A Model for Enhancing Students' Self-Management Skills in Public Universities in Guiyang City, Guizhou Province, China

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ABSTRACT

The objective of this study was to develop a model for enhancing self-management skills among university students in public universities in Guiyang City, Guizhou Province, China. Using a mixed-methods approach, the research involved a stratified random sample of 1,509 students from three major universities in Guiyang, ensuring a diverse and representative sample. The study focused on seven key self-management skill areas: Self-Motivation, Social Skills, Time Management, Emotional Regulation, Healthy Habits, Goal Setting and Execution, and Learning Strategies. Data analysis utilized the Priority Needs Index (PNImodified), with results indicating a mean PNImodified value of 0.461 for overall self-management skills. Self-Motivation (0.599), Social Skills (0.549), Time Management (0.501), Emotional Regulation (0.480), and Healthy Habits (0.471) were identified as priority areas for improvement, while Goal Setting and Execution (0.302) and Learning Strategies (0.30) were recognized as relative strengths. The model development was based on the identified priority areas, incorporating key theories to build a conceptual framework. The model was then validated by a panel of experts, ensuring its applicability and effectiveness in enhancing self-management skills. This study provides valuable insights for educators and policymakers, offering targeted recommendations for interventions to improve students' self-management skills in Chinese universities.

Keywords: Self-Management Skill, University Student, Learning strategy

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Introduction

In today's society, individuals are navigating increasingly complex and fast-paced environments. The rapid development of technology and the acceleration of globalization require the management of various tasks, time, emotions, and goals for personal and professional success and satisfaction. Against this backdrop, self-management, which comprises a set of vital skills, is essential.

As for the problem statement, the exponential growth of technology and the globalized landscape have heightened the demands on personal and professional self-management. University students, transitioning from structured high school environments to more autonomous college settings, face unique challenges in developing and maintaining effective self-management skills. In the Chinese context, these challenges are further compounded by cultural and educational dynamics that emphasize academic competition and achievement-oriented values. Despite the acknowledged importance of self-management in academic and career success, there remains a significant gap in understanding how to effectively foster these skills among Chinese university students, particularly in the face of increasing digital distractions and the pressures of a competitive academic environment.

In this research, there are four research questions comprising (1) How do cultural values such as diligence and perseverance influence the self-management skills of Chinese university students, particularly in areas like time management and emotional regulation? (2) What are the specific challenges Chinese university students face in transitioning from a high school to a college environment, and how do these challenges impact their self-management abilities? (3) How does the prevalence of digital technology in academic and daily life affect the self-management practices of Chinese university students? (4) In what ways can educational institutions, policymakers, and employers collaborate to support the development of self-management skills among Chinese university students, thereby enhancing their academic and career prospects?

In the realm of higher education, college students face a variety of challenges to their self-management skills as they move from a structured high school environment to a more autonomous college environment, the complexity of college life, and the prevalence of digital technology.

In the Chinese context, self-management skills among university students are shaped by unique cultural and educational dynamics. Recent studies emphasize the importance of self-regulatory capacities in navigating the pressures of competitive academic environments (Chen and Wong, 2018). These studies reveal that Chinese students' time management and emotional regulation are influenced by cultural values like diligence and perseverance in educational achievement.

Self-management extends beyond the academic sphere into the domain of career development. Employers are placing increasing emphasis on employees' autonomy and self-management abilities. Employees with strong self-management skills are typically more competitive and more likely to achieve professional success (Handayani et al., 2021). Given these considerations, it is evident that university students stand to benefit substantially from the enhancement of their self-management skills.

Research Objectives

1. To identify and analyze the self-management challenges faced by college students in increasingly complex and fast-paced environments, particularly as they transition from a structured high school setting to a more autonomous college environment.

2. To explore how unique cultural and educational dynamics in the Chinese context shape the self-management skills of university students, focusing on the influence of cultural values such as diligence and perseverance on time management and emotional regulation.

3. To evaluate the role and importance of different self-management skills in achieving academic and professional success, based on recent studies and employer expectations.

4. To propose effective interventions and strategies aimed at enhancing the self-management abilities of university students, thereby contributing to their personal and professional success.

Literature review

Self-Management Skills

Self-management skills encompass a set of strategic behaviors and cognitive processes that individuals employ to guide their goal-directed activities in an effective and efficient manner. These skills are particularly crucial in the context of higher education, where students are expected to autonomously navigate complex academic landscapes, manage their learning, and meet the demands of rigorous educational programs (Zwetsloot, 2020).

Self-management Skills in the Context of Higher Education.

Higher education institutions are increasingly emphasizing self-management skills as essential to the student learning experience. This shift aims to produce graduates who are knowledgeable in their fields and capable of lifelong self-management. The demand for self-management skills is heightened by the complexities of the modern academic environment. As universities prepare students for a rapidly changing world, the ability to manage learning and personal development becomes crucial. Self-management skills are closely tied to academic success, enabling students to

own their educational experiences, navigate university challenges, and become autonomous lifelong learners (Zimmerman, 2002).

Importance of Self-management for Students

Research and practice on a global scale have shown that everyone has innate self-management potential, which can be developed and enhanced through various educational and non-educational forms. This development helps individuals better adapt to various environments, unlock their potential, apply learned knowledge and skills, and better serve their communities and society. This realization is the true purpose of talent cultivation in higher education and is necessary for the perfection of China's university talent training models (Wong, 2019).

Major Theories for the Study

The major theories of this study: Zimmerman's (1989) Self-Regulated Learning Theory. Bandura's (1986) Social Cognitive Theory and Deci and Ryan's (1985) Theory of Self-Determination. Zimmerman's Self-Regulated Learning Theory posits that students can actively control their cognitive, affective, and behavioral processes during learning. In the context of enhancing self-management skills in public universities in Guiyang, this theory applies as it explains how students can develop self-management skills such as autonomous learning and time management through self-reflection, goal-setting, and behavioral adjustments. Bandura's Social Cognitive Theory emphasizes the role of observational learning, imitation, and social interaction in the development of behaviors. In research aimed at improving students' self-management skills, social cognitive theory can explain how students learn and adopt effective self-management behaviors by observing others. Deci and Ryan's Theory of Self-Determination: This theory focuses on the role of intrinsic motivation in personal choice and persistence of behavior. It helps understand how the development of student self-management skills can be influenced by their needs for autonomy, competence, and relatedness.

Self-Regulated Learning Theory

Zimmerman (2002) emphasized the active role students take in their own learning process. This theory consists of three core components: self-observation, self-judgment, and self-reaction, which form the pillars of self-regulated learning. This served as the cornerstone for understanding student-directed learning processes. It informed the strategies within the model to enhance students' self-management skills.

Social Cognitive Theory

Social Cognitive Theory (SCT), developed by Bandura (1986), emphasizes the role of observational learning and self-efficacy in shaping behavior. Individuals learn by observing others and the consequences of their actions, forming beliefs about their own capabilities to succeed. These beliefs, known as self-efficacy, are influenced by mastery experiences (personal successes),

vicarious experiences (observing others succeed), and social persuasion (encouragement from others). High self-efficacy fosters motivation, persistence, and resilience, ultimately impacting an individual's choices and actions. SCT provides a framework for understanding how personal factors, behavior, and environmental influences interact to shape human behavior.

Theory of Self-Determination

The Theory of Self-Determination (SDT), developed by Deci and Ryan (1985), explores the innate human need for growth and fulfillment. According to the theory, individuals naturally pursue experiences that fulfill three basic psychological needs: competence, relatedness, and autonomy. The need for competence drives individuals to seek mastery of challenges and achieve a sense of accomplishment, thus feeling effective and capable in their interactions with the environment. Relatedness encompasses the desire to feel connected to others, experience a sense of belongingness, and have meaningful social interactions. Finally, autonomy reflects the need for agency and control over one's behaviors and goals, making choices based on personal interests and values.

Related Research

Related Research in the International Context

The importance of self-management skills in higher education has gained prominence globally, especially due to the interconnectedness of the economy and challenges faced by students. Numerous studies emphasize that these skills are critical for personal and professional success, making their incorporation into curricula essential (Zimmerman, 2002). For public universities in Guiyang City, insights from global trends provide benchmarks for developing local educational strategies.

Enhancing self-management skills is a complex issue, supported by research indicating that these skills can be taught and developed through structured educational programs (Zimmerman and Schunk, 2001). Bandura's Social Cognitive Theory highlights that a learner's confidence in their abilities influences their perseverance in overcoming challenges, suggesting that universities can enhance self-management by fostering self-efficacy (Bandura, 1997).

Related Research in the Chinese context

In the 21st century, educational landscapes are changing globally, with self-management skills like goal setting, time management, self-monitoring, and self-reflection becoming increasingly important, especially in China. Traditionally focused on rote memorization and teacher-led instruction, China's high-pressure, exam-oriented system is now shifting as educators and policymakers recognize the value of self-regulatory competencies for academic and professional success (Chen, 2020). Liu and Wang (2016) found a positive correlation between self-regulated

learning techniques and academic achievement in Chinese students, suggesting that structured self-management programs could enhance their outcomes.

The literature on self-management competencies among Chinese university students shows that while some research has been conducted, it lacks depth and breadth, highlighting the need for more rigorous studies. Additionally, international research tends to take a broad perspective on collegiate self-management, with a noticeable lack of empirical studies focusing on the practical implementation and application of these competencies.

Context of Study

Guizhou Normal University

Guizhou Normal University (GNU) is a public undergraduate university located in Guiyang City, Guizhou Province, China, and is a provincial key university with a comprehensive disciplinary layout featuring teacher education. The university has been selected as one of the universities of higher education under the Discipline Innovation and Intelligence Program, the Basic Capacity Building Project for Colleges and Universities in Central and Western China, the Excellence in Teacher Training Program, the New Engineering Research and Practice Program, and the Teacher Education Collaboration and Quality Improvement Program for the group of colleges and universities, and it is a first-class academic discipline construction university in Guizhou. The university has about 40,000 students.

Guizhou Minzu University

Guizhou Minzu University is a key university in Guiyang City Guizhou Province. As of December 2023, the university covers an area of 2,708 acres, with a campus area of 1.11 million square meters; it has 23 colleges, offering 81 general undergraduate majors; it has 10 authorized points for master's degrees in first-level disciplines, 20 authorized points for professional master's degrees, and 1 doctoral degree program to serve the special needs of the country. It has 10 master's degree authorization points, 20 professional master's degree authorization points, and one doctoral talent cultivation program to serve the special needs of the country; 1309 full-time teachers and 20,000 full-time students.

Guizhou Institute of Technology

Guizhou Institute of Technology, located in Guiyang City, Guizhou Province, China, is a multidisciplinary full-time general undergraduate college focusing on engineering, science and management. It was founded in July 2011, approved by the Ministry of Education in March 2012, and officially established on April 18, 2013. With a school area of 1,336 acres and a planned construction area of 669,000 square meters, Guizhou Institute of Technology has 19 colleges and a university science and technology incubator park, offering 39 undergraduate majors. The university has 882 teaching staff and more than 12,400 full-time undergraduate students.

Research Methodology

Research Design

A mixed-method approach was employed, with 1,509 students participating.

Population and Sample

To obtain a representative research sample, invitations were emailed to all 13 universities, detailing the study's objectives and requirements. Three universities—Guizhou Normal University, Guizhou Minzu University, and Guizhou Institute of Technology—positively responded, expressing their willingness to participate. For the 2023 academic year, these universities have 72,075 students combined: 40,000 from Guizhou Normal University, 19,589 from Guizhou Minzu University, and 12,486 from Guizhou Institute of Technology. The sample size was determined using the Morgan table, resulting in 380 students from Guizhou Normal University, 377 from Guizhou Minzu University, and 375 from Guizhou Institute of Technology (as shown in Table 1).

Table 1 Population and Minimum Sample of the Study

Universities	Population*	sample**
Guizhou Normal University	40,000	380
Guizhou Minzu University	19,589	377
Guizhou Institute of Technology	12,486	375
Total	72,075	1,127

Note: * from direct correspondence with university human resource departments;

**from Krejcie and Morgan (1970)

Research Instrument

The research instrument is a questionnaire which examined seven key areas of self-management skills: Self-Motivation, Social Skills, Time Management, Emotional Regulation, Healthy Habits, Goal Setting and Execution, and Learning Strategies.

Data Collection

Three universities, Guizhou Normal University, Guizhou Minzu University, and Guizhou Institute of Technology, were chosen for data collection.

Data Analysis

Data analysis utilized the Priority Needs Index (PNImodified). In order to further understand and analyze the current status and desired level of self-management skills of public university students in Guiyang City, the research method used was to conduct a needs analysis using the Priority Needs Index Correction Method (PNI Correction Method). The Priority Needs Index (PNI) modification method prioritizes students' needs for developing self-management skills through the

PNI modification formula, which consists of three parts: I (importance) for desirable student self-management skills, D (degree of success) for current student self-management skills, and PNI for the priority needs index of student self-management skills. See Table 2 for details.

Table 2 PNI modified Formula

Attribute (Instructional Leadership Capabilities)	Importance	Degree of Success	PNI $_{modified}$ = (I-D) / D	Rank
(Variables)	(Desirable)	(Current)	(Result)	

Results and discussion

Demographic Information

Table 3 Descriptive of Demographics (n =1509)

Demographics	Frequency	Percentage
	Gender (n =1509)	
Male	753	49.9
Female	756	50.1
	Age(n=1509)	
Freshmen	405	26.84
Sophomore	628	41.62
Junior	334	22.13
Senior	142	9.41
	Year (n = 1509)	
18-19	493	32.67
20-21	487	32.27
22-23	330	21.87
24 and above	199	13.19

According to Table 3, slightly more participants were female (50.1%, n=756). In terms of year of study, sophomores constituted the largest group (41.62%), followed by freshmen (26.84%). Juniors and seniors represented smaller proportions. The most common age ranges among participants were 18-19 (32.67%) and 20-21 (32.27%), followed by 22-23 (21.87%).

Table 4 T-test Analysis Results

	T-test Analysis Results			
	Gender (Mean ± Standard Deviation)		t	p
	Female (n=753)	Male (n=756)		
Time management	4.39±0.66	4.56±0.45	-5.798	0.000**
Goal setting and execution	4.12±0.90	4.31±0.74	-4.312	0.000**
Emotional regulation	4.19±0.83	4.35±0.64	-4.083	0.000**
Learning strategy	4.19±0.88	4.36±0.73	-4.195	0.000**
Healthy habits	4.14±0.93	4.39±0.69	-6.013	0.000**
Self-motivation	4.31±0.86	4.52±0.62	-5.506	0.000**
Social skill	4.35±0.82	4.53±0.67	-4.586	0.000**

*p<0.05 **p<0.01

According to Table 4, males scored significantly higher than females across all seven categories (p<0.01 for all). The largest gender differences were observed in healthy habits (male: 4.39±0.69, female: 4.14±0.93, t=-6.013) and time management (male: 4.56±0.45, female: 4.39±0.66, t=-5.798). The smallest, though still significant, difference was in emotional regulation (male: 4.35±0.64, female: 4.19±0.83, t=-4.083). All categories showed statistically significant gender differences favoring males, with t-values ranging from -4.083 to -6.013.

Table 5 Analysis of Variance Results of Grade

	Analysis of Variance Results					
	Grade (Mean ± Standard Deviation)				F	p
	Freshman (n=493)	Sophomore (n=487)	Junior (n=330)	Senior(n=199)		
Time management	4.47±0.60	4.47±0.57	4.46±0.57	4.50±0.51	0.208	0.891
Goal setting and execution	4.24±0.81	4.21±0.81	4.17±0.89	4.22±0.83	0.482	0.695
Emotional regulation	4.25±0.77	4.27±0.73	4.27±0.77	4.34±0.68	0.67	0.571
Learning strategy	4.28±0.82	4.26±0.81	4.25±0.79	4.31±0.85	0.248	0.863
Healthy habits	4.26±0.82	4.23±0.84	4.31±0.82	4.29±0.83	0.801	0.493
Self-motivation	4.41±0.77	4.40±0.75	4.42±0.76	4.42±0.73	0.04	0.989
Social skill	4.48±0.71	4.39±0.76	4.41±0.82	4.49±0.71	1.447	0.227

*p<0.05 **p<0.01

According to Table 5, there were no statistically significant differences across grade levels for any of the seven categories (p>0.05 for all). Time management scores were nearly identical across grades (F=0.208, p=0.891), with means ranging from 4.46 to 4.50. Goal setting and execution showed slight variations (F=0.482, p=0.695), with means between 4.17 and 4.24. Emotional regulation had the highest, though still non-significant, F-value (0.670, p=0.571), with seniors scoring slightly higher (4.34±0.68). Learning strategy, healthy habits, and self-motivation all showed minimal differences across grades (F-values ranging from 0.040 to 0.801, all p>0.05). Social skill had the largest, but still non-significant, variation (F=1.447, p=0.227), with means ranging from 4.39 to 4.49.

Student Self-management Skills

To find the current and desired level of self-management skills of university students in Guiyang City. A total of 1509 student responses were analyzed to assess the desired and current levels of self-management skills. Tables 6 and 7 explain the desired and current levels of self-management skills of university students in Guiyang City by means (M) and standard deviation (SD) descriptive statistics for the seven self-management skills, respectively.

Table 6 Summary of Desired of Student Self-management Skills

Student Self-management Skills	Mean	SD	Interpretation
Time Management	4.48	0.57	High
Goal Setting and Execution	4.22	0.83	High
Emotional Regulation	4.27	0.75	High
Learning Strategies	4.27	0.81	High
Healthy Habits	4.26	0.83	High
Self-Motivation	4.41	0.76	High
Social Skills	4.44	0.75	High
Overall	4.34	0.76	High

Table 6 shows a summary of the desired levels of Student Self-management Skills. The overall mean score for desired skills is high (M=4.34, SD=0.76). Time Management has the highest desired score (M=4.48, SD=0.57), while Goal Setting and Execution has the lowest, though still high, desired score (M=4.22, SD=0.83). All skills are interpreted as High in terms of desired level.

Table 7 Summary of Current of Student Self-management Skills

Student Self-management Skills	Mean	SD	Interpretation
Time Management	3.02	1.05	Moderate
Goal Setting and Execution	3.25	0.98	Moderate
Emotional Regulation	2.85	0.98	Moderate
Learning Strategies	3.28	0.95	Moderate
Healthy Habits	2.90	0.99	Moderate
Self-Motivation	2.76	0.88	Moderate
Social Skills	2.89	0.98	Moderate
Overall	2.99	0.97	Moderate

Table 7 shows a summary of the current levels of Student Self-management Skills. The overall mean score for current skills is moderate (M=2.99, SD=0.97). Learning Strategies has the highest current score (M=3.28, SD=0.95), while Self-Motivation has the lowest current score (M=2.76, SD=0.88). All skills are interpreted as "Moderate" in terms of current level.

To analyze the current and desired level of self-management skills of university students in Guiyang city. The second objective of this study is to identify the student self-management skills that need to be developed as a priority. The researcher analyzed the research results of objective two through the PNI modified Formula in the following tables.

Table 8 The Priority Needs Index Regarding Self-management Skills for Students of Guiyang, China

(n = 1509)

Self-management Skills	PNI modified	Rank	Strength (<mean)	Weakness (>mean)
Self-Motivation	0.60	1		1
Social Skills	0.54	2		2
Time Management	0.50	3		3
Emotional Regulation	0.48	4		4
Healthy Habits	0.47	5		5
Goal Setting and Execution	0.30	6	2	
Learning Strategies	0.30	7	1	

Mean of PNImodified = 0.46

Table 8 shows the Mean of the PNImodified value at 0.46 of Students' Self-management Skills. According to the ranking, Self-Motivation has the highest PNImodified value of 0.60, followed

by Social Skills with a PNImodified value of 0.54, Time Management with 0.50, Emotional Regulation with 0.48, and Healthy Habits with 0.47. These five students' self-management skills have an average higher than the mean PNImodified value (0.46), which indicates that there is a big difference between the desired level and the current level of these students' self-management skills and the improvement and development of these skills should be prioritized. Thus, these five students' self-management skills are identified as weaknesses.

Also, Goal Setting and Execution and Learning Strategies both have a PNImodified value of 0.30. These two students' self-management skills are lower than the mean of the PNImodified value (0.46), indicating that these two students' self-management skills are relative strengths.

Hence, according to Table 8, five students' self-management skills need to be developed in priority: Self-Motivation, Social Skills, Time Management, Emotional Regulation, and Healthy Habits.

To develop a model to enhance self-management skills of university students in public universities in Guiyang City, China. According to the model development process, the researcher arranged and combined the model components,keyword sub-information, and proposed a draft model through model data collection, analysis, and model development, as shown in Figure 1.
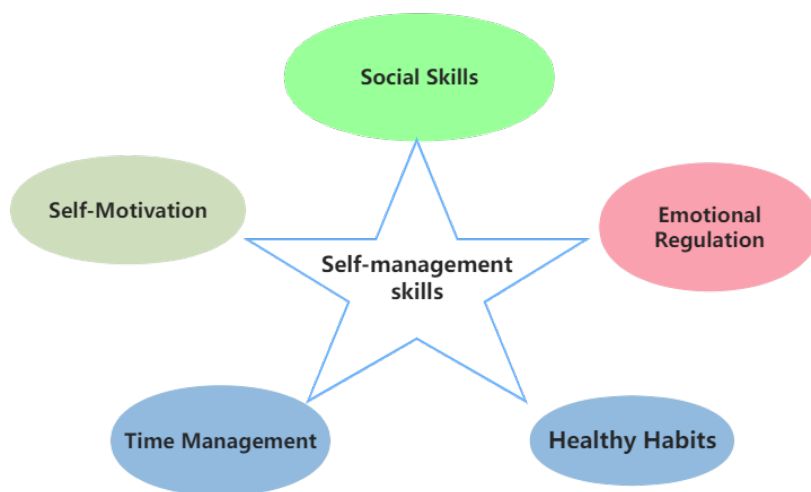

Figure 1 A Proposed Model to Enhance Self-management Skills of University Students in Public Universities in Guiyang City, China.

The model shows the seven dimensions comprising students' self-management skills in higher education institutions in Guiyang, China. They include Self-Motivation, Social Skills, Time Management, Emotional Regulation, Healthy Habits, Goal Setting and Execution, and Learning Strategies. According to the findings, these two students' self-management skills are strengths: Goal Setting and Execution, and Learning Strategies. Five students' self-management skills need to be

developed in priority: Self-Motivation, Social Skills, Time Management, Emotional Regulation, and Healthy Habits.

To assess the effectiveness of the model for developing self-management skills for university students in public universities in Guiyang city, China. A panel of experts evaluated a model for enhancing self-management skills in students at Guiyang's higher education institutions, they deemed the model comprehensive and methodologically sound but suggested three improvements: 1) Include both strengths and areas for development in the visuals. 2) Prioritize skills needing development. 3) Use color coding to distinguish between strengths and areas for development.

In response, the researcher revised the model to clearly display strengths (Goal Setting and Execution, Learning Strategies) in green and urgent development areas (Self-Motivation, Social Skills, Time Management, Emotional Regulation, Healthy Habits) in orange, organized by importance. The updated model is shown in Figure 2 as a two-part diagram.
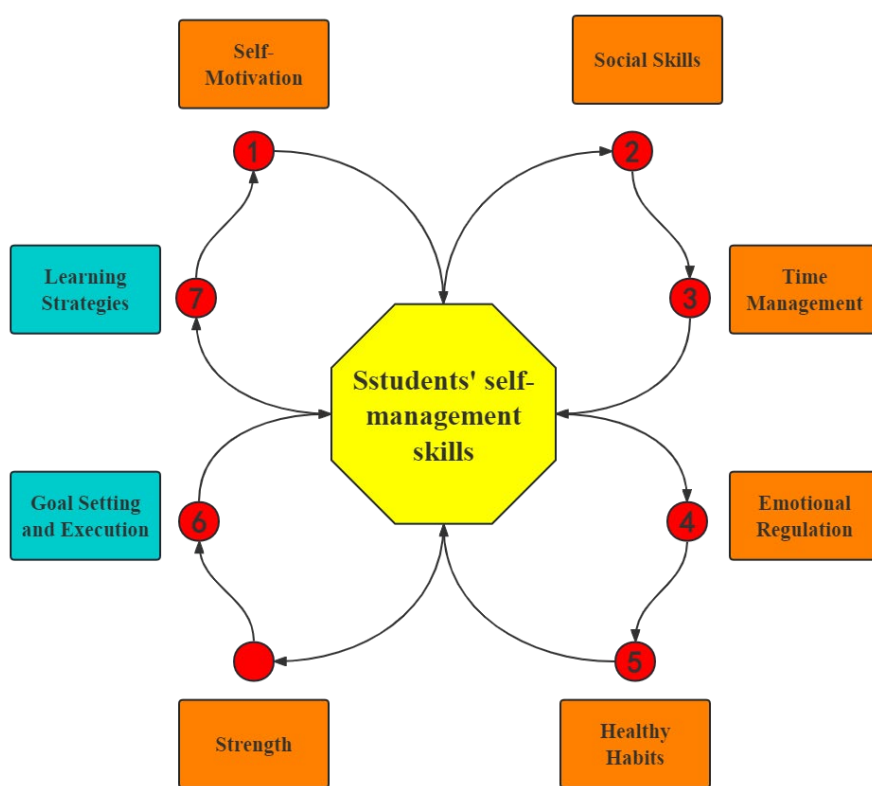

Figure 2 A Model to Enhance Self-management Skills of University Students in Public Universities in Guiyang City, China.

Explanation of the Model; The model illustrates the self-management skills of students in Guiyang's higher education institutions, divided into strengths and areas needing priority development.

Strengths (Left side, green):

Areas Needing Priority Development (Right side, orange)

The model highlights that while students excel in goal-setting and learning strategies, there is a need for focused development in the other five areas, with self-motivation being the top priority for improvement.

Conclusions and suggestions

Conclusion

This study emphasizes the critical importance of self-management skills for university students in Guiyang City, Guizhou Province, China. It identified seven essential skills: Goal Setting and Execution, Learning Strategies, Self-Motivation, Social Skills, Time Management, Emotional Regulation, and Healthy Habits. While Goal Setting and Execution and Learning Strategies were found to be strengths, significant gaps exist in Self-Motivation, Social Skills, Time Management, Emotional Regulation, and Healthy Habits, which need priority development.

The findings suggest that universities should focus on enhancing these skills to improve students' academic performance and personal growth. The developed model provides a clear framework for understanding strengths and areas for improvement and has been assessed as a valuable tool for guiding skill development initiatives in public universities.

These insights have important implications for curriculum design, student support services, and extracurricular activities, advocating for the integration of self-management skill development into university programs. Overall, the study highlights the importance of self-management skills in promoting student success and offers a foundation for targeted interventions in Guiyang City.

Suggestions

Based on the research findings, the following recommendations are proposed to enhance self-management skills among college students in public universities in Guiyang, Guizhou Province, China:

Recommendations

1. Recommendations for Research Utilization

1.1 For Students: Actively participate in self-management training and practical activities, such as courses, seminars, and workshops. Apply learned knowledge in daily life by setting achievable goals, managing time effectively, communicating actively, and regulating emotions. Focus on self-reflection to identify problems and make improvements.

1.2 For Teachers: Increase awareness of self-management education and integrate it into teaching. Design related activities to guide students in practice, strengthen communication to

understand their difficulties, and provide targeted support. Teachers should also improve their own self-management skills to model good practices for students.

   1.3 For School Administrators: Incorporate self-management skill development into talent development strategies and create systematic training programs. Offer related courses, diverse educational activities, and foster a positive self-management culture. Enhance teacher training in self-management education and establish practice platforms for students. Focus on evaluating the development of these skills and continuously optimize the education model.

  2. Recommendation for Future Research

  For Future Researchers: Expand research perspectives to explore self-management skills across different cultural backgrounds and analyze influencing factors. Investigate the relationship between self-management skills and academic performance, employability, and innovation, highlighting their role in student growth.

  These recommendations aim to enhance self-management skills, support holistic student development, and cultivate high-quality talent for local socio-economic advancement.

References

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W. H. Freeman.

Chen, X. (2020). A review of research on autonomous English learning. *Advances in Social Sciences,* 9(2), 188–194.

Chen, X., and Wong, Y. L. (2018). Cultural adaptation and resilience: A new perspective on the challenges faced by Chinese students in higher education. *Journal of International Students,* 8(1), 347–366.

Dasmadi, D. (2023). Leadership models in modern organizations. *Enrichment: Journal of Management,* 12(6), 4646–4650. https://doi.org/10.35940/ijeat.f4355.0612623

Handayani, M. S., Wangid, M. N., and Julius, A. (2021). The impact of self-management techniques to improve university students' social cognition. *Islamic Guidance and Counseling Journal,* 4(1), 116–123.

Huang, J. C. (2023). Implementation effect of integrating cooperative inquiry into blended learning: Analysis of students' goal setting, task value, and well-being. *Interactive Learning Environments,* 1–16. https://doi.org/10.1080/10494820.2023.2168531

Kosaseang, S. (2023). Need assessment and development guidelines for effectiveness. *Management,* 32(7), 566–576.

Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement,* 30(3), 607–610.

Liu, L. Y., and Wang, H. L. (2016). Research on the relationship between college students' interpersonal relationship, self-regulated learning, and mobile phone dependence. *Advances in Psychology, 6*(7), 836–845.

Meier, A. (2022). Studying problems, not problematic usage: Do mobile checking habits increase procrastination and decrease well-being? *Mobile Media & Communication, 10*(2), 272–293. https://doi.org/10.1177/20501579211029326

Niu, S. J., Niemi, H., and Furman, B. (2022). Supporting K-12 students to learn social-emotional and self-management skills for their sustainable growth with the solution-focused kids' skills method. *Sustainability, 14*(13), 7947. https://doi.org/10.3390/su14137947

Sajeevanie, T. L., and Tharuka, W. M. V. (2022). Impact of strategic self-management practices on academic success with the moderating effects of self-leadership and time management practices: A study based on management undergraduates of the selected state universities in Sri Lanka. *Wayamba Journal of Management, 13*(2). https://doi.org/10.4038/wjm.v13i2.7543

Shen, P. (2022). A brief analysis on the self-management ability of students in higher vocational colleges. *The Proceeding of the 6th STIU International Conference*, 258–268.

Wang, W. C. (2019). Exploring the relationship among free-time management, leisure boredom, and internet addiction in undergraduates in Taiwan. *Psychological Reports, 122*(5), 1651–1665.

Yu, C. (2021). The relationship between undergraduate students' creative self-efficacy, creative ability, and career self-management. *International Journal of Academic Research in Progressive Education and Development, 2*(2), 181–193.

Zhu, M., Bonk, C. J., & Doo, M. Y. (2020). Self-directed learning in MOOCs: Exploring the relationships among motivation, self-monitoring, and self-management. *Educational Technology Research and Development, 68*, 2073–2093. https://doi.org/10.1007/s11423-020-09747-8

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41*(2), 64–70.

Zimmerman, B. J., and Schunk, D. H. (Eds.). (2001). Self-regulated learning and academic achievement: Theoretical perspectives. Lawrence Erlbaum Associates Publishers.

Zwetsloot, R. (2020). *China's approach to tech talent competition: Policies, results, and the developing global response.* Global China.