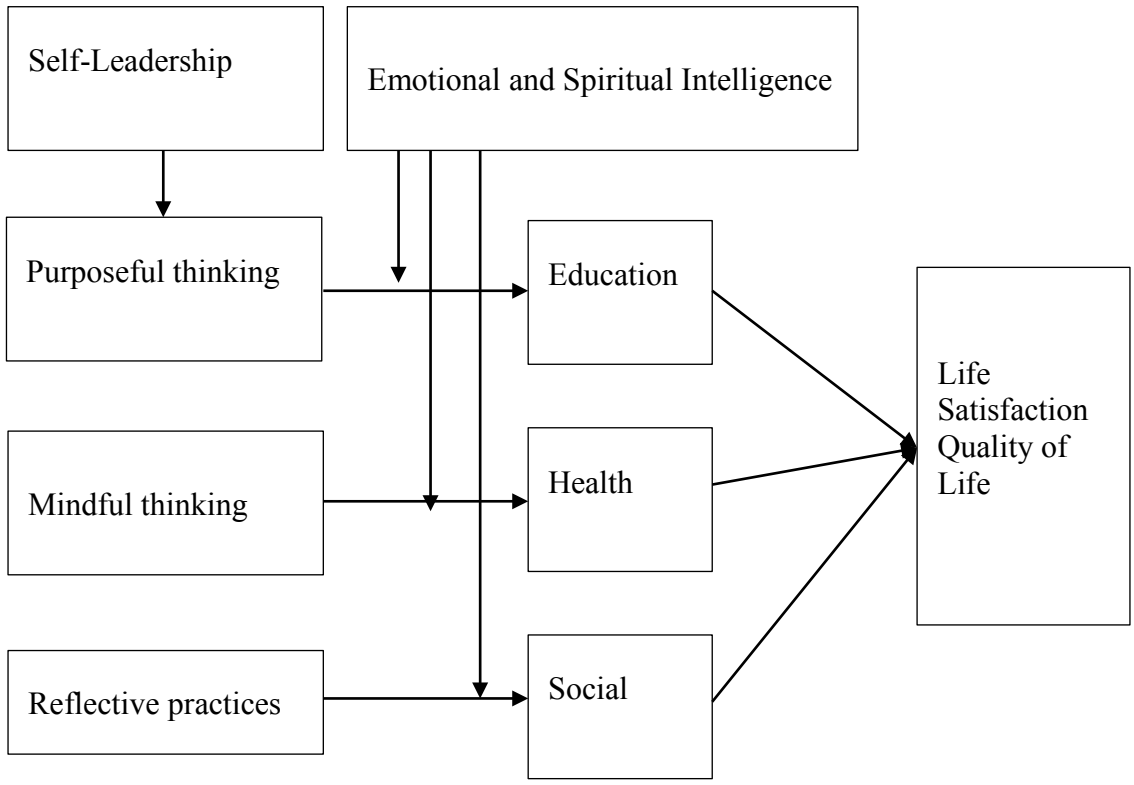

Figure 1: Conceptual framework

Methodology

The quantitative research questions that were investigated included:
Research Question 1: Does self-leadership among higher education students predict their quality of life, controlling for emotional and spiritual intelligence?
Research Question 2: Does self-leadership among higher education students predict their life satisfaction, controlling for emotional and spiritual intelligence?

The study's objectives were (a) to identify the impact of self-leadership on predicting the QoL of higher education students controlling emotional and spiritual intelligence and (b) to identify the impact of self-leadership on predicting the life satisfaction of higher education students controlling emotional and spiritual intelligence.

An explanatory sequential mixed method was utilized in the project as it entails the collection and analysis of quantitative data, followed by obtaining qualitative data and performing analysis (Creswell & Creswell, 2018). In the study, the design was employed to help assess and conclude the relationship between self-leadership, life satisfaction, and QoL. A mixed-method approach is essential in overcoming the bias and weakness associated with a mono approach (Cohen et al., 2018). Likewise, mixed-method approaches effectively enhance the

reliability and accuracy of the data obtained through data triangulation, bias reduction, and complementary and completeness benefits of the methodology strategies (Cohen et al., 2018). The study was conducted in three higher institutions in Brunei (Universiti Brunei Darussalam (UBD), Universiti Teknologi Brunei (UTB), and Politeknik Brunei (PB). The inclusion criteria for the students included the (a) students enrolled at either UBD, UTB, or PB; (b) studying in their first to fourth years, and (c) having English proficiency levels ranging from intermediate to proficient. Respondents who did not complete the survey or withdrew their willingness to participate were excluded. A random sampling technique was applied to recruit participants for the quantitative study. A total of 396 students were recruited for the study.

The data collection process commenced after receiving the three institutions' authorization (UBD, UTB, and PB). Quantitative data collection involved obtaining numeric data on the student's life satisfaction, QoL, and self-leadership scores. A Google link was sent to the recruited participants to their email addresses. The demographic characteristics of the participants, such as age, gender, marital status, year of study, study program, and highest education level, were collected. The demographic data were collected to aid in determining the distribution, dispersion, and representativeness of the sample. The Revised Self-Leadership Scale (RSLS) was used to obtain self-leadership data, the Quality-of-Life Scale (QoLS) for quality-of-life scores, and the Satisfaction with Life Scale (SWLS) for life satisfaction.

Descriptive analysis such as mean, standard deviation, frequencies, and percentages was performed using Statistical Package for Social Sciences (SPSS) version 26 to assess the distribution of the sample. Inferential statistics were performed at a 0.05 significance level. A regression analysis was performed to assess the association between the independent and the dependent variables. The independent variable (X) was self-leadership, while the dependent variables (Y) were life satisfaction and QoL. The regression analysis model used was; $Y = \beta_0 + \beta_1 x_1 + \ldots + \beta_n x_n + €$, where y denotes the dependent variable, β is the population parameters, x is the independent variable, and € is the error term. In the study, two dependent variables were used separately; thus, the outcome regression model was: $y = \beta_0 + \beta_1 x_1 + €$. However, the sample was used to estimate the population parameters; hence, the regression model based on the statistics is: $\hat{y} = \widehat{\beta o} + \hat{\beta} 1x1 + \widehat{€}$.
Equation (i) = quality of life = $\beta 0 + \beta 1 \text{self} - \text{leadership} + € \,(\text{error term})$
Equation (ii) = life satisfaction = $\beta 0 + \beta 1 \text{self} - \text{leadership} + € (\text{error term})$.
Hence equations (i) and (ii) were used in the data analysis.

In the second phase of the explanatory sequential mixed method, qualitative data were collected using interviews. A conveniently sampled population of 49 participants agreed to participate, but saturation was achieved at the 32nd participant. The interviews were conducted via email using a semi-structured interview protocol. Accordingly, a qualitative approach was suitable because it enabled collecting higher education students' perceptions on how their emotional and spiritual intelligence help explain the positive or negative relationship between self-leadership on QoL and life satisfaction. The third research question was:
Research Question 3: How do themes emerge in Bruneian higher education students' emotional and spiritual intelligence responses help explain the positive or negative relationship between self-leadership on QoL and life satisfaction?

The thematic data analysis was conducted in a five-step process. First, the researcher organised the data and imported the transcripts into NVivo 12 (https://www.qsrinternational.

com/nvivo-qualitative-data-analysis-software/home) to facilitate data management (NVivo, 2022). In the published literature, researchers have supported the efficacy of NVivo in promoting the rigour and transparency of the data analysis process (Dalkin et al., 2021; Maher et al., 2018; Swygart-Hobaugh, 2019). Second, the researcher read and re-read all the transcripts to comprehensively understand the collected data. Third, inductive coding was conducted, which supported in identifying In Vivo terms. Fourth, the formulated codes were combined to create themes. Fifth, the themes' definitions were formulated, and verbatim responses were assigned.

Results

Descriptive Statistics

The average age of the participants was M = 22.17(SD = 4.072). Most participants were females (65.6%), and 95.7% were single. Most of the participants were also pursuing a bachelor's degree (n = 185), 46.3% of the respondents had studied for three years, and 41.5% had attained a GCE A education level. Forty-nine participants were willing to participate in the study's second phase (see Table 1).

Variable		Frequency	Percentage
Gender	Male	136	34.4
	Female	259	65.6
Marital status	Married	17	4.3
	Single	378	95.7
Program	PHD	14	3.5
	Masters	14	3.5
	Bachelor	185	46.8
	Diploma	113	28.6
	Others	69	17.5
Duration of the study	Less than 3 years	27	6.8
	3 years	183	46.3
	4 years	174	44.1
	More than 4 years	11	2.8
Highest education level	GCE O level	51	12.9
	GCE A level	164	41.5
	Level 5 Diploma	111	28.1
	Others	69	17.5
Willing to participate in the second phase	Yes	48	12.2
	No	168	42.5
	Maybe	179	45.3
Age		M = 22.17(SD = 4.072)	

Note. M = mean, SD = standard deviation.

Table 1: Descriptive Statistics

Inferential Statistics

Regression analysis was conducted at a .05 significance level to assess the relationship between the independent (self-leadership) and the dependent variables (QoL) and life satisfaction). The first research question was:

Research Question 1: Does self-leadership among higher education students predict their quality of life, controlling for emotional and spiritual intelligence?

The first equation was: Quality of life = $\widehat{\beta 0}$ + $\widehat{\beta 1}$self-leadership + €. There was a statistically significant relationship between self-leadership and QoL (p = 0.000). The degree of correlation was 0.423, indicating a high correlation between self-leadership and students' QoL. Approximately 18% of the QoL (dependent variable) is predicted or can be explained using self-leadership (independent variable), suggesting a small variation. There was a positive relationship between self-leadership and QoL. Hence, they are directly proportional; that is, as the self-leadership score increases, it results in a surge in the level of QoL (see Table 2).

Variable	Model 1			
	B	SE B	β	*t*
Constant	32.104	5.302		6.055
Self-leadership	.360	.039	.423	9.286
R	.423			
R square	.179			
Df	395			
F	86.235***			

Note. B = unstandardized coefficients, SE B = standard error coefficients, β = beta. N = 396
*p < .05, **p < .01, ***p < .001

Table 2: Regression Analysis of Association between Self-leadership and Quality of Life

The second research question was:
Research Question 2: Does self-leadership among higher education students predict their life satisfaction, controlling for emotional and spiritual intelligence?

The second equation was: Life satisfaction = $\widehat{\beta 0}$ + $\widehat{\beta 1}$self-leadership + €. A regression analysis was conducted to assess the relationship between self-leadership and satisfaction with life at a 0.05 significance level. There was a statistically significant association between the independent and the dependent variable (p = 0.001). The degree of correlation was 0.170, indicating a low correlation between self-leadership (independent variable) and life satisfaction (dependent variable). Approximately 2.9% of the dependent variable (life satisfaction) can be explained by the independent variable (self-leadership), suggesting a small variation. The regression model predicts the dependent score as the p = 0.001 obtained is less than the 0.05 significance level. Hence, the regression model is a good fit for the data. There is a positive correlation between self-leadership and students' satisfaction with life. They are directly proportional; that is, an increase in self-leadership score results in a surge in the level of satisfaction with life (see Table 3).

Variable	Model 1			
	B	SE B	β	*t*
Constant	12.548	2.597		4.831***
Self-leadership	.065	.019	.170	3.430***
R	.170[a]			
R square	.029			
Df	395			
F	11.766***			

Note. B = unstandardized coefficients, SE B = standard error coefficients, β = beta.
*$p < .05$, **$p < .01$, ***$p \leq .001$

Table 3: Regression Coefficients of Self-leadership and Life Satisfaction

Qualitative Findings

The third research question was:
Research Question 3: How do themes emerge in Bruneian higher education students' emotional and spiritual intelligence responses help explain the positive or negative relationship between self-leadership on QoL and life satisfaction?

The thematic analysis helped answer the third research question. Six themes; self-awareness, help-seeking, self-acceptance, holistic approaches, self-regulation, and achieving control, were derived from the thematic analysis. A discussion of the themes was included in the subsequent sections.

i. Self-Awareness

Based on the thematic analysis, it was identified that the students understood the self, specifically their behaviours, feelings, and traits. The higher education students were adequately aware of their overthinking habits, the probability of tone varying based on the situation, and the likelihood of experiencing challenging emotions and feelings that have an appositive or negative impact. For instance, BP1 indicated, "…I found it hard to convey what I was thinking whenever I felt like I am overwhelmed with any form of emotions, especially anger…." Another respondent BP13 posited that "…whenever I feel anxious or upset, it hinders my communication ability and causes me to keep quiet and cut off all communications..." BP2 noted that "…sometimes I have a bad habit of overthinking. There have been times when my overthinking has led to poor quality of work..." BP9 acknowledged that "I also realised that the tone of how I talk or convey information to others changes depending on my emotions. For instance, it is more lenient and friendlier when I feel good, but demanding and vice versa."

ii. Self-Regulation

It was identified that higher education students could overcome stress, manage problems, and avoid conflict, attributed to their self-awareness. As such, the participants reported applying adaptive self-regulation approaches such as crying, negotiating, logical thinking, listening to music, journaling, positive thinking, and self-soothing. For instance, BP10 indicated that "…if in a positive mood, I might be open to negotiating conflict, but if I am in a negative mood, i.e., if I am angry or sad, I will walk away until I have a better grasp; on myself..." BP5 explained that "…I regard myself as the object of analysis. I objectively clarify my pressure and difficulties, and finally, objectively list the solutions..." Another respondent,

OP10, said, "…when I realised how much pressure I was under, I would cry it out and let myself feel all the thoughts that were pressuring me, and after an hour, I would calm myself down and deal with it effectively..." OP5 responded, "…to manage this stress, I usually do whatever I enjoy to improve my mood, for example, journaling with colouring pens or just doing my work while listening to chilling songs…."

iii. Self-Acceptance

The respondents recognised their strengths and weaknesses, which supported them in comprehensively accepting themselves. The reposted strengths were the ability to work under pressure, belief in Allah, being contented, the capacity to maintain composure, and gratitude. BP9 explained their belief by indicating that "…Allah would not burden a soul beyond what it can bear. When I fail to achieve a certain goal, I always think it is not the end of the world. I can do better next time…." BP11 stated, "…I can work under pressure or maintain composure in the most stressful times…." BP9 responded that "… Yes, there are so many more things I want. However, I can't stop being thankful for every little I have in life…." On the contrary, the weaknesses were neuroticism, overthinking, and negative thoughts/emotions. For instance, BP10 indicated that "…I tend to overthink. Other life incidents outside higher education learning can also bring in stress, which sometimes can't be resolved in the short term….." Another respondent, BP7, said, "…I would describe myself as a person with high neuroticism (easily influenced by high anxiety and high levels of negative emotion)…."

iv. Help-Seeking

Based on the assessed data, the participants acknowledged the importance of having a support system. The students reported receiving support from professors, peers, friends, and lecturers. BP1 said, "…having friends who are my support system, we [have] the same academic problem[s]; thus, our stress is shared…." BP12 indicated, "…I go to my family and friends when I need help..." OP19 indicated that "…[in the case of challenges in which I am unable to work out myself, I usually ask my close friends and lecturers.

v. Holistic Approaches

The respondents inculcated that they use different approaches to improve their physical, emotional, spiritual, and mental wellness. The approaches included sports, journaling, pet ownership, social media, praying, writing poetry, listening to music, watching, hiking, going to the gym, playing badminton, videogames, cooking, learning new things, swimming, walking, gathering, skating, doing art, reading a book, colouring, basketball, painting, and learning music. For instance, BP1 said, "…I fill my time with weekly sports, journaling, taking care and spending time [with] my pet, and indulging in social media…." BP11 continued by saying that, "…listening to music helps build my focus and motivation…." GP1 indicated that "…I perform *solat* five *waktu* [the five obligatory Muslim prayers], sleep well, drink plenty of water, eat nutritious foods, exercise for 15-30 minutes, play games, and watch shows…."

vi. Achieving Control

The higher education students recognised how their spiritual and emotional intelligence influenced their capability to manage stress, communicate, overcome issues, and live

purposeful and meaningful lives. For example, BP9 indicated that "…I am living a life with minimal conflicts, and it helps me build a good rapport with many people throughout my journey of achieving human excellence…." GP1 expressed that "…managing my stress gives me a sense of control that increases my self-esteem, lessens depression, and gradually improves my quality of life..." GP7 indicated that "…alhamdulillah, I managed to pick up myself and perform daily prayers and read the Quran and perfect my knowledge on becoming a good Muslim..."

Discussion

The results were consistent with Sampl et al. (2017), Durnali (2020), Bozyigit (2019), and Maykrantz and Houghton (2020) on the positive impact of self-leadership on different aspects of higher education students. Additionally, Uzman and Maya (2019b) assessed the impact of self-leadership on the life satisfaction of university students and determined that there was a positive correlation and that self-leadership explained 15% of life satisfaction, congruent with the study findings. Although no study evaluated the direct correlation between self-leadership and QoL, several articles assessed the impact of self-leadership on the factors that affect students' QoL in higher education institutions. For example, Maykrantz and Houghton (2020) assessed the impact of coping skills on the students' stress levels, moderating self-leadership. The authors concluded that self-leadership was effective in stress management among the students.

Grimard (2017) reported that self-leadership is essential because it enables higher education students to become aware of their attitudes and emotions, supporting their capacity to mitigate challenges, overcome problems, and interact with others. The study added to the existing literature that self-leadership significantly influences students' QoL and life satisfaction in higher learning institutions. Similar to this study's findings, Carden et al. (2022) acknowledged that self-awareness is essential in promoting emotional intelligence development and enhancing leadership efficacy. Browning (2018) defined self-leadership as understanding one's ability and capacity to influence communication, emotion, and behaviour. The self-awareness theme in this case study is consistent with the self-leadership construct discussed in published literature (Carden et al., 2022).

The participants' responses are consistent with the arguments in the published literature because self-awareness is associated with self-regulation as it promotes decision-making (Turi et al., 2020). Carden et al. (2022) and Grimard (2017) also noted that self-regulation enables individuals to control their actions and thoughts. Consistent with published literature self-acceptance is associated with emotional intelligence because both concepts influence one's thoughts and moods (Sogolitappeh et al., 2018). Self-acceptance is also associated with self-regulation and self-awareness because the concepts influence individuals' beliefs (Hatami et al., 2019).

The findings in this study show individuals who possess emotional and spiritual intelligence are aware of their feelings, which underpins their help-seeking practices (Sogolitappeh et al., 2018). The results have congruence with those in the published literature because individuals with emotional intelligence apply psychological, cognitive, and behavioural components to achieve control and overcome problems (Rogowska et al., 2021; Sogolitappeh et al., 2018). Consistent with the published literature, individuals who have self-leadership enjoy activities that promote self-control (Kujawa & Kamiński, 2019; Neck et al., 2019).

Conclusion

The findings revealed that self-leadership is influential and significantly impacted life satisfaction and QoL, moderating spiritual and emotional intelligence among students in higher education institutions. The recommendations made are based on the significant positive findings obtained. The first recommendation is that higher education institutions should introduce self-leadership training, especially or mandatory for first-year students transitioning from adolescence to adulthood: This will help equip the students with skills and competencies to cope with the new environment and academic expectations positively. The second recommendation is to form social groups and active clubs that the students can engage in or be involved with to build and develop a social support system.

Thirdly, higher learning institutions should develop policies that sustain self-leadership practices to aid in enhancing the QoL and life satisfaction of the students, which will, in turn, benefit the establishment because of better performance, reduced rate of dropout, and increased workforce output. Fourth, future researchers should assess the effects of self-leadership on life satisfaction and QoL, moderating spiritual and emotional intelligence separately. The fifth recommendation is to effectively integrate emotional and spiritual intelligence into academic practices and culture. Emotional and spiritual intelligence were identified as positive predictors of the relationship between self-leadership, QoL, and life satisfaction. Despite the essence of emotional and spiritual intelligence, the concepts are ignored and not perceived as pre-requisite factors in the teaching and learning processes (Kornas-Biela et al., 2020).

Based on phase two findings, it is evident that the interviewed higher education students possessed spiritual and emotional intelligence, which underpins the understanding of self. In addition, the students were identified as self-aware, applied self-regulation, and engaged in self-acceptance, practices that promoted help-seeking or adopting holistic approaches to control their life. The qualitative results imply that emphasising the essence of spiritual and emotional intelligence among higher education students could promote improved life satisfaction.

The study's strengths include using students from three different institutions and, ensuring representativeness, promoting data triangulation. A mixed-method approach was also used, which helped mitigate the biases or weaknesses associated with mono-method bias. Another strength is that validated and reliable data collection instruments were used in the first phase, increasing the results' rigour. In addition, during the second phase, NVivo was applied, supporting effective data management and systematic analysis.

Implications

The RSLS, QoLS, and SWLS questionnaires were used in the project, and the findings showed that self-leadership significantly impacts life satisfaction and quality. Consequently, the tools can be used in various cultures and contexts. The outcomes confirmed that self-leadership significantly impacted students' QoL and life satisfaction in higher education institutions. As a result, higher education institutions can use self-leadership techniques to help students transition to maturity. The explanatory sequential mixed-method approach can be applied to minimize the limitations of using a single methodology and obtain concise evidence that can be utilized to support the stated hypothesis. The bottom-up spill over theory was applied in the study, which advanced its application in explaining the correlation

between the QoL and life satisfaction, which is influenced by education, health, and social domains connected to self-leadership, emotional intelligence, and spiritual intelligence.

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