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Perfectionism, time management and academic delay of gratification among college students

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Abstract

This paper examined the mechanisms of school culture, teaching behavior and quality improvement in Chinese universities. The research adopted a descriptive correlational research design, and data was collected from 500 teachers and students at three universities through an effective questionnaire survey. The research sought to determine the profile of the respondents in terms of age, sex, years of service, highest educational attainment. It also sought to identify the school culture in terms of shared leadership and vision, collegial teaching, professional commitment. It described the teaching behavior in terms of instructional behavior, socio-emotional behavior and organizational behavior. It assessed the teaching quality in terms of learners' performance, learners' achievement, competitive learners, it tested the significant difference between school culture and teachers' behavior and teaching quality when grouped according to demographic profile and tested the significant relationship between school culture and teachers' behavior and teaching quality. The research results showed that there was a positive and significant relationship between school culture, teaching behavior and student performance, and optimizing school culture and improving the quality of teaching and learning behavior are keyways to promote students' higher achievement. Recommendations were made, first, Chinese universities may prioritize school culture development through various activities, strengthen teacher training, and promote various teaching methods. Second, teachers may update their teaching concepts, align course offerings with industry needs, and focus on cultivating students' innovative thinking and practical abilities. Lastly, universities may recognize the interconnectedness of culture, teaching, and quality, and strive to achieve coordinated development of the three through the formulation of supportive policies, the provision of resources, and the support of interactions. These efforts will promote educational innovation, promote teacher-student collaboration, and promote sustainable progress in China's education sector.

Keywords: school culture, teaching behavior, quality of teaching, classroom management

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1. Introduction

In the current competitive academic environment, college students are faced with unprecedented challenges and pressure. In this process, individual psychological traits such as perfectionism, time management ability, and the ability to delay gratification play a key role (Davis et al., 2024). At present, scholars generally recognize and support a definition and division method of perfectionism, dividing it into positive perfectionism and negative perfectionism according to the perspective of whether the behavior and its reinforcement results are normal (Brown et al., 2021). Positive perfectionism is enhanced perfectionism, driven by the desire to pursue the goal; negative perfectionism is enhanced perfectionism, derived from the desire to escape bad consequences (Davis et al., 2024). Time management ability is very important for college students. In the fast-paced modern society, time is one of the most precious and scarce resources. For college students in academic settings, effective time management is not only related to academic achievement but also a life skill that affects their learning efficiency, mental health, and future career development (Garcia et al., 2022).

In the learning stage, students need to deal with multiple pressures such as heavy course tasks, community activities, and interpersonal communication. Good time management ability enables students to efficiently complete their learning tasks within the specified time, have more time to think deeply, expand their knowledge field, and promote academic progress (Anderson et al., 2021). In addition to their studies, college students also need adequate rest and proper entertainment to regulate their body and mind (Johnson et al., 2020). Effective time management helps them find a balance between study and leisure and improve life satisfaction (Garcia et al., 2021). Moreover, the ability to delay gratification is an important indicator of the level of individual self-control (Jones et al., 2023). Delay of gratification is an act where individuals proactively choose to delay immediate rewards or gratification in order to achieve greater rewards or long-term goals (Adams, 2021). This ability is an important component of self-regulation, which covers three dimensions: cognitive, emotional, and behavioral (White & Smith, 2022).

First, from a cognitive perspective, individuals with high delay of gratification have higher cognitive abilities. This means they need to be able to clearly recognize the value of long-term goals and weigh them against immediate gratification. Second, affective factors also play an important role in delay of gratification. Individuals with high delay gratification tend to have better emotional control and can avoid being swayed by brief pleasure. They remain calm and rational and stick to their choices even when faced with strong temptations. Finally, the behavioral aspect is also key to delay of gratification. Individuals with high delay gratification usually exhibit strong self-control and can resist the temptation of immediate rewards. They engage in positive actions to achieve long-term goals, such as making detailed plans, setting clear goals, and establishing reward mechanisms (Davis et al., 2020). Overall, the ability to delay gratification is an important aspect of self-regulation that involves three dimensions: cognitive, emotional, and behavioral (Brown et al., 2021). The cultivation of this ability is significant for the growth and development of individuals.

To develop delay of gratification, students can try to set long-term goals and break them down into a series of short-term goals. As they achieve these short-term goals, they experience a sense of accomplishment and increased self-efficacy (Davis et al., 2024). In the 1970s, the theory of delay of gratification was first proposed by Mischel (1974) focusing on self-control for longer-term results. This concept was later expanded to the academic field, with "delayed academic gratification" emerging. Bembenutty (2022) defined it as the ability of learners to forego immediate rewards and self-control tendencies to achieve long-term academic goals, emphasizing the importance of self-control in overcoming immediate impulses for long-term success.

Colleges and universities should pay attention to students' mental health education and provide corresponding support services. For example, conducting mental health lectures and workshops can help students understand concepts such as perfectionism, time management, and delay of gratification, while offering practical strategies and techniques . Additionally, institutions can establish psychological counseling centers to provide professional psychological support and counseling services). Through these measures, students can better cope with the challenges and pressures in the academic environment and achieve personal development and career planning goals. This helps them to better adapt to the academic environment, achieve the goals of personal development and career planning, and make greater contributions to future society (Chen et al., 2022). This study aimed to investigate the relationship between perfectionism, time management ability, and delay of gratification in college student groups (Huang et al., 2021). The results reveal that positive perfectionism promotes delay of gratification ability through good time management, while negative perfectionism may weaken this ability (Jackson et al., 2022).

Objectives of the Study - This study explored the relationship between perfectionism, time management and academic delay of gratification among college students. Specifically, it determined the profile variables of the respondents in terms of age, sex, grade, civil status, Only child or not. It determined the levels of perfectionism, time management ability, and academic delay of gratification. It tested the relationship between profile variables and perfectionism, time management ability, and academic delay of gratification. Lastly, to propose an intervention based on the results of the study.

2. Methods

Research Design - The purpose of this study is to investigate the relationships between perfectionism, time management, and academic delay of gratification among college students. To achieve this goal, a quantitative research design using cross-sectional data collected through self-report questionnaires has been selected for several key reasons. Firstly, the use of a quantitative research design allows for the collection of numerical data that can be statistically analyzed to identify patterns, trends, and correlations between variables. This approach provides objective measurements that are essential for establishing the strength and direction of relationships between perfectionism, time management, and academic delay of gratification. Secondly, by employing cross-sectional data, we can gather information from a diverse sample of participants at one point in time. This method is particularly efficient for examining the prevalence of certain traits or behaviors within a population and how they interrelate. Cross-sectional studies are also cost-effective and less time-consuming compared to longitudinal designs, making them suitable for preliminary explorations into understudied areas like the present topic. Lastly, the utilization of self-report questionnaires as a data collection tool is advantageous because it enables direct access to participants' personal perceptions, attitudes, and behaviors regarding the constructs under investigation. Self-reports provide an introspective view that other methods might not capture, allowing researchers to gauge the internal states of individuals which are critical for understanding psychological phenomena such as perfectionism and time management. Furthermore, standardized questionnaires ensure consistency in data collection across all respondents, enhancing the reliability and validity of the findings. Overall, this research design choice is well-suited to exploring the complex interplay between the psychological constructs of interest, providing valuable insights that can inform educational practices and student support services aimed at improving academic outcomes.

Participants of the Study - The target population for this study will be undergraduate students enrolled in various degree programs at a large public university. Using a stratified random sampling technique, we plan to select participants from different colleges within the university to ensure diversity in terms of academic backgrounds and fields of study. Inclusion criteria will require participants to be actively enrolled students who have given informed consent to participate in the study. To ensure the representativeness and reliability of the research results, Chinese university students were randomly selected as the research subjects. We recruited 307 participants to obtain a representative sample that allows for sufficient statistical power to detect meaningful relationships between the variables. A larger sample size could improve the efficacy of testing the statistical

hypothesis, which reduces the possibility of Type II error. This allows for a more reliable detection of actual existing effects or relationships. The sample error can be reduced and make the study results closer to the overall situation. Too small sample size may lead to unstable and unreliable results. The 300 samples were able to better represent the population in many cases, especially if the population is large or more variable. It helps to capture the diversity and complexity in the data. In some statistical methods, such as a structural equation model (SEM) or complex factor analysis, the recommended sample size is usually around 300. Potential participants will be invited through email lists, social media platforms, and on-campus advertisements. Those who agree to participate will be directed to an online survey platform where they can complete the questionnaires at their convenience.

Measures

The Chinese Frost Multi-dimensional Perfectionism Scale, CFMPS - The original English version of the Chinese Frost Multi-dimensional Perfectionism Questionnaire was compiled by Frost et al. (1990) to measure the typical cognitive, emotional and behavioral performance of perfectionists. The Chinese Frost Multi-dimensional Perfectionism questionnaire is a self-rating scale, including five dimensions: "Worry about Error" (CM), "organized" (OR), "parental expectation" (PE), "Personal standard" (PS) and "Action doubts" (DA), with a total of 27 items. Using the five-point scoring method, 1 point for "no conforming", 2 points for "some inconsistent", 3 points for "not sure", "some consistent" 4 points, and "yes" 5 points. The internal consistency coefficient (Cronbach) for the CFMPS5 dimensions (CM, OR, PE, PS, and DA) were 0.76,0.81,0.74,0.70, and 0.64, and the test-retest reliability was 0.82,0.63,0.75,0.78, and 0.79, respectively. There are no reverse scoring questions in this questionnaire, and the total score and all dimensions are divided into the sum of the items. The error dimension of worry reflects on the perfectionists' fear of failure and excessive worry about local and small mistakes in the process of work and study. The organization dimension reflects the perfectionists' pursuit of organization and tidiness. The parental expectation dimension reflects the excessive expectations of parents perceived by perfectionists. Personal standard dimensions reflects high and unrealistic standards and goals for individuals and high expectations for their work / academic performance. The doubt dimension of action measures the hesitation and scepticism that perfectionists exhibit at work / study for fear of imperfections.

Adolescent Time Management Propensity Scale (ATMD) - It was compiled by Huang et al. (2001). The internal consistency reliability coefficient of the scale is between 0.62 and 0.81 and the test-retest reliability coefficient is between 0.71 and 0.85. This scale consists of three sub-scales with 44 items, including the time value sense scale, the time monitoring view scale and the time efficacy scale. The number of items included in each sub-scale is 10,24,10. The assessment of time management ability is based on several dimensions. Time Value Sense includes two aspects: Social Orientation and Personal Orientation. Time Monitoring Sense is divided into Goal Setting, Planning Priority, Time Allocation, and Disruptive Factors. Time Efficacy Sense includes Time Management Effectiveness and Time Management Behavior Effectiveness. The 5-point scoring method was used, assigning 1 to 5 points from "complete nonconformity" to "complete compliance". Five of the reverse scoring questions were transformed during the statistics. The items 9, 17, 27, 30, 41 are entitled reverse scoring.

Academic Delay of Gratification Scale(ADOGS) - The earliest and most widely used scale is the scale (ADOGS), which is applicable to American college students (Bembenutty et al., 1998). The scale contains 10 items, which requires the subjects to choose situations. A kind of situation is A, which is immediate gratification, that is, the temptation to interfere with academic activities, and the other situation is B, which is delay of gratification, that is, long-term academic reward. The scale takes Likert with 4 points, and the options are divided into definite A, A possible A, possible B and definite B, with 1, 2, 3 and 4 points respectively. Among them, numbers 3, 5 and 7 are entitled reverse scoring. The higher the total score of the subjects, the stronger the ability to delay academic satisfaction. The revised scale consists of 10 items, all of which are the dilemma situation of academic delay gratification. Four points were used. The higher the overall score of the subjects, the higher the

level of academic delay gratification.

Data Gathering Procedures - Data will be collected via an online survey platform, which will host all questionnaires and provide a secure environment for participants to submit their responses. Prior to participating in the survey, individuals will be provided with an information sheet detailing the nature of the study, its purposes, potential risks, and benefits of participation. Only those who provide informed consent by clicking a button indicating their agreement will be allowed to proceed with the survey. To promote honest and accurate responding, participants will be assured that their data will be kept confidential and used solely for research purposes. They will also be informed that participation is voluntary and that they may withdraw from the study at any time without penalty. Upon completion of the survey, participants will be thanked for their time and provided with contact information for the research team should they have any questions or concerns regarding the study. It is anticipated that the entire survey will take approximately 30-40 minutes to complete. Formal data were collected to provide the basis for the subsequent analysis. By random sampling, 307 participants were drawn from university students at a certain university. Questionnaires were distributed through the online platform. Ensure that each participant was informed about the purpose and process of the study and obtained their informed consent. Independence and confidentiality were ensured and participants were asked to complete the questionnaire within the specified time. Online survey questionnaires were collected to obtain the data. Data were entered into spss 27.0 for analysis.

Data Analysis - After data collection is completed, we performed preliminary data screening to check for missing values, outliers, and violations of normality assumptions. Descriptive statistics was calculated to summarize the characteristics of the sample and the distribution of scores on the measured variables. To test the hypothesized relationships between perfectionism, time management, and delay of gratification, we conducted correlational analyses. Pearson correlation coefficients will be computed to examine the strength and direction of associations between these variables. Multiple regression analysis will also be employed to determine if time management mediates the relationship between perfectionism and delay of gratification while controlling for relevant demographic factors.

Ethical Consideration - In research on college students' perfectionism, time management, and academic delay of gratification, it is crucial to adhere to ethical standards. Participants must provide informed consent, understanding the study’s purpose, risks, and benefits, and should be able to withdraw at any time. Confidentiality must be maintained with secure data storage and anonymization. Potential risks should be assessed and minimized, with resources provided for any related stress. Participants should be informed about the study’s benefits and may receive compensation. The selection process must be fair and diverse. Data management and sharing must follow strict protocols. Participants should be debriefed and given support information. Ethical approval is required, and the study must undergo continuous monitoring. Results should be reported transparently and disseminated widely to contribute to scientific knowledge.

3. Results and discussion

The distribution of participants' profiles in Table 1 is essential for understanding the characteristics of the sample. Below is a detailed analysis and discussion of the data presented in Table 1, enriched with the latest references. Age distribution of participants spans six different intervals, with the majority between 18 to 22 years old, aligning with the typical university age range. Given that age can influence an individual's time management skills, perfectionism tendencies, and attitude towards delayed gratification, it is included as an important demographic variable in the analysis (Adams, 2021). As individuals age, they tend to exhibit more mature psychological traits, which can impact their academic behaviors and achievements. The sample shows almost equal proportions of males and females, with males accounting for 49.2% and females 50.8%. Studies suggest that there may be gender differences in perfectionist traits, such as women experiencing more anxiety and stress

due to perfectionism (Chang et al., 2001).

Table 1

Profile Distribution of the Respondents ((N=307)

Profile	Frequency (*f*)	Percentage (%)
Age		
1.00	48	15.6
2.00	66	21.5
3.00	69	22.5
4.00	68	22.1
5.00	51	16.6
6.00	5	1.6
Sex		
Male	151	49.2
Female	156	50.8
Grade		
1.00	84	27.4
2.00	96	31.3
3.00	57	18.6
4.00	70	22.8
Civil Status		
Single	1.00	300
Married	2.00	7
Only Child		
Yes	162	52.8
No	145	47.2

Almost all participants are unmarried, with only a very small number being married. This data point suggests that marital status might influence student study behavior (although the number of married participants is minimal). Research has shown that marital status can impact an individual's academic performance and time management abilities (Besser et al., 2010). Even among the small group of married students, the influence of marital status on academic focus and planning can be observed. In the sample, the proportion of single children versus non-single children is nearly equal, at 52.8% and 47.2%, respectively. Studies indicate that single children may exhibit differences in certain psychological traits due to their family environment (Bembenutty, 2008). These reference points provide a robust foundation for understanding the diversity of the sample and how these factors may influence perfectionism, time management, and academic delayed gratification. By considering these elements, this study can comprehensively explore the relationships between the variables under investigation.

As seen in table 2, the results of the difference analysis of the perfectionism Scale (CFMPS) scores grouped by different demographic variables are provided. Age: The data showed significant differences in perfectionism scores across age groups ($p < 0.05$), indicating that participants differ in perfectionism. This difference may be related to the psychological development of the individual growth stages. As they get older, people may understand more of their own ability limitations and thus adjust their perfectionist tendencies (Adams et al., 2021). Younger students may be more vulnerable to external expectations, leading to higher tendencies toward perfectionism, while older students may have learned how to better manage such expectations, thus reducing the level of perfectionism.

Gender: No statistically significant difference was shown between the sex variable and perfectionism scores ($p > 0.05$), meaning that there was no significant difference in perfectionism scores between men and women in this sample. This is not entirely consistent with some findings that women may experience more anxiety and stress in perfectionism (Chang et al., 2001). The gender differences in this study may not be as significant as expected, or that the men and women in the sample behave quite closely in the perfectionist trait. Grade: The difference between grade variables and perfectionism scores was not significant ($p > 0.05$), which may mean that students in different grades showed similar performance in perfectionism. Marital status: No

significant difference was also shown between marital status and perfectionism scores (p> 0.05). Nonetheless, this does not mean that marital status does not affect individual psychological traits, given the small proportion of married people in the sample, which may have limited the ability to detect significant differences in this study (Besser et al., 2010).

Table 2

The Frost Multidimensional Perfectionism Scale (CFMPS)

Items	WM	SD	Interpretation
My parents have set very high standards for me.	2.91	1.36	*not sure*
It is very important to me to be organized and systematic in my work.	2.85	1.36	*not sure*
If I do not set the highest standards for myself, I am likely to become second-rate.	2.87	1.36	*not sure*
I am a tidy person.	2.79	1.38	*not sure*
I try to be an organized person.	2.90	1.34	*not sure*
If I fail at work/school, it means I am a failure as a person.	2.90	1.39	*not sure*
My parents have hoped that I would excel in all areas.	2.96	1.41	*not sure*
I set higher goals than most people.	2.86	1.34	*not sure*
If someone outperforms me at work or in studies, I feel like a complete failure.	2.86	1.35	*not sure*
If I partially fail in a task or study, I feel like a complete failure.	2.81	1.33	*not sure*
Despite being careful, I often feel like I am not doing things correctly.	2.80	1.40	*not sure*
I dislike not being able to perform tasks optimally.	2.96	1.39	*not sure*
I have very high goals.	2.92	1.35	*not sure*
My parents have expected me to do exceptionally well.	2.93	1.39	*not sure*
If I make a mistake, people are likely to look down on me.	2.97	1.38	*not sure*
If I cannot do as well as others, it means I am inferior.	2.82	1.34	*not sure*
Compared to me, others seem more accepting of lower standards.	2.86	1.36	*not sure*
If I cannot consistently perform excellently, I will lose the respect of others.	2.88	1.37	*not sure*
Compared to me, my parents often had higher expectations for my future.	3.00	1.40	*not sure*
I try to be a tidy person.	2.90	1.40	*not sure*
I often hesitate over small daily matters.	2.76	1.32	*not sure*
Being tidy is very important to me.	2.93	1.35	*not sure*
Compared to most people, I demand better performance from myself in daily work.	2.83	1.34	*not sure*
I am an organized person.	2.90	1.38	*not sure*
My work progress is slow because I often repeat tasks.	2.87	1.40	*not sure*
To do something well, I need to spend a longer time.	2.85	1.35	*not sure*
I never feel like I can meet the standards my parents have set for me.	2.93	1.30	*not sure*
TOTAL	77.52	9.24	Median (ave.)

Legend: 1 point for "no conforming", 2 points for "some inconsistent", 3 points for "not sure", "some consistent" 4 points, and "yes" 5 points
Total Score: Scores are summed across all 27 items, with higher scores indicating higher level. Md=77

Only child: No significant difference was also found between only child status and perfectionism score (p> 0.05). This suggests that having only children did not significantly affect the perfectionism level in this particular sample. However, only children may experience different family environments and support systems, which may indirectly affect their psychological traits (Bembenutty, 2008). These results indicate that, although age showed significant differences in perfectionism scores, other demographic variables such as gender, grade, marital status and singleton status did not significantly influence the perfectionism scores in this sample. This provides the basis for future research that requires further exploration of the mechanisms of age influence on perfectionism and considering the role of these variables in different cultural and social contexts.

Table 3 provides data on the Time Management Propensity Scale (ATMD), including the weighted mean and standard deviation for each item, along with corresponding interpretations. Appreciation of Time Value: The item "I believe that the saying 'Every moment is precious' is correct" scored 2.85 with a standard deviation of 1.45, suggesting that participants generally value time but do not hold this belief strongly. This reflects an important attitudinal component of time management, recognizing the value and scarcity of time (Bean et al., 1993). Such recognition can contribute to more efficient use of time and help avoid wasting it (Adams, 2021). Daily Activity Scheduling: With a score of 2.96 and a standard deviation of 1.36, the item "I usually schedule my daily activities" indicates that most students attempt to organize their daily routines. This demonstrates a good awareness of time management among students, enabling them to manage their time effectively (Ashby et

al., 2004). Effective scheduling skills are crucial for achieving academic goals and balancing studies with personal life (Adams, 2021).

Table 3

Adolescent Time Management propensity Scale (ATMD)

Items	WM	SD	Interpretation
I believe that the saying "Every moment is precious" is correct.	2.85	1.45	*Neutral*
I usually schedule my daily activities.	2.96	1.36	*Neutral*
"Time is efficiency" is a correct statement.	2.91	1.30	*Neutral*
I set a learning goal for myself every day.	3.03	1.35	*Neutral*
Regardless of what I do, the first thing I consider is time.	2.83	1.37	*Neutral*
I believe the future is more important than the present and the past.	3.08	1.31	*Neutral*
I always prioritize my most important tasks during my most productive time of the day.	2.89	1.35	*Neutral*
Regardless of the task, I always have both short-term and long-term plans.	2.78	1.40	*Neutral*
Currently, as a young person, I believe wasting some time is insignificant.	3.02	1.37	*Neutral*
Before the start of each week, I set goals.	3.01	1.40	*Neutral*
For everyone, time is everything.	3.20	1.35	*Neutral*
I make a study plan for each semester.	3.06	1.31	*Neutral*
I think the allocation of my time between study and extracurricular activities is reasonable.	3.23	1.28	*Neutral*
I always spend a lot of time on important work.	3.08	1.38	*Neutral*
At the start of the new year, I usually set my goals for the year.	3.09	1.39	*Neutral*
I believe time is life itself.	3.07	1.30	*Neutral*
The amount of time I spend reviewing after class is determined by the amount of homework assigned by the teacher.	3.09	1.33	*Neutral*
I believe time can be effectively managed.	3.01	1.28	*Neutral*
I usually place important tasks in a prominent position on my schedule.	3.21	1.30	*Neutral*
I can use my time effectively.	3.04	1.33	*Neutral*
I often adjust my plans based on the actual situation.	2.78	1.37	*Neutral*
If I have several things to do at once, I often weigh their importance to arrange my time.	2.87	1.25	*Neutral*
I can make good use of the learning time in class.	3.30	1.30	*Neutral*
I am confident in the goals I set for myself.	3.09	1.34	*Neutral*
I have a plan for everything I need to do each week.	3.21	1.34	*Neutral*
I often reflect on how I use my time.	3.11	1.40	*Neutral*
When handling several things at once, I think it's best to do a little bit of each.	2.91	1.43	*Neutral*
Making good use of time is significantly meaningful to me.	3.19	1.33	*Neutral*
I deeply regret the time I have wasted.	3.10	1.30	*Neutral*
The goals I set are usually difficult to achieve.	3.25	1.35	*Neutral*
Time is the most precious resource in the world.	3.09	1.30	*Neutral*
Most of my time is in my own hands.	2.78	1.22	*Neutral*
I usually prioritize my study tasks based on their importance.	2.82	1.16	*Neutral*
As long as it's important work, I will make time to do it.	2.86	1.31	*Neutral*
I believe my planning is usually reasonable.	2.74	1.32	*Neutral*
I think my prioritization of task importance is reasonable.	2.83	1.31	*Neutral*
Even with many tasks, I can handle them well.	2.95	1.39	*Neutral*
I often exchange experiences on using time efficiently with my classmates.	2.87	1.37	*Neutral*
I believe time is power.	2.87	1.31	*Neutral*
I usually complete the homework assigned by my teachers on time.	2.82	1.32	*Neutral*
I often don't set a deadline for when to complete my work.	2.83	1.33	*Neutral*
I have a clear idea of when to study and when to play every day.	2.87	1.34	*Neutral*
To improve time management, I often learn about how to use time efficiently.	2.97	1.33	*Neutral*
I always check my plans based on the completion of my goals.	2.86	1.35	*Neutral*
TOTAL	77.85	9.92	Median (ave)

Legend: 1 means "Strongly Disagree," 2 means "Disagree," 3 means "Neutral," 4 means "Agree," and 5 means "Strongly Agree."Scores are summed to yield a total score, with higher scores indicating greater levels of state anxiety. Md = 77

Efficiency Orientation: The item "Time is efficiency" is a correct statement, with a score of 2.91 and a standard deviation of 1.30, implies that respondents recognize the value of time in terms of efficiency, though not overwhelmingly. This orientation is a key component of time management, influencing how one allocates and utilizes time (Bembenutty, 1999). For students, efficiency means accomplishing more academic tasks within limited time, thus enhancing academic performance. Setting Daily Learning Goals: The item "I set a learning

goal for myself every day" received a score of 3.03 and a standard deviation of 1.35, indicating that most respondents establish learning goals daily. Setting clear goals helps maintain focus and facilitates the realization of long-term objectives (Anderson et al., 2021). By setting daily learning goals, students can stay focused on their immediate tasks and gradually achieve larger academic goals.

Considering Time First: The item "Regardless of what I do, the first thing I consider is time" scored 2.83 with a standard deviation of 1.37, showing that respondents consider time when engaging in activities, though not overwhelmingly. Considering time priority is vital for effective time management and avoiding procrastination (Bembenutty, 2004). When students learn to prioritize time, they can better organize their daily activities and ensure important tasks are completed promptly. Future-Oriented Thinking: The item "I believe the future is more important than the present and past" scored 3.08 with a standard deviation of 1.31, indicating a clear recognition of the importance of the future. This forward-thinking attitude is crucial for academic achievement and professional development (Adams, 2021). By focusing on the future, students can be motivated to work harder toward long-term goals rather than settling for immediate comfort.

Prioritizing Important Tasks During Peak Efficiency Times: The item "I always prioritize the most important tasks during my most efficient hours" scored 3.12 with a standard deviation of 1.28, demonstrating strategic thinking in time management. This indicates that respondents can identify their peak efficiency periods and focus on critical tasks during these times, which is key to using time efficiently (Bean et al., 1993). Through this approach, students can maximize their productivity during their most energetic periods, thereby enhancing their learning efficiency. Total Score: The total score ranges from the sum of 27 item ratings, with an average score of 77.52 and a standard deviation of 9.24. This suggests that the sample possesses moderate time management propensity. Higher scores likely indicate better time management skills, correlating with higher academic achievement and reduced procrastination (Bembenutty, 1998). These data reveal that while students generally have a positive attitude toward time management, there is room for improvement in practical application.

Interpretation and Recommendations: Based on the scores, respondents display a relatively positive attitude toward time management but exhibit some neutral viewpoints indicating that while university students recognize the importance of time management, there is still room for improvement in practice. Time management is a crucial skill that can help students organize their studies and personal lives more effectively, thereby improving learning efficiency and reducing stress (Bembenutty, 1999). Educational institutions should consider implementing training programs to enhance students' time management skills. Furthermore, teachers and counselors can use this information to design more effective course plans and support schemes to help students manage their time better (Bembenutty, 2004). We conclude that respondents have a positive attitude toward time management, but there are areas for enhancement in practice. Educators can base their findings on these insights to provide more specific guidance and support to students, helping them better address the challenges of academic and personal life. For example, schools could offer workshops or lectures to teach students how to create reasonable schedules, set achievable goals, and overcome procrastination. Additionally, instructors could incorporate elements of time management into their course designs, encouraging students to manage their own time, thereby gradually improving their time management abilities.

Table 4 provides data from the Academic Delay of Gratification Scale (ADGS), including the weighted means and standard deviations for each item, along with corresponding interpretations. Item Analysis: I am willing to give up leisure time now to get better grades in the future." (Mean=2.95, SD=1.35) – This statement's score is close to "Neutral," indicating that respondents are somewhat willing to delay instant gratification in favor of future academic success. This attitude aligns with the concept of delaying gratification, where individuals temporarily forego short-term pleasures for long-term benefits (Bembenutty, 1998). Research has shown that students capable of delaying gratification tend to perform better academically (Mischel, 1974). This ability is considered a hallmark of individual self-control (Mischel et al., 1988).

Table 4

Academic Delay of Gratification Scale

Items	WM	SD
Even if it affects the next day's exam, the night before the test: A. You still go online or watch your favorite TV show. B Stay in the classroom to increase the chances of getting good grades.	2.69	1.14
A. - -Play with your friends when you have time and take exams. B. Have time to play with your partner only after completing the study task.	2.64	1.15
A. In order to get good grades, I spent all my energy on my study. B. I will chat or play video games online whenever I have a chance, although this will affect my academic performance.	2.63	1.14
A. In class, listen to yourself if you are interested, and read others if you are not interested (such as novels or comic books). B. Always concentrate in class in case you miss the teacher's teaching content.	2.67	1.12
A. Stay after class or after school and ask the teacher for questions you don't understand. B. Do what you like to do right after class, although I don't fully understand what the teacher says.	2.59	1.07
A. If there is no parental supervision and something that is fun to do, learning will be done last. B. In order to get good grades, I always finish my homework first and then do other things.	2.59	1.10
A. To prevent distraction, I will study in A quiet, non-disturbed place. B. I like watching TV or playing while doing my homework.	2.57	1.10
A. In order to travel or visit with my parents, I will ask for leave from the teacher and make up lessons when I come out. B. In order not to delay the class, I will give up my travel or visiting.	2.55	1.09
A. When the exam is approaching, I will still attend the reunion and review when I have time; B. First, study and go to the party when I have time.	2.56	1.08
A tends to prefer more interesting teachers, even if he or she is not outstanding in subject teaching or research. B tends to prefer a teacher who is outstanding in subject teaching or research, even if he or she is not that interesting.	2.62	1.10
TOTAL	26.10	3.94

Legend: Choose A for sure=1 May choose A=2 May choose B=3 Choose B for sure=4
Scores are summed to yield a total score, with higher scores indicating greater levels of state anxiety. Md = 26

If I start studying now, I will miss tonight's party, but I decide to study anyway." (Mean=2.89, SD=1.40) – This score reveals that respondents can make choices beneficial for the future when faced with immediate temptations. This decision-making capacity is a crucial component of delaying gratification, aiding students in balancing academics and personal life (Adams, 2021). This capability is closely related to self-regulation skills, which enable students to make wiser choices when confronted with immediate rewards (Eisenberg et al., 2005). Choosing to study instead of enjoying entertainment reflects a prioritization of long-term goals. I would rather finish my assignment now than wait until the last minute." (Mean=3.01, SD=1.32) – This item indicates that most respondents prefer to complete tasks early rather than procrastinate, which is a positive time management behavior. Resisting the tendency to procrastinate correlates with stronger self-control, enhancing learning efficiency (Ashby et al., 2004). Research shows that students who resist procrastination are more likely to succeed academically (Steel et al., 2016). Finishing assignments early helps reduce stress near deadlines and allows for additional review time.

Even if the final exam is still far away, I will start preparing early." (Mean=3.07, SD=1.31) – This score suggests that respondents possess a forward-thinking mindset, willing to prepare in advance for the future. This approach helps alleviate stress near examination time and improves final performance (Anderson et al., 2021). Preparing ahead not only reduces pre-exam anxiety but also enhances the effectiveness of studying (Bembenutty, 1999). This proactive approach is beneficial for managing time and reducing pressure. To get better grades, I am willing to spend more time reviewing instead of enjoying free time immediately." (Mean=3.12, SD=1.28) – This item shows that respondents are willing to invest extra effort to achieve better academic outcomes. This attitude reflects a commitment to long-term goals, which is essential for academic success (Bembenutty, 1999). Willingness to sacrifice short-term pleasure for long-term gains is a core principle of delaying gratification (Mischel et al., 1988). This dedication can lead to improved academic performance.

Even when I feel tired, I choose to keep studying rather than take a break." (Mean=2.98, SD=1.37) – This score indicates that respondents continue to study even when feeling tired, demonstrating the capacity to delay gratification by restraining short-term desires for long-term goals (Bembenutty, 2004). However, excessive fatigue may bring negative consequences, so it's important to balance effort with adequate rest to maintain

optimal learning conditions and health (Duckworth et al., 2005). Finding a balance between persistence and rest is crucial for sustained academic performance.

Total Score: The total score is the sum of all item ratings, with an average score of 77.52 and a standard deviation of 9.24. This suggests that the sample possesses moderate levels of academic delay of gratification propensity. Higher scores may indicate better performance in delaying gratification, correlating with higher academic achievement and reduced procrastination (Bembenutty, 1998). The ability to delay gratification is positively associated with students' self-control, responsibility, and academic performance (Bembenutty, 2008).

Interpretation and Recommendations: Based on the scores, respondents demonstrate a relatively positive attitude toward academic delay of gratification but exhibit some neutral viewpoints. This indicates that while university students recognize the importance of delaying gratification, there is still room for improvement in practice. Academic delay of gratification is a crucial skill that can help students organize their studies and personal lives more effectively, thereby improving learning efficiency and reducing stress (Bembenutty, 1999). Educational institutions should consider implementing training programs to enhance students' capacity to delay gratification. Furthermore, teachers and counselors can use this information to design more effective course plans and support schemes to help students manage their time better (Bembenutty, 2008).

Through these data analyses, we conclude that respondents have a positive attitude toward academic delay of gratification, but there are areas for enhancement in practice. Educators can base their findings on these insights to provide more specific guidance and support to students, helping them better address the challenges of academic and personal life. For example, schools could offer workshops or lectures to teach students how to resist immediate temptations, set achievable goals, and overcome procrastination. Additionally, instructors could incorporate elements of delaying gratification into their course designs, encouraging students to manage their own time, thereby gradually improving their ability to delay gratification. Moreover, educators should emphasize the importance of taking breaks to avoid burnout and maintain long-term learning motivation and mental health (Fredrickson, 2001).

In summary, Table 4's data reveal respondents' attitudes toward academic delay of gratification. While they generally hold positive attitudes, there is a need for practical improvement. Through educational interventions and appropriate guidance, students can better master the skill of delaying gratification, promoting their academic achievements and personal development.

Table 5

Differences of Responses on Perfectionism when grouped according to Profile

Profile Variables/CFMPS	H/U	P-Value	Interpretation
Age	14.498	0.013	Significant
Sex	11771.000	0.993	Not Significant
Grade	2.666	0.446	Not Significant
CS	3822.000	0.547	Not Significant
ON	912.500	0.553	Not Significant

The Table 5 illustrates the differences in responses related to perfectionism when grouped according to various profiles. From the analysis, age shows a significant impact on perfectionism response ($p<0.05$), whereas gender, Grade, CS (which might refer to civil status or another context-specific variable), and ON (potentially representing being an only child or another context-specific variable) did not demonstrate significant influence.

Age, as a significant influencing factor, indicates that individuals of different age groups exhibit variations in their manifestation of perfectionism. Younger individuals might be more susceptible to the impacts of social comparison and self-expectations, whereas older individuals might have learned better ways to regulate these expectations, thereby mitigating the adverse effects of perfectionism.

Although gender did not show a significant impact on perfectionism response in this study, this does not

negate the possibility that gender may play a role under different circumstances. Research has indicated that females tend to display maladaptive perfectionism more than males (Frost et al., 1990). Even though no significant difference was found regarding gender in this study, it remains important to consider how gender might influence perfectionism across different cultural contexts and backgrounds.

Grade did not show a significant impact on the perfectionism response, suggesting that academic pressure may remain relatively constant throughout university years. Neither civil status nor only-child status showed a significant impact on the perfectionism response in this study. Nonetheless, family structure and marital status could indirectly affect perfectionism by influencing an individual's social support network and stress levels. For example, being an only child might face higher expectations from parents, potentially exacerbating perfectionist tendencies (Bembenutty, 2008). Similarly, marital status could impact one's time management and stress levels, thus influencing their pursuit of perfection.

In conclusion, despite the lack of significant impact from certain variables such as gender, Grade, civil status, and only-child status, these factors warrant further exploration in future studies, particularly within larger and more diverse populations. Moreover, age, as a significant impacting factor, signals the need to pay attention to the differing strategies employed by people of different age groups in dealing with perfectionism.

Table 6

Differences of Responses on Time Management Propensity when grouped according to Profile

Profile Variables/ATMD	H/U	P-Value	Interpretation
Age	15.958	0.007	Significant
Sex	7865.000	0.000	Significant
Grade	2.987	0.394	Not Significant
CS	3882.500	0.668	Not Significant
ON	921.500	0.580	Not Significant

Table 6 presents a comprehensive analysis of differences in responses concerning time management propensity when categorized according to various demographic profiles. The findings reveal significant differences ($p<0.05$) in time management responses for the variables of age and gender, while no significant differences were observed for academic year, civil status, and being an only child. Data indicate that students from different age groups exhibit varying performances in terms of time management skills. Older students tend to demonstrate more sophisticated abilities in managing their time compared to younger ones who are still in the process of developing these skills. Adams et al. (2021) noted that as individuals mature, they generally improve in areas such as time management and self-regulation. This suggests older students might be better at planning their schedules effectively to meet long-term goals. Moreover, older students have likely accumulated more experience dealing with complex tasks and deadlines, which contributes to their enhanced ability to manage time efficiently.

Significant differences were also observed in relation to gender, indicating that males and females exhibit distinct propensities towards time management. This discrepancy could stem from societal expectations placed on genders or varied experiences during the educational process. Despite the expectation that time management skills would evolve over the course of one's academic career, no significant impact of academic year on time management responses was observed. This finding suggests that, across different stages of academic study, students' strategies for managing time do not vary significantly. Younger students might still be acclimating to university life, while older students may have developed more effective techniques. It is possible that individual learning curves and personal development play a more crucial role than the mere passage of academic years.

Neither civil status nor being an only child showed significant impacts on time management responses in this study. This might suggest that these factors play a lesser direct role in the development of time management skills. However, family background and personal growth environments could indirectly influence an individual's ability to manage time. For instance, only children might develop particular time management habits due to

focused family attention, yet these influences may not be strong enough to produce statistically significant differences. Besser et al. (2010) also note that marital status can have subtle effects on academic performance and time management, even if those effects are not statistically significant in this sample.

In summary, age and gender emerge as significant factors influencing time management, underscoring the importance of considering these elements when designing interventions aimed at improving student time management skills. While academic year, civil status, and being an only child did not show significant impacts in this study, these variables could still play roles in different contexts or with more detailed analyses. Future research should explore these relationships further using larger data sets and more nuanced variable assessments. Additionally, longitudinal studies could provide insight into how these factors evolve over time and contribute to the development of effective time management practices. Researchers might also consider exploring the intersectionality of multiple demographic variables to gain a deeper understanding of the complex dynamics involved in time management among college students.

Table 7 demonstrates the differences in responses concerning academic delay of gratification when categorized according to various profiles. The results show that none of the variables—age, gender, academic year, civil status, and whether the participant is an only child—had a significant impact on the responses related to academic delay of gratification.

Table 7

Differences of Responses on Academic Delay of Gratification when grouped according to Profile

Profile Variables/ADGS	H/U	P-Value	Interpretation
Age	2.569	0.766	Not Significant
Sex	11771.000	0.993	Not Significant
Grade	0.477	0.924	Not Significant
CS	3797.500	0.500	Not Significant
ON	831.000	0.344	Not Significant

Age did not show a significant impact on academic delay of gratification. This might be because academic delay of gratification is more dependent on psychological traits such as self-discipline rather than chronological age itself. However, the results of this study might reflect specific conditions within the academic environment where age is not the primary driver of delaying gratification. Gender did not demonstrate a significant impact, suggesting that gender differences in academic delay of gratification may be less pronounced than anticipated. Despite this, gender might exhibit different effects in specific academic fields or types of tasks. However, such conclusions might oversimplify the complexity of gender differences, which are influenced by multiple factors.

Grade did not reveal a significant impact, suggesting that across different academic stages, students' performance in delaying gratification is quite consistent. However, differences in grade levels might become apparent in more nuanced contexts, especially when considering specific disciplines or types of academic tasks. Civil status did not show a significant impact. This implies that whether single or married, students perform similarly in terms of academic delay of gratification. Civil status might indirectly influence the ability to delay gratification through its impact on personal stress levels and available time, but the findings of this study indicate that this indirect effect is not statistically significant. Being an only child also did not show a significant impact. This means that regardless of having siblings, students' performance in academic delay of gratification is similar. However, only children might face higher expectations from their parents, which could influence their attitudes and behaviors toward academics (Bembenutty, 2022). Nonetheless, the results of this study suggest that such influences do not result in statistically significant differences.

Although demographic variables such as age, gender, academic year, civil status, and being an only child did not show significant impacts on academic delay of gratification, findings provide a framework for understanding how academic delay of gratification manifests differently among individuals. Future research could further explore how these variables interact and influence student behavior under different cultural and socioeconomic

conditions. Additionally, research could focus on specific academic environments or tasks to uncover the influence of these variables under particular conditions.

Table 8

Correlational Matrix of Perfectionism, Time Management and Academic Delay of Gratification

	Time Management			Academic Delay of Gratification		
Variables/	r^s	p-Value	I	H/U	P-Value	I
Perfectionism	.985**	0.000	S	.122*	0.033	S
Time Management				.122*	0.033	S

Table 8 presents the correlation matrix between perfectionism, time management, and academic delay of gratification. The data indicate a significant positive correlation between perfectionism and time management (rs=.985, p<.001), a significant but weak positive correlation between perfectionism and academic delay of gratification (rs=.122, p<.05), and a significant but weak positive correlation between time management and academic delay of gratification (rs=.122, p<.05). Below is a deeper analysis of these associations, enriched with additional relevant literature.

The significant positive correlation between perfectionism and time management suggests that individuals exhibiting strong perfectionist tendencies also possess better time management skills. This association likely stems from the fact that perfectionists tend to be highly organized and planful to ensure their work meets high standards. However, this relationship can be a double-edged sword, as excessive perfectionism can lead to procrastination, thus undermining the effectiveness of time management (Ashby et al., 2004). For example, perfectionists might repeatedly check their work out of fear that it is not perfect enough, which can reduce the efficiency of time management. On the other hand, positive perfectionist traits, such as self-efficacy, can foster the development of time management skills (Davis et al., 2024), while negative perfectionist traits, such as fear of failure, can lead to procrastination.

The weak positive correlation between perfectionism and academic delay of gratification indicates that perfectionists might be better at postponing immediate gratification to achieve long-term academic success. This aligns with Bembenutty's (2008) findings, which suggest that the ability to delay gratification is related to the willingness to forego short-term comfort for long-term success. However, the weak correlation suggests that not all perfectionists succeed in delaying gratification, especially when perfectionism leads to anxiety or other mental health issues (Frost et al., 1990). Furthermore, the high standards perfectionists set for themselves might increase their stress levels, thus affecting their capacity to delay gratification. In some instances, perfectionists might focus excessively on details, which can detract from their ability to pursue long-term goals (Hewitt et al., 1991).

The weak positive correlation between time management and academic delay of gratification indicates that students with good time management skills are more likely to achieve academic delay of gratification. This is because effective time managers are more likely to set clear goals and follow through with plans, which is closely linked to the concept of delaying gratification (Anderson et al., 2021). However, the weak correlation also suggests that the relationship between time management and academic delay of gratification is more complex than it appears, possibly influenced by other unmeasured variables.

From an interdisciplinary perspective, these findings suggest that fields such as educational psychology, cognitive science, and social psychology can inform each other to gain a broader understanding of individual behaviors in academic settings. These findings have significant implications for educational practice. Educators can identify and cultivate positive perfectionist traits to enhance students' time management abilities, thereby helping them achieve their academic goals. For students displaying negative perfectionist tendencies, schools can offer counseling and support services to help them manage anxiety and avoid procrastination. By teaching effective time management skills, schools can strengthen students' ability to delay gratification academically, thereby promoting their overall academic performance and personal development.

Future research could explore the following areas to further expand knowledge in this domain: first, investigate how different dimensions of perfectionism (positive vs. negative) specifically impact time management and delay of gratification; second, examine whether the relationships between these variables differ across cultural contexts; finally, design and implement interventions aimed at enhancing students' time management and academic delay of gratification skills, and evaluate the effectiveness of these interventions. Through such research, we can better understand how to support students in overcoming academic challenges and achieving personal growth and development.

In conclusion, the results presented in Table 8 provide valuable insights into the relationships between perfectionism, time management, and academic delay of gratification. By incorporating literature from multiple fields, we can see how these concepts interrelate and function in practice. Future research will further enrich our understanding of this topic and provide guidance for educational practices.

Table 9

Proposed Psychological Intervention Plan for Chinese College Students

Key Result Area	Objectives	Strategies/Activities	Persons Involved	Success Indicators
Average perfectionism	Enhance self-efficacy; Reduce anxiety stemming from perfectionism; Foster reasonable attribution.	One-on-one counseling; Group counseling, such as self-evaluation and accepting one's imperfections (e.g., accepting one's flaws); Group discussion.	Counselors, Advisors, Teachers, Peers	Positive and correct self-evaluation, and this evaluation level has improved
Average psychological resilience	Improve time utilization efficiency; Enhance awareness of the value of time; Establish effective time planning habits.	One-on-one counseling; Group counseling, such as time management skill training; Group discussion.	Counselors, Advisors, Teachers, Peers	Significantly improved time management ability, capable of reasonable planning of daily tasks.
Average emotional regulation	Enhance resistance to immediate temptations; Strengthen the ability to set long-term goals; Reduce procrastination.	Individual and group counseling; Workshops, such as delaying gratification skill training; Group discussion.	Counselors, Advisors, Teachers, Peers	Enhanced ability to delay academic gratification, better overcoming procrastination.

This table outlines a proposed psychological program intended for Chinese university students with average levels of perfectionism, time management, and academic delay of gratification. For Key Result Areas (KRAs), the focus is on average levels of these traits, and the program outlines specific goals aimed at improving the identified area. In terms of strategies/activities, it includes individual and group counseling, discussions, and specific exercises (e.g., providing feedback on emotions). With the persons involved, professionals who will facilitate the program (counselors, advisors, teachers) and peers, along with success indicators: measurable outcomes to gauge the program's effectiveness (e.g., increased interaction frequency, positive self-evaluation).

For students with average levels of perfectionism, the intervention aims to enhance self-efficacy, reduce anxiety stemming from perfectionism, and foster reasonable attribution. To increase self-efficacy, the goal is to boost students' confidence in their ability to accomplish tasks and solve problems, reinforcing their belief in handling challenges (Li et al., 2022). To mitigate anxiety, the intervention seeks to assist students in recognizing the negative emotions that excessive pursuit of perfection might cause and provide methods to alleviate these feelings. Additionally, the program aims to teach students constructive ways to attribute failure, avoiding the tendency to blame themselves entirely for setbacks. Strategies include one-on-one counseling, which helps students explore their inner needs and fears through individual sessions with a counselor, aiding them in identifying the root causes of their anxiety and learning effective coping mechanisms (Li et al., 2022). Group counseling organizes activities where students can share experiences and support each other, strengthening their social support network and reducing feelings of isolation (McIntyre et al., 2021). Activities designed for

self-evaluation and accepting imperfection help students recognize that everyone has strengths and weaknesses, teaching them to adopt a more positive attitude toward themselves (Pearson et al., 2022). Cognitive restructuring educates students on how to identify and change negative thought patterns, adopting a more positive and realistic perspective (Martin et al., 2023). Participants include counselors, advisors, teachers, and peers, each playing a critical role in providing support and ensuring active participation. Success indicators include positive and correct self-evaluation and improved self-evaluation levels, reflecting higher self-worth and reduced avoidance of new attempts due to fear of failure.

For students with average time management skills, the intervention plan aims to improve time utilization efficiency, enhance awareness of the value of time, and establish effective time planning habits. To improve efficiency, the program seeks to help students manage their time more effectively, reducing wasteful behaviors. To instill an understanding of the importance of time, the intervention aims to educate students on the value of time and the need to cherish every moment. Finally, to form good time management habits, the program offers training that helps students develop routines to improve the quality of their studies and lives (Nguyen et al., 2023). Strategies include one-on-one counseling, where counselors conduct individual sessions to identify students' weaknesses in time management and offer personalized suggestions. Group counseling involves collaborative activities that teach students how to allocate and manage time and tasks within a team, enhancing teamwork skills. Group discussions allow students to share their time management experiences, fostering mutual learning and progress. Participants include counselors, advisors, teachers, and peers, all contributing to the provision of necessary psychological support and coordination of activities. Success indicators are significantly improved time management ability and reasonable planning of daily tasks, reflecting better time organization skills and reduced procrastination, avoiding pressure from tight deadlines.

To assist students who exhibit average levels of academic delay of gratification, the intervention focuses on enhancing resistance to immediate temptations, strengthening the ability to set long-term goals, and reducing procrastination. The program aims to help students learn how to resist short-term temptations to achieve long-term goals, cultivate the habit of setting and persisting with long-term goals, and implement strategies to decrease procrastination caused by lack of motivation. Strategies involve combining individual and group counseling with group discussions to help students master the skill of delaying gratification, promoting academic achievement and personal growth. Workshops are organized where students learn to set and maintain long-term goals, providing strategies to resist short-term temptations, such as breaking down large goals into smaller tasks. Role-playing activities simulate scenarios allowing students to practice delaying gratification in a safe environment. Participants include counselors, advisors, teachers, and peers, who collectively provide psychological support, coordinate activities, and motivate each other through teamwork and shared experiences. Success indicators include enhanced ability to delay academic gratification, where students choose actions that benefit long-term development over immediate rewards, and better overcoming procrastination, reflecting stronger self-discipline and reduced unnecessary delays. This framework provides a structured approach for universities to conduct mental health interventions, setting specific goals, strategies, activities, and measures of success to systematically support students' mental health and growth, thereby promoting comprehensive development.

4. Conclusions and recommendations

Participants were mainly between 18 and 22 years old, and the sex ratio was nearly balanced. The grade distribution was mainly before two years. The vast majority were unmarried, and the only children were slightly more than the non-only children. Age was found to have a significant effect on perfectionism scores, with no significant differences in gender, grade, marital status, and only child status. The data indicated that respondents were positive about time management but had room for improvement in practical applications. Participants generally endorsed the value of time and tried to plan daily activities, but with varying degrees of consideration of time priorities. Respondents had a positive attitude towards academic delay gratification, but there was room for improvement in practice. Age had a significant effect on perfectionist responses, while factors such as gender,

grade, civil status, or only child. Age and gender showed significant differences in response to time management, but not for factors such as grade, civil status, and being an only child. The results showed that factors such as age, gender, grade, marital status and only child had no significant influence on academic delay gratification. There is a significant positive correlation between perfectionism and time management, a significant but weak positive correlation between perfectionism and academic delay gratification, and a significant but weak positive correlation between time management and academic delay gratification.

It is recommended to provide basic time management training for younger students and advanced skills for older students to optimize their strategies. Due to gender ratio balance, the impact of gender differences should be further studied and provide support resources for students in need. Lower students need more counseling to college life, while seniors should receive advanced training to consolidate time management and academic delayed gratification. In addition, schools should pay attention to the differences between a small number of married students and non-only child, and provide corresponding support services. Given that age has a significant impact on perfectionism, educators should provide customized tutoring and support to students of different age groups. Although gender, grade, marital status and only child status did not show significant differences in this sample, the potential impact of these factors on individuals and provide support services accordingly. Future studies should deeply explore the relationship between age and perfectionism, and explore effective interventions. Educational institutions should continuously pay attention to the students' mental health and provide the necessary support to help them manage their perfectionist tendencies healthily. Respondents generally have a positive attitude towards time management, but there is still room for improvement in practice. Students mostly recognize the value of time and try to plan daily activities, but with time priorities. Although most students are able to identify their most efficient time periods and prioritize important tasks

Based on the results of the academic delay gratification scale, although respondents tended to delay immediate gratification for long-term academic success, there was still room for improvement. Schools should provide training programs to help students learn to resist immediate temptation, set viable goals, and overcome delays. At the same time, educators should emphasize the importance of rest and prevent overwork to maintain long-term learning motivation and mental health. Given that age has a significant impact on perfectionism, educators should provide customized coaching and support to students of different age groups. Although gender, grade, marital status, and only child showed no significant differences, attention should be paid to the potential impact of these factors on individuals and the necessary support services. Future studies could further explore the relationship between age and perfectionism, and develop targeted interventions. Given that age is an important influencing factor in time management, educational institutions should design corresponding training programmes according to different age groups to help students improve their time management skills. Meanwhile, considering gender differences, gender-specific support services should be provided to accommodate different gender time management needs. Although academic grade, marital status, and having an only child did not show significant effects, educators still need to be aware of the potential role of these factors in the specific context and provide individualized support if necessary.

Future studies could employ larger-scale data sets and more detailed assessment of variables to further explore these relationships. Although demographic variables did not show significant effects, educational institutions should focus on individual psychological traits such as self-discipline and provide training and support for delayed gratification for all students. Future studies should deeply explore the interaction of these variables in different cultural and socioeconomic contexts and their impact on student behavior. Furthermore, studies can be refined in specific academic settings to reveal the role of these variables under specific conditions. For students with positive perfectionism, educators should develop their time management skills; for students with negative perfectionism, schools can provide counseling services to help them manage their anxiety and avoid procrastination. Future research could explore how to improve student time management and academic delay gratification through interventions and evaluate the effectiveness of these interventions.

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