

# Academic self-regulated learning and health practices of Chinese students

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## Abstract

This paper explored the interrelationship between academic self-regulation learning and health practice among Chinese students and how these two together influence personal development. Data on their academic self-regulation abilities and health practices were collected from questionnaires of 325 Chinese students. The study found that the majority of respondents were female, freshmen, and nutrition students. The findings showed that respondents showed different degrees of ability in self-regulation learning, of which executive control was a particularly prominent link in their self-regulation practice. However, despite the positive factors, some students encountered difficulties in initial goal setting and consistent implementation of the strategies. Furthermore, although most students maintained good health habits, such as a balanced diet, regular physical exercise and adequate sleep, promoting their overall well-being and academic performance, some students had difficulty maintaining these healthy habits due to academic stress and insufficient time. Academic self-regulation showed significant differences between gender and grade, generally stronger in female and senior students. Studies also showed a significant correlation between students' self-regulation abilities and their academic and individual success. In light of this, the study proposed an action plan to improve students' academic and health outcomes through the development of academic skills (e. g., time management and strategic learning) and the promotion of physical activities, appropriate nutrition and stress management skills. Based on the above findings, the study presented specific recommendations for school administrators, parents, teachers, and students. These recommendations included incorporating self-regulation training in the curriculum, providing resources for healthy lifestyles, creating conditions to support academic growth and personal development in home settings, and integrating self-regulation learning strategies into teaching practices. Furthermore, future researchers were advised to conduct longitudinal studies to explore cross-cultural differences and to examine innovative strategies to improve academic self-regulating learning and health habits.

**Keywords:** academic self-regulated, health practices, Chinese students

## Academic self-regulated learning and health practices of Chinese students

### 1. Introduction

With the rapid development of globalization and technology, the field of education is facing unprecedented challenges and opportunities, making academic self-regulated learning has become a hot topic in educational research. Academic self-regulated involves active monitoring, control and adjustment of their own learning processes and is seen as a key mechanism for improving students' academic performance, academic self-regulated consists of three stages: pre-setting, performance and self-feedback, each of which plays a crucial role in students' learning effectiveness. This model not only emphasizes the initiative of students in the learning process, but also reveals how the learning effects can be optimized through self-regulated.

Self-regulated learning involves self-control on urges, behaviors, feelings and attention. The capacity to self-control is especially fundamental in the advancement of ideal psychological adjustment. The idea of self-regulated learning is a heavily researched topic, especially concerning school and college population. Self-Regulated Learning (SRL) or academic self-regulation is one of the six aspects of self-regulation. It alludes to learning that is guided by metacognition, strategic action, and inspiration to learn. Academic self-regulation can be seen as an integrated learning process, involving the development of a set of constructive behaviors that influences one's learning. Studies have demonstrated that students with elevated levels of self-regulation have reasonable control over the accomplishment of their objectives. According to Zimmerman's theory (2022), academic self-regulated includes three important components: self-observation, self-evaluation and self-response. Students not only need to evaluate their learning progress and effectiveness, but also need to adjust strategies in the process to meet challenges and optimize learning outcomes.

In China's educational environment, academic self-regulated is particularly critical to students' academic success. Chinese students often face high expectations and pressure from schools and families, especially when dealing with major exams such as the gaokao. For example, a Chinese high school student may start a self-regulated study program a few months before the gaokao. The student may set review goals for each week and continuously monitor his progress. Through self-assessment, if the mastery of a certain subject is insufficient, students will adjust their study plan, increase the study time of the subject, or try different learning methods to improve efficiency. In addition, they may also further enhance the effects of self-regulated by forming study groups to share resources and learning strategies with their classmates.

Health practice refers to a range of behaviors and habits adopted by individuals to maintain or improve their health status. In the educational and academic fields, health practices are particularly important because they directly affect students' learning efficiency and psychological state. Good health habits can help students stay energetic, improve attention and memory, while reducing course absence due to health problems. However, the development and practice of academic self-regulated may be significantly influenced by the cultural context. Moreover, the emphasis on standardized testing and academic achievement in China's educational system may create a culture of academic competition and comparison among students. In such environments, students may feel compelled to prioritize academic success at the expense of their physical and mental well-being, leading to unhealthy study habits and lifestyle choices. Furthermore, the cultural values and beliefs surrounding education in China, such as the perception of academic success as a pathway to social mobility and filial piety, can further influence students' attitudes and behaviors towards learning and self-regulated. This complex interplay between cultural norms, societal expectations, and individual experiences underscores the importance of considering the cultural context when examining academic self-regulated and health practices among Chinese students.

The significance of the study lies in its potential to provide comprehensive insights into two crucial aspects of student development: academic self-regulated and health practices. Firstly, understanding academic

self-regulated learning behaviors among Chinese students is essential for educators and policymakers aiming to enhance educational outcomes. By elucidating factors such as goal setting, time management, and strategic learning strategies, the study can inform the design of interventions tailored to improve students' academic performance and success. In addition, this study aimed to explore the interrelationship between academic self-regulation learning and health practice. By examining how these two dimensions influence each other, the study could provide valuable insights into how enhancing one aspect might benefit the other. For example, improving health habits may lead to better cognitive endurance and attention, thereby enhancing students' ability to engage in effective self-regulatory learning strategies. Conversely, students who perform well in self-regulatory learning may be better at managing their health effectively due to better organizational and planning skills (Zhou et. al., 2022).

The results of this study have the potential to fill existing gaps in the academic literature, but also to provide practical applications. For example, if studies confirm a strong correlation between specific health practices and improved academic self-regulation, then schools and universities could prioritize these practices in their educational strategies and student support services. This study was motivated by the pressing need to address the complex interplay between academic self-regulated learning and health practices, particularly within the unique cultural context of China's educational system. Despite the growing recognition of the importance of both academic self-regulation and health practices in student development, there remains a gap in understanding how these dimensions interact and influence each other, especially among Chinese students. By investigating this relationship, the study aims to provide valuable insights into effective strategies for promoting holistic student well-being and academic success. Furthermore, the findings of this research have the potential to inform the development of evidence-based interventions and policies that can be tailored to the specific needs of Chinese students, ultimately contributing to the advancement of educational practices and student support services in China and beyond.

**Objectives of the Study** - The study aimed to determine the relationship between academic self-regulated learning and health practices. More specifically, to assess the academic self-regulated learning in terms of forethought, performance control and self-reflection; determine the health practices as to social emotional mental physical and spiritual wellness; test the significant relationship between the two variables and proposed a plan of action to enhance academic self-regulated learning and health practices.

## 2. Methods

**Research Design** - According to the framework described by Siedlecki (2020), descriptive research method was used to collect detailed information on the academic self-regulated and health practices of Chinese college students. This approach contributed to an in-depth understanding of the main conditions and variables tested in the study. It also discussed the evaluation of academic self-regulated ability and health practices of college students in the background of Chinese higher education, analyzed the relationship between the two, and explored how to improve the health practices of college students by strengthening academic self-regulation. As recommended by Fowler (2018), the questionnaire was used as the primary data collection tool. These questionnaires were carefully designed to collect the views of Chinese college students on their academic self-regulated and health Practices. At the same time, this study deeply explored the patterns and methods of academic self-regulated in the context of higher education, as well as various indicators of their own health practices (including physical health, mental health, emotional health and social health), to assess how these factors affected students' educational outcomes. This approach enabled the study to accumulate diverse, extensive sample data and improving the applicability and adaptability of this study in the educational field in China. This study carefully studied the interaction between different variables based on the method proposed by Seeram (2019) and combined with relevant literature. Using a non-experimental approach, this study aimed to explore the statistical relationship between academic self-regulated and health practices among Chinese university students. Through this analytical effort, research sought to identify recognizable patterns and correlations, revealing the association between academic self-regulated ability and health Practices, and its

potential impact on students' health Practices. This study design comprehensively and deeply explored the interaction between academic self-regulated and health practices and its impact on learning outcomes by combining descriptive, investigative and relevance approaches, providing valuable insights into policy making and practice in the educational field.

**Participants of the Study** - The respondents were Chinese students with a sample of 325 school students from multiple schools. The target participants in this study were college students in China, selected according to their availability and willingness to participate in the study. The respondents came from four Chinese universities, the total number of students was 2346 LPU graduate school of statistical consultant, the researchers used Rao soft 95% confidence interval and 5% sampling error range target respondents, the researcher used stratified non-proportional allocation sampling method to select respondents. Considering the ethical problems in this paper, the total number of participants were 325 students. The criteria of selecting respondents were must be college students and professionals. The investigators used a simple random sampling method to select participants.

**Instrument of the Study** - This study used a questionnaire instrument adapted from different sources, including the famous Zimmerman self-regulated learning scale as well as research papers derived from Lyceum University of the Philippines. This survey was divided into three parts, aimed to fully evaluate the participants' academic self-regulated ability and their health practices. Through this comprehensive research design, this study aimed to reveal the interaction between academic self-regulated and health practices, and how the two together affected students' overall academic performance and quality of life. The results were expected to provide targeted intervention strategies to promote academic success and physical and mental health of students. In the first part, respondents were asked to provide information about their own demographics.

The academic self-regulated learning section was divided into three subsections—Forethought, Performance Control, and Self-Reflection. In Forethought, questions probe students' planning and motivation for studying, including how they organize and schedule their learning tasks. Performance Control evaluates the execution of these plans, focusing on the optimization of the learning environment and strategies for engaging with content. Self-Reflection assesses how students review and adapt their learning strategies based on outcomes and previous experiences, highlighting their capacity for self-assessment and improvement. Health practices were explored across five domains: Social, Emotional, Mental, Physical, and Spiritual Wellness. Each domain included questions that gauged behaviors and attitudes impacting students' well-being. Social Wellness questions assess interpersonal skills and empathy. Emotional Wellness questions address the ability to manage and express emotions effectively. Mental Wellness focuses on cognitive engagement and stress management. Physical Wellness evaluates exercise, dietary habits, and sleep patterns. Finally, Spiritual Wellness questions explore the depth of spiritual beliefs and practices, contributing to overall life satisfaction and purpose. This article was adapted from the Zimmerman's Self-regulatory Learning Scale (2002) and the article from Nambiar, & Pothiyil (2022), Development and validation of Academic Self-regulated Learning Questionnaire (ASLQ).

The content of the instrument used in this study underwent a rigorous validation and validation process to ensure its reliability. First, the instrument was reviewed and validated by a panel of experts in the field to ensure that it adequately measured the intended construct. Subsequently, the research instrument was tested for reliability using Cronbach's alpha, a recognized measure of internal consistency. According to the results of the reliability measurement scale of the above questionnaire, the instrument used in this study showed good reliability on all indicators. Cronbach's alpha value of About discipline vision was 0.848, and that of Subject knowledge was 0.863. Knowledge about teaching methods Cronbach's alpha was 0.867, of course, Cronbach's alpha of Integrated pedagogical knowledge of technology was 0.921; Cronbach's alpha of Knowledge was 0.929. Cronbach's alpha value of Attitude was 0.913. However, the Cronbach's alpha of Integration of technical subject knowledge was 0.755, but was still at an acceptable level. According to the reliability measures of this study, the tool showed good reliability in assessing relevant indicators of academic self-regulated and health Practices among Chinese university students. This suggests that researchers can fully rely on their results when using the

tool for data collection and analysis to conduct inferences and discuss studies with confidence.

**Data Gathering Procedure** - The data collection process for this study included the use of a valid questionnaire and a rating scale to collect data from respondents. The online questionnaire was produced through Wenjuanxing, China's largest online survey, examination, assessment and voting platform. The questionnaire consisted of three parts. After obtaining consent from the school staff, the questionnaire was distributed to school students, and after 359 participants responded, data collection and retrieval with a total of 325 fully valid questionnaires were obtained. The questionnaires produced and published through—the largest online survey, examination, evaluation and voting platform in China. The platform was selected for its extensive coverage and user-friendly interface. The questionnaire was carefully designed and divided into three parts, which was clear and easy to understand, ensuring that the respondents could accurately understand and answer. Prior to the distribution of the questionnaire, consent was obtained from the relevant school staff to ensure ethical compliance and collaboration, a step important for smooth data collection. After obtaining approval from the school authorities, the online questionnaire links were distributed to the school students. Distribution channels may include school mail, online student portals, or other communication platforms used by the school. A total of 359 participants answered the questionnaire during the questionnaire opening period. Each submission was reviewed to ensure completeness and validity, yielding 325 fully valid questionnaires. These validated questionnaires constituted the final dataset of the study, ensuring that the data used for analysis were reliable and representative. With this structured approach, studies are able to collect high-quality data, laying the foundation for robust analysis.

**Data Analysis** - For the data analysis, the following statistical tools were used. Weighting and ranking were used to determine academic self-regulated, as well as student health practices, and the data were tested as normal using Shapiro-Wilk. From the results, the data were not normally distributed, thus using the Mann Whitney U test and Kruskal Wallis as part of the non-parametric test to test the comparison of test variables. Similarly, Spearman rho was used to test for significant relationships between treatment variables. In addition, post-hoc tests were also performed. In addition, all data were processed using statistical software called PASW version 26 to further explain the results of the study using alpha levels of 0.05 and 0.01.

**Ethical Considerations** - To ensure that respondent privacy is adequately protected, researchers strictly avoid disclosing any information that may identify individuals. They showed extremely high respect in their interaction with the participants, always obtaining their consent before exposure to any sensitive information. During the data analysis process, the researchers always put the interests of the participants first, ensuring that the accuracy and representativeness of their data are guaranteed. Although the researchers remained objective in the study and expressed no personal opinions, they presented a range of information and conclusions based on the data collected. Furthermore, the investigators promised participants that all responses were confidential and explicitly informed that the data were used only for the purposes of this study.

### 3. Results and discussion

**Table 1**

*Summary Table on Academic Self-Regulated Learning*

Indicators	Weighted Mean	Verbal Interpretation	Rank
Forethought	3.03	Agree	1
Performance control	2.99	Agree	2
Self-reflection	2.94	Agree	3
Composite Mean	2.99	Agree	

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree*

Table 1 summarizes the respondents' assessment in three aspects of academic self-regulatory learning. The overall mean was 2.99, indicating that the respondents generally agreed to the indicators. Among them, the highest average was 3.03, reflecting the active preparation activities of the respondents before study. This table

provides a comprehensive assessment of the three key dimensions of pre-plan thinking (Forethought), executive control (Performance Control), and self-reflection of academic self-regulated learning (Self-reflection).

Pre-plan thought scored highest indicating that students performed well in pre-study preparation and planning activities. This includes making a study plan, allocating learning materials and time, and setting specific learning goals. This score reflects that students already have good self-regulated strategies before starting learning to effectively arrange and optimize learning resources and environment. Studies have shown that good early preparation can significantly improve learning efficiency and learning outcomes (Zimmerman, 2022). The score of executive control was slightly lower than pre-plan thinking, indicating that students were slightly inadequate in regulation and control during the learning process. This involves maintaining attention, making effective use of learning strategies, and timely adjusting learning methods in the learning process.

Self-reflection scored the lowest, but was still within the "consent" range, indicating that students need to be strengthened in their post-study reflection and assessment activities. This includes assessing learning outcomes, learning from experience, and adjusting learning strategies based on feedback. This score points out that while students can learn from their mistakes and try to improve, there is room for improvement in systematically evaluating and optimizing their learning strategies (Xu et. al.,2019). Chen et. al.,(2020) found that structured reflection sessions led to improved academic performance and deeper understanding of the material. Furthermore, integrating feedback mechanisms can provide students with concrete steps to refine their learning strategies (Wang et. al.,2020).

**Table 2**

*Summary Table on Health Practices*

Indicators	Weighted Mean	Verbal Interpretation	Rank
Social Wellness	3.27	Agree	1
Emotional Wellness	2.99	Agree	4
Mental Wellness	3.00	Agree	3
Physical Wellness	3.06	Agree	2
Spiritual Wellness	2.94	Agree	5
Composite Mean	3.05	Agree	

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree*

Table 2 summarizes the respondents' assessments in various types of health practices. The overall mean was 3.05, indicating the general consent of the respondents. Among these, social health practices received the highest average of 3.27, reflecting the importance of social interaction and interpersonal relationships in the lives of the respondents. Social health scores were highest, indicating that students performed well in building and maintaining interpersonal relationships and social interactions. This includes supporting and appreciating others, active participation in social activities, etc. Good social health contributes to improved quality of life and psychological well-being, which matches the literature describing the importance of social support on overall health effects (Cao et. al.,2019).

Physical health scores indicate that students generally value and participate in activities to improve their physical health, such as regular exercise, healthy eating and moderate drinking. Mental health scores showed that students performed well in psychological adjustment, decision-making ability, and time management. The slightly lower emotional health score indicates that although most students were able to effectively express and manage emotions, there is room for improvement, especially in coping with stress and maintaining optimism.

The lowest mental health score, indicating that students may have difficulties finding the meaning and purpose of life and maintaining personal beliefs. Overall, students were generally positive in multiple areas of health practice, especially in social and physical health. However, there is still room for improvement in emotional and mental health. It is recommended that higher education institutions provide more comprehensive health education and practice support, especially curricula and activities that enhance emotional regulation and spiritual exploration, to help students achieve greater promotion in these areas to achieve more comprehensive

health and well-being.

**Table 3**

*Relationship Between Academic Self-Regulated Learning and Health Practices*

Forethought	rho-value	p-value	Interpretation
Social Wellness	.476	0.000	Highly Significant
Emotional Wellness	.306	0.000	Highly Significant
Mental Wellness	.201	0.000	Highly Significant
Physical Wellness	.253	0.000	Highly Significant
Spiritual Wellness	0.097	0.081	Not Significant
Performance control			
Social Wellness	.269	0.000	Highly Significant
Emotional Wellness	.386	0.000	Highly Significant
Mental Wellness	.705	0.000	Highly Significant
Physical Wellness	.254	0.000	Highly Significant
Spiritual Wellness	0.01	0.861	Not Significant
Self-reflection			
Social Wellness	.173	0.002	Highly Significant
Emotional Wellness	.288	0.000	Highly Significant
Mental Wellness	.368	0.000	Highly Significant
Physical Wellness	.208	0.000	Highly Significant
Spiritual Wellness	0.027	0.622	Not Significant

*Legend: Significant at p-value < 0.01*

Table 3 explores the association between academic self-regulated learning and health practice. The results showed that there were significant correlation ( $p$ -value  $< 0.000$ ) between prospective, executive control, and self-reflection, especially the correlation between executive control and mental health practice (rho-value = 0.705). However, the association of mental health with self-regulatory learning was not significant, which may indicate a weaker association between mental health practice and academic performance. This table presents the relationship between three aspects of academic self-regulated learning (pre-plan thinking, executive control, self-reflection) and health practice (social, emotional, mental, physical and mental health).

For pre-plan thinking, the correlation analysis results showed that: social health: rho = .476,  $p < 0.001$ -highly significant. This result suggests a strong positive correlation between good academic preparation and better social health practice. Specifically, good planning and organizational skills may help students to manage social activities and relationships more effectively, thereby enhancing social competence and social adaptability. Emotional health: rho = .306,  $p < 0.001$ - highly significant. This data shows a clear positive association between academic preparation and emotional health. A good upfront plan may help students reduce study stress to better manage emotions and reduce anxiety. Mental health: rho = .201,  $p < 0.001$ - highly significant.

This suggests a positive link between careful planning before study and mental health. By arranging and preparing ahead, students may feel more control and self-efficacy, which is an important support for mental health. Physical health: rho = .253,  $p < 0.001$ -highly significant. This result suggests that there is a positive correlation between better pre-plan thinking and better physical health. For example, systematic planning habits may encourage students to more regularly arrange a healthy diet and exercise, which are key factors in maintaining good physical health. Mental health: rho = 0.097,  $p = 0.081$ -non-significant. This implies a weaker link between pre-planning thinking and mental health practice. This may suggest that the maintenance of mental health involves more intrinsic systems of values and beliefs that may not be easy to influence directly through extrinsic planning and organizational skills. Overall, the highly significant correlations not only highlighted the role of good planning and organizational skills in academic success, but also revealed the positive impact of these skills on health-promoting behaviors. By planning learning activities in advance, students can not only improve their academic performance, but also improve themselves in multiple aspects of life (e. g., social interaction, emotional adjustment, and healthy living habits).

For executive controls, social health: rho = .269,  $p < 0.001$  — highly significant. This suggests that students

with better executive control perform better in social health and may be better at managing time and resources related to interpersonal interactions and thus being more effective and satisfied in social activities. Improving executive control helped them better balance academic and social activities. Emotional health:  $\rho = .386$ ,  $p < 0.001$ - highly significant. This result points to a strong positive correlation between executive control and emotional well-being.

Good executive control not only helps students reduce stress during academic tasks, but also handles emotional problems and enhances emotional stability, consistent with the study by Thayer et al (1994) that showed that good emotional regulation is associated with higher life satisfaction and lower psychological stress levels. Mental health:  $\rho = .705$ ,  $p < 0.001$ - highly significant. This data suggests a very strong positive relationship between executive control and mental health. Students who were able to effectively perform the learning program showed better psychological adaptability in managing stress and facing challenges. Physical health:  $\rho = .254$ ,  $p < 0.001$ -highly significant.

The positive correlation between executive control and physical health practices suggests that good executive control may encourage students to more systematically schedule a healthy diet and take regular exercise to maintain good physical health. Mental health:  $\rho = 0.01$ ,  $p = 0.861$ -non-significant. This result suggests little correlation between executive control and mental health, possibly because the maintenance of mental health involves deeper personal beliefs and values that are not easily directly influenced through day-to-day learning and work task management. The high relevance of executive control emphasizes the importance of applying effective learning strategies and time management skills in the face of stress. Students who were able to effectively implement their study programs performed better in managing stress and maintaining their mental health, which not only helped to improve their academic performance, but also significantly improved their overall quality of life and health Practices.

For self-reflection, social health:  $\rho = .173$ ,  $p = 0.002$ - highly significant. The moderate positive correlation between self-reflection and social health suggests that students who can reflect effectively may be more self-conscious and sensitive in interpersonal interactions and social activities. Emotional health:  $\rho = .288$ ,  $p < 0.001$ - highly significant. The positive relationship between self-reflection and emotional well-being highlights the individual's ability to identify and adjust their own emotional responses. Mental health:  $\rho = .368$ ,  $p < 0.001$ - highly significant. The strong correlation between self-reflection and mental health suggests that deeply understanding and assessing one's thoughts and behavior patterns is crucial to maintaining a good mental state. Through regular reflection, students can identify and adjust behaviors that are not conducive to mental health, which is extremely beneficial to combat psychological problems such as depression and anxiety (Xu et. al., 2019). Physical health:  $\rho = .208$ ,  $p < 0.001$ -highly significant. The positive effects of self-reflection on physical health may stem from individual continuous assessment and optimization of their lifestyle choices, such as adjustment of eating habits, sleep patterns and exercise frequency, which directly affect physical health. Mental health:  $\rho = 0.027$ ,  $p = 0.622$ -not significant. The association between self-reflection and mental health is weak, perhaps because mental health is more deeply related to individual beliefs, values and meaning of life, which are not easily directly influenced through simple self-reflection. The highly significant correlation of self-reflection emphasizes the central role of students' self-monitoring and adjustment abilities in maintaining emotional balance and mental health. These competencies allow students to identify and improve potentially problematic behaviors to achieve positive changes in a variety of life domains.

As a special case of mental health, mental health and academic self-regulated show low correlation, and the maintenance of mental health involves many factors, including but not limited to personal beliefs, values, meaning of life and internal motivation. These factors constitute a person's spiritual world and directly influence his state of mental health. The low correlation between mental health and academic self-regulated ability compared to social, emotional, mental, and physical health may reflect its unique complexity and diversity. The uniqueness of mental health is that it is deeply influenced by individual personal beliefs and values. These intrinsic factors are often difficult to observe and evaluate directly through external behaviors or habits, and they



are more reflected through personal self-reflection and introspective process. For example, a person's life goals and his understanding of the meaning of life can profoundly influence his mental health state, but these factors are difficult to directly reflect on in everyday academic self-regulated behaviors. Although academic self-regulated skills, such as time management, goal setting, and self-monitoring, have obvious benefits for promoting student social, emotional, mental, and physical health, these skills may have less direct effects on mental health. This is because mental health depends more on individual attitudes and philosophical thinking about life, which often develop through deeper self-exploration and personalized psychological support. Regarding the low relevance of mental health, educational institutions should consider taking a more individualized approach to support students' mental health. This may include providing opportunities for students to explore personal beliefs, conduct philosophical and ethical discussions, engaging in meaning-seeking activities, etc.

In addition, schools can help students through counseling and counseling services to better understand and integrate personal values and life practices, thus enhancing their spiritual well-being. The low correlation between mental health and academic self-regulated is a reminder of the need to focus on their inner world and spiritual needs in supporting students in their development. By promoting students' deep understanding of their personal beliefs and values and supporting their growth at a spiritual level, we can more comprehensively promote their overall health and well-being. The analysis suggests that improving aspects of academic self-regulated learning can indirectly promote students' healthy practices, thereby improving their overall quality of life and academic performance. These findings provide valuable information for education policy makers and schools to help develop more effective student support and health promotion programs. Implications for educational practice: Academic institutions should consider integrating training and health promotion strategies for academic self-regulated skills, such as improving their overall health by enhancing their time management and stress coping skills. Educators should identify the arities of mental health and provide students with more resources on how to explore personal values and beliefs to support their spiritual well-being. Closer collaboration between mental health professionals, educators and health promoters is recommended to jointly develop and implement integrated interventions targeting different health practice areas.

**Table 4**

*Proposed Plan of Action to Enhance Self-Regulated Learning and Health Practices*

Key Result Area	Activities	Strategies	Success Indicators	Persons Involved
1.Academic self-regulated 1.1 forethought	Time management workshop	Teach effective time planning and priority setting skills, and practice schedule planning skills. incorporate activities or assignments that require students to plan their study time, extracurricular activities, and leisure activities in advance.	90% Students can effectively manage learning and rest time, reduce emergency tasks and delays	Students, teachers, and psychological counselors
1.2 performance control	Goal setting and monitoring training	Train SMART goal-setting methods and guide students to set short-term and long-term goals	85% Students should set clear and achievable learning goals and improve their academic performance	Students, teachers
1.3 Self-reflection	Self-reflection diary and discussion groups	Guide students to record and analyze their own learning experience, and organize regular reflection and sharing meetings	90% Students can identify the difficulties and successes in learning and improve their ability to adjust themselves	Students, psychological counselors
2.1 Social Wellness	Social skills training and team activities	Organize interactive games and social activities, and conduct teamwork training	Enhance 85% students' social skills and interpersonal interaction, and improve teamwork efficiency	The Student Affairs Office, and the Student Union
2.2 Emotional and mental Wellness	Emotional management workshop	Provide training in emotional cognition and regulation skills, and teach stress coping strategies	Reduce 70% students' anxiety and depression level, and students can effectively respond to stress	Mental health consultant, student consultant team
2.3 Physical Wellness	Healthy living promotion activities	Provide healthy diet guidance and nutrition information, and organize regular sports activities	Improve 80% students' eating habits and physical activity, and improve their overall health level	Sports coaches, nutritionists, and students

2.4 Spiritual Wellness	The Spiritual Growth and Values workshop	Explore the meaning of life and personal goals, and provide guidance for spiritual growth	Students' spiritual satisfaction improves and enhances their personal internal motivation	Psychological counselor, religious counselor, students
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#### 4. Conclusions and recommendations

The respondents exhibited varying degrees of academic self-regulation, and executive control was a particularly powerful aspect of their self-regulation practice. Despite the positive aspects, the study also identified the challenges. Some students experienced difficulties in initial goal setting and consistent implementation of strategies. Majority of the respondents generally maintained good health habits, including a balanced diet, regular physical exercise, and adequate sleep. These practices contributed to their overall well-being and academic performance. Despite positive outcomes, some students face challenges in maintaining consistent healthy habits due to academic stress and insufficient time. Stress and irregular schedules often undermine their ability to adhere to a healthy schedule. Research showed a significant correlation between students' self-regulated abilities and their overall academic and individual success. Educational policies that promoted the comprehensive development of practices, combining academic skills and health awareness, were essential to creating an environment conducive to the growth and well-being of students. An action plan was developed to address the observed gaps and improve student academic and health outcomes. The program included developing plans that focus not only on academic skills such as time management and strategic learning, but also on promoting physical activity, appropriate nutrition and stress management techniques.

School administrators may implement targeted interventions and support programs aimed at enhancing students' academic self-regulated learning skills and health practices. Which could involve incorporating self-regulated training into the curriculum and providing resources for promoting healthy lifestyle habits. Parents may encourage and reinforce the development of self-regulated learning skills and healthy lifestyle habits at home. They can collaborate with educators to create a supportive home environment conducive to academic growth and personal development. Teachers may integrate self-regulated learning strategies into their teaching practices by scaffolding assignments to promote goal setting, self-monitoring, and reflection. Additionally, providing personalized feedback and support to students can help them navigate academic challenges and maximize their potential for success. Students may take initiative in developing self-regulated learning skills and prioritizing their health to optimize their academic performance. They can actively engage in self-assessment, reflection, and goal setting, as well as seek support from teachers, parents, and peers when needed. The proposed action plan may be tabled for discussion and implementation. Future researchers may contribute by conducting longitudinal studies, exploring cross-cultural differences, and investigating innovative strategies to improve academic self-regulated learning and health practices.

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