

A Research on the Influence of College Student Time Management on Their Academic Development

Wenxin Xu

Soochow university Wenzheng college, Suzhou, 215300, China

ABSTRACT

Time management is of great significance to the learning of college students. As a personality trait, time management has huge differences among individuals. This study surveyed 74 students from different universities, including 16 men and 58 women, and collected relevant data by issuing questionnaires. The results show that students' time management ability significantly affects their short-term learning development and long-term learning development, while other control variables such as gender, parents' occupations and disciplines have no significant impact. Based on this finding, we recommend that educators pay more attention to the cultivation of students' time management ability, because time management ability not only affects students' short-term academic performance, but also has a certain impact on their future development. Educators should look at problems with a developmental perspective.

Keywords: *Time Management, Academic Development, College Students*

1. INTRODUCTION

Academic development is an important indicator of measuring whether students are excellent. It is affected by many factors, in which, time management is an important factor. Previous studies have shown that time management disposition can effectively predict students' learning performance. Students who are good at managing time can use time more reasonably and achieve better results [1]. At the same time, time management disposition can also affect students' long-term academic development. Especially for the group of college students, they have more autonomous time and richer learning resources than learners at other stages. However, relevant research on the time management and academic development of college students is insufficient.

Time management ability has a certain influence on the mental health and learning ability of college students. Time management disposition can better reflect the personality traits of individuals. It refers to a relatively stable psychological and behavioral characteristics of individuals in terms of time use [2]. If the time management disposition is different, the life style and learning habits of the students are also

different. Therefore, it is very meaningful to study and analyze students' time management disposition. The study found that mastering and understanding the related concepts of learning management can enable the instructor to guide the learner more effectively and reasonably, and have a profound impact on the long-term development of students. Learners who have mastered time management skills will be able to achieve better academic performance. Academic performance is an important indicator to measure students' short-term academic development. At the same time, by measuring short-term academic development, long-term academic development can also be predicted to a certain extent, because short-term academic development can reflect individual learning ability and learning attitude, which can also affect future development.

2. LITERATURE REVIEW

2.1. Time management

Time management refers to the process of achieving flexible and effective use of time by planning ahead and applying certain skills, methods and tools to

achieve the established goals of individuals or organizations. The development of time management theory can be divided into four stages [3], which are the application of notes and memos, the application of calendars and schedules, the emphasis on the concept of priority and maintaining the balance between capacity and output. It can be seen that the concept of time management has also changed over time. Changes in concepts have brought about changes in behavior, and modern people understand the important role of "balance" in time management more than ever before.

Psychologists have different views on time management, and they have also proposed different models. One of the representatives is Britton and Glynn (1989), who understand time management from the perspective of information processing. They divide time management into three areas: macro level, intermediate level and micro level, and link them with psychological management. Britton and Macan compiled a Time Management Questionnaire (TMQ) based on this theory.

In China, Huang Xiting and Zhang Zhijie once proposed the concept of time management disposition. They believe that time management disposition is a psychological and behavioral characteristic, which is reflected in the usual time use process. This view has many similarities with those of Britton and Glynn, and both recognize the connection between time management and psychology. In addition, they further pointed out that time management disposition is a multi-level, multi-dimensional psychological structure, which is composed of a sense of time monitoring, time efficiency and time value. Based on theory, the time management scale proposed by the two of them is also measured through multiple dimensions and levels [5]. Through the exploratory factor analysis of 1027 college students and the confirmatory factor analysis of 507 college students, they found that the three factors of time value, time monitoring and time efficiency are the ideal structure of time management disposition. This questionnaire is also the most widely used and well-known time management scale. In addition, there are related scales in other fields to measure different groups of people. For example, Ai Ping (2006) compiled a time management disposition scale for professionals in China. Zhang Feng (2007) conducted an extremely in-depth study on the basis of the *Time Management Disposition Scale for Youth* and compiled the *Self-Monitoring Scale for Time Management of Middle School Students* [6].

2. 2. Academic Development

Academic development can be divided into two dimensions of learning ability self-efficacy and learning behavior self-efficacy. The American social learning theorist Bandura proposed the concept of self-efficacy, and he defined self-efficacy as "the

subjective judgment of the individual on his ability of performing a certain task successfully" [7]. In the academic context, efficacy refers to whether an individual believes that he has the ability to complete an academic task or achieve an academic goal, and it is actually a subjective judgment on his academic ability. Different scholars also have different definitions of efficacy. Zhou Guotao, Qi Lifu (1993) believe that self-efficacy is the speculation or judgment of individuals on their ability to perform certain actions [8], that is, before starting a task, an individual will first evaluate whether he can successfully complete a task or achieve a certain result. Yang Xinde (1993) believes that self-efficacy is the effective or ineffective self-experience that individuals hold on their actions to affect the results of their actions. Although these definitions are different, they all involve the problem of individuals evaluating their own abilities in certain aspects. In addition, its influencing factors on academic development mainly include the following four aspects: direct experience, alternative experience, persuasion and emotional or physiological awakening of individuals' perception of their abilities. [9]

As to the academic development scale, when the self-efficacy was firstly studied, the measurement of academic self-efficacy adopted the general self-efficacy scale of Jerusalem and Schwarzer (1980). Later, with the in-depth study of this field of study, the academic self-efficacy scale compiled by Wood and Laeke (1987) appeared. Liang Yusong and Zhou Zongkui (2000) compiled an academic self-efficacy scale appropriate to Chinese students based on the *Academic Self-Efficacy Questionnaire* of Pintrich and DeGroot (1990).

2. 3. Main Research Findings

Macan (1990) found that the stronger a student's time management ability, the better his academic performance. This means that by evaluating the learner's time management capabilities, students' learning performance can be predicted relatively accurately. Britton K.B. found that the average score of students is positively related to time management habits.

In China, since Huang Xiting put forward the concept of time management disposition, there are more and more related research in different fields, and the age and ethnic groups involved in different studies have become more and more extensive. Lv Qingyan (2007) surveyed 184 college students of different nationalities and found that there is no difference in the sense of time efficiency among college students of different nationalities, but there are significant differences in the sense of time value and time monitoring [10]. Yi Limin (2012) studied the characteristics of time management disposition of deaf college students and ordinary college students, and found that there are

some differences time management disposition. Combining existing conclusions, it can be concluded that there are significant differences in time management characteristics among different groups. Many studies have shown that students' time management ability and learning ability are closely related. There have been many studies on different age groups at home and abroad. In 1991, Britton and Tesser used longitudinal research to predict academic performance. In China, the study of Zhang Zhijie et al. (2001) also confirmed that time monitoring has a certain predictive effect on academic performance. Li Jin also concluded that there was a significant positive correlation ($P < 0.005$) between time management and performance by investigating the primary school students. The research conducted by Li Bing and Yang Jiale (2004) on junior high school students also shows that all dimensions of time management disposition are positively correlated with the academic performance of students.

2. 4. Evaluation

Through the comparison and analysis of previous studies at home and abroad, this study finds the shortcomings of domestic research, and divides academic development into short-term and long-term aspects on the basis of existing research. It can be found from previous studies that different researchers mostly focus on one dimension of short-term or long-term academic evaluation of students. Most of their measurement standards are scales or just refer to students' academic achievements, and ignore the fact that academic development should be measured in multiple dimensions. Similarly, the measurement of time management should also be multi-faceted and multi-dimensional. Since the concept of time management changes with time, measurement tools should also take this factor into account.

In terms of research results, this study concludes that time management has varying degrees of impact on short-term and long-term academic development. This article mainly collects relevant information and data through the form of questionnaire survey, and performs statistical analysis, correlation analysis and regression analysis based on the obtained data, so as to achieve the purpose of the research.

3. DESIGN OF THE CHIP KICK MECHANICS

3.1. Research Object

This questionnaire is in the form of software editing. This questionnaire has a total of 32 questions, which are randomly distributed online. The research object includes university students from different regions and

different grades, including university students from overseas. 74 valid questionnaires were recovered, with 16 men and 58 women. The questionnaires were filled by college students of different grades, including two freshmen, 10 sophomores, 32 juniors, 25 seniors, 1 senior, 3 masters and 1 doctor.

3.2. Research Tool

The questionnaire includes two parts to measure different variables, as follows:

3. 2. 1. Time Management Scale

The part of the questionnaire used to measure students' time management adopts the time management scale (2001) compiled by Huang Xiting and Zhang Zhijie. The original questionnaire includes a total of 44 questions, including 10 questions to evaluate the sense of time value, 24 questions to measure the sense of time monitoring, and 10 questions to measure the sense of time efficiency. Based on these three dimensions, this study selected the topics that best represent different dimensions, a total of 11 questions.

3. 2. 2. Academic development scale

The questions in this part include two aspects: short-term academic development and long-term academic development. Short-term academic development takes the grade point as a reference standard with a full score of 4. Long-term academic development used the self-efficacy of learning scale compiled by Liang Yusong and Zhou Zongkui in 2000, which was adapted from the learning self-efficacy questionnaire compiled by Pinirich and Degroot (1990). This part includes a total of 22 questions, which are divided into two parts. The first part is used to measure learning ability self-efficacy, and the other part is used to measure learning behavior self-efficacy. Learning ability self-efficacy refers to the individual's estimation of whether he is capable of completing his studies, achieving good results, and avoiding academic failure; self-efficacy of learning behavior refers to the students' estimation of whether their learning behavior can reach the learning goal, that is, the estimation of their own behavior results. This study selected 20 questions from these three dimensions, each of which can be representative in its dimensions.

3. 3. Data Analysis

The results of the questionnaire used Stata to process and analyze the data, and the data were subjected to descriptive statistics, difference test, correlation analysis and regression analysis.

4. RESULT AND ANALYSIS

4.1. Time management and academic development of college students

Table 1: Total score and numerical distribution of time management, short-term academic development and long-term academic development.

	Score	Mean	Standard deviation
Time management	100	72.7	13.1
Short-term academic development	4.0	3.3	0.46
Long-term academic development	100	71.4	12.7

Table 1 summarizes the total score and numerical distribution of time development, long-term and short-term academic development. From Table 1, it can be seen that the average value of time management is 72.7, and the standard deviation is 13.1; the average value of short-term academic development is 3.3, and the standard deviation is 0.46; the average value of long-term academic development is 71.4, and the standard deviation is 12.7.

In order to investigate whether there is a gender difference in time management and academic development, this study calculated the different scores of men and women, thus obtaining the following data:

Table 2: time management scoring table of men and women.

	Population	Average value	Standard difference	Minimum value	Maximum value
Male	16	77.7	13.0	56.4	100
Female	58	71.3	13.0	41.8	100

Table 4: Correlation analysis among time management, discipline, parent occupation, grade, gender and long-term academic development and short-term academic development.

	Gender	Grade	Vocation of the father	Vocation of the mother	Discipline	Total time management score	Long-term academic development	Short-term academic development
Gender	1.0000							
Grade	0.3627*	1.0000						
Vocation of the father	0.0164	0.0049	1.0000					
Vocation of the mother	0.0367	0.0025	0.6055*	1.0000				

Table 3: long-term academic development scoring table of men and women.

	Population	Average value	Standard difference	Minimum value	Maximum value
Male	16	73.2	12.1	55.8	100
Female	58	70.9	13.0	48.4	100

It can be seen from Table 2 that the average time management for men is 77.7, the standard deviation is 13.0, and the minimum and maximum scores are 56.4 and 100 respectively; the average time management for women is 71.3, the standard deviation is 13.0, and the minimum score and the maximum values are 41.8 and 100, respectively.

It can be seen from Table 3 that the average score of male academic development is 70.9, the average value is 13.0, and the maximum and minimum scores are 48.4 and 100 respectively; the average score of female academic development is 73.2, the average value is 12.1, and the maximum and minimum scores are 55.8 and 100, respectively.

In addition, the research also calculated the average of male and female grade points, 3.26 for men and 3.27 for women.

As shown in the table, the total scores of male time management and long-term academic development are slightly higher than that of females, but the average short-term academic development of females is slightly higher than that of males, but this difference is not significant.

4.2. Correlation analysis

Discipline	-0.1248	0.1647	0.1647	0.0790	1.0000			
Total time management score	-0.0622	-0.1678	-0.1424	-0.1120	0.1091	1.0000		
Long-term academic development	0.1721	-0.1237	-0.0391	-0.0983	0.0301	0.8358*	1.0000	
Short-term academic development	0.1635	0.0492	-0.0525	-0.0450	-0.0462	0.3233*	0.3082*	1.0000

*** p<0.001, ** p<0.01, * p<0.05

As shown in Figure 4, there is a significant positive correlation between time management and long-term and short-term academic development (P <0.01); there is no inevitable relationship between academic development and gender, father's occupation, mother's occupation, and discipline.

4. 3. Regression analysis of time management on academic development

In order to analyze whether time management disposition has a predictive effect on academic development, this paper uses time management disposition score as the independent variable and the academic development score as the dependent variable to perform regression analysis, thus obtaining the following results.

Table 5: Regression analysis of time management on short-term academic development, long-term academic development, learning ability self-efficacy and learning behavior self-efficacy.

	Short-term academic development	Long-term academic development
Time management	0.023*(0.008)	1.469***(0.121)
Educational level of parents	-0.017 (0.026)	-0.053 (0.392)
With humanities & social sciences as the reference		
-Science	-0.165(0.121)	0.505(1.786)
-Engineering	-0.115(0.177)	-3.999(2.582)
-Medicine	0.083 (0.334)	1.759 (4.948)
Take male as the reference		
-Female	0.115 (0.148)	1.444 (2.115)
Grade	0.043 (0.052)	0.177 (0.778)
Intercept	2.516***(0.382)	5.240 (5.633)
Sample number	73	74
LR chi-square value	1.87	24.60***

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, + p <0.1

It can be seen from Table 5 that short-term academic development is affected by time management, and the parents' education level, subject, gender and grade have insignificant influence on it. Long-term academic development is mainly affected by time management, and parents' educational level, subject, gender, and grade have little effect on it.

5. CONCLUSION

Through analysis, it can be seen that the current time management level of college students is in the upper middle position. However, there are large differences in time management capabilities among different students. There is a certain difference between different genders, and the time management ability of men is slightly higher than that of women. Both short-term academic development and long-term academic development are closely related to time management. The better the time management ability, the better the academic development. At the same time, time management is also positively related to learning ability and learning behavior.

Based on the above findings, educators should pay attention to the cultivation of time management capabilities. For college students, good use of time and reasonable allocation of time are of great significance to academic development and personality training. In classroom teaching and after-school tutoring, instructors should also pay attention to this aspect of supervision. In addition, in the task of cultivating time management ability, the instructor should also pay attention to the differences between different ages and different genders, and should conduct appropriate guidance according to the development characteristics of students to make up for the deficiencies, so that university education can play the most role.

At the same time, based on the fact that time management also has a non-negligible impact on future development, individuals should pay more attention to the cultivation of current abilities. In addition, students should form a correct view of time, reasonable and scientific allocation and use of time through long-term learning and training to maximize efficiency and lay a good and stable foundation for future development.

REFERENCES

- [1] Macan T H, Shahani C, Dpboye R L, et al. College students's time management: correlation with academic performance and stress. *Journal of Educational Psychology*[J], 1990, 82(4): 760—768
- [2] Zheng Wenqing, *Types of College Students' Learning Postpones and Their Relationship with Time Management Disposition and Learning Self-efficacy* [D], Northeast Normal University, 2014.
- [3] Yan Zheng, *Competent Quality of Managers* [M], Machinery Industry Press, 2007.
- [4] Britton B K, Tesser A. Effects of time-management practices on college grades. *Journal of Educational Psychology*, 1991, 83(3): 405—410.
- [5] Huang Xiting, Zhang Zhijie, *Compilation of Adolescent Time Management Disposition Scale* [J], *Psychological Journal*, 2001 (04): 338-343.
- [6] Zhang Feng, Liu Cong, (2012). The Relationship Between Time Management Self-monitoring and Academic Performance of Middle School Students, *Psychological Research*, 5 (4), 79-84.
- [7] Bandura A. *Self - efficacy: The exercise of control*. New York: Freeman ,1997.
- [8] Zhang Lin, Zhou Guotao, (2003). A Review of Research on Self-regulated Learning Theory, *Psychological Science*, 26 (5), 870-873.
- [9] Zheng Wenqing, *Types of College Students' Learning Postpones and Their Relationship with Time Management Disposition and Learning Self-efficacy* [D], Northeast Normal University, 2014.
- [10] Lv Qingyan, *A Research on the Relationship Between Time Management Disposition and Achievement Motivation of College Students of Hui, Han and Tibetan Nationalities* [J], *National Education Research*, 2007 (06): 29-33.