Analysis on the Chinese University Students' Self-Management Abilities

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Abstract: This study focuses on investigating the factors that influence on university students' self-management abilities. A questionnaire with 6 frequency attributes and 40 scale attributes has been developed among 924 university students in China. Factors analysis yielded four reliable factors affecting university students' self-management abilities: time and task management, career planning management, interpersonal relationship management and psychological resilience management. After a multiple linear regression analysis, the results can be predicated with the regression equation. The researcher concludes that teachers should give guidance to the students' self-management abilities; teachers and administrative institutions should optimize the instructional design to cultivate and improve students' self-management abilities with contents and tasks.

1. Introduction

Self-management, as one of the non-academic skills, also known as self-control or self-regulation, means the ability of managing his or her future development goals, mental construction, ideological improvement and behavioral performance. Self-management of university students is the management of their future goals, psychological development, mental enhancement and behavior in an organized, directed and systematic way. On the one hand, only people with strong self-management skills can conform to the development needs of society. In the colorful world of the future, university students are faced with multiple choices. Only by managing their time, life and work well and having their own development goals and plans can they be needed by the society and get the trust and recognition of others, thus to get better development in the society. On the other hand, only those who have strong self-management can achieve the goal of strong self-management is the only way to realize the value of life. The realization of life value requires continuous improvement of personal ability and knowledge and culture. Many studies have shown that good self-management ability is a larger influence on academic achievement than other non-academic skills such as openness to experience, friendly personality, and agreeableness [1-3].

In China, the concept of self-management by university students is mostly adopted in the form of education and guidance, expecting all university students to achieve an effective combination of self-management and self-education, and less in the form of fieldwork. This study will focus on a quantitative method to make a more comprehensive research on university students'

self-managements ability from different factors such as the goal and plan of study, the method of research and thinking, the form of expression of ideas, the degree of resource utilization, the ability knowledge learning, the ability of self-control, the strength of conceptual awareness etc.

2. Literature Review

Different disciplines make researches on self-management abilities from different perspectives, such as in the fields of psychology, education and other disciplines. Psychologists study self-management from personality perspective and emotional dimension which is responsible for causing quick response, such as fighting or interrupting [4]. Several studies shows there is a relationship between the self-management abilities and students' academic achievement. Troll et al. (2021) found smartphones caused self-control challenges in people's daily lives[5]. Better self-control will bring good academic performance. Compared with self-management, Boema and Neill (2020) find owing the trait of grit is more likely to predict higher and academic satisfaction, which brings new insight to the study of non-academic skills [6]. However, according to the findings of Powers et al. (2020), greater self-management abilities could predict lower anxiety in university students which can increase student success and well-being [7]. Other researchers studies other factors like self-esteem that may mediated negatively the relations between self-management and university students' academic procrastination [8]. Tremayne and Curtis (2021) found how the factors of self-control, pressure from self and others influence plagiarism behavior [9].

Some studies have focused on the impact of self-management ability on overuse of mobile phone and internet addiction [10-12]. Yang and his team members (2019) explored the relationship between physical exercise and mobile phone dependence in Chinese university students and verified the positive role of self-management in decreasing the overuse of mobile phone by physical exercise. Kim (2017) also found different grades and smart phone usage time affected school life adaptation, self-management. Few scholars focused on the self-management scale and evaluated its dimensionality and psychometric properties and examined the self-management scale's construct validity, criterion validity, factorial validity, and good internal consistency [13]. Ismail and Zawahreh (2017) conducted a survey with Self-control Scale and Internet Addiction Scale to draw a conclusion, the lower self-control of the participants, the higher Internet Addiction of the participants or visa.

3. Research Method

This research made a survey to analyze the factors influencing university students' self-management abilities. The sample is the students (n=924) who study in Nanjing Xiaozhuang University. Data was collected by an online survey app called WENJUANXING.

4. Results and Analysis

As Table 1 shows, the majority of the participants are female students, accounting for 64.7%. Male participants rank the second with 35.3%. Freshmen rank first among all participants with 42.5%, followed by the sophomores with 25%. Juniors comes to the third with 21.5%. The last place goes to senior participants with 10.9%. The majority of the participants are Arts participants, accounting for 53.8%. Science participants rank second with 33.5%. Lastly, Business English majors make up 15.4%. The majority of the participants are education majors, accounting for 53.8%. Non-education participants rank second with 46.2%. The majority of the participants are the only-one-child in their families, accounting for 52.1%. 47.9% participants are from families with more than one child. The majority of the participants are from rural areas with 51.9%. Participants

from urban areas rank the second with 48.1%.

Table 1: Frequency of Demographics

Item		n	%
Gender	Male	326	35.3
	Female	598	64.7
Educational level	Freshman	393	42.5
	Sophomore	231	25
	Junior	199	21.5
	Senior	101	10.9
Major	Arts	497	53.8
	Science	310	33.5
	Other	117	12.7
Education Background	Education	497	53.8
	Non-education	427	46.2
Family Role	Only child	481	52.1
	Not only child	443	47.9
Place of Origin	Urban area	444	48.1
	Rural area	480	51.9

Table 2: Kmo and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.96
Bartlett's Test of Sphericity	Approx. Chi-Square	23939.97
	df	780
	p	.000

Table 3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.97	41.29	41.29	11.97	41.29	41.29	5.75	19.84	19.84
2	2.57	8.87	50.16	2.57	8.87	50.16	5.05	17.41	37.25
3	1.93	6.65	56.81	1.93	6.65	56.81	3.99	13.78	51.03
4	1.21	4.18	60.99	1.21	4.18	60.99	2.89	9.97	60.99

With the KMO and Bartlett's Test in Table 2, the value of KMO is 0.96 and the p-value of Bartlett's test of sphericity is 0.000< 0.01.Therefore, the data could be taken to conduct factor analysis. After applying exploratory factor analysis (EFA) to the survey scale dataset, four factors have been got. By analyzing the underlying traits of the variables of each factor in Table 3, Component 1 could be described as "time and task management". Component 2 could be described as "career planning management". Component 3 could be described as "interpersonal relationship management". Component 4 could be described as "psychological resilience". From the table 3 Total Variance Explained, the total variance explained is 56.99%, which means the three factors can explain 60.99% of the sample.

Table 4: Model Summary[e] of Multiple Regression Related to Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.136[a]	.018	.017	.99	.02	17.33	1.00	922.00	.00
2	.177[b]	.031	.029	.99	.01	12.20	1.00	921.00	.00
3	.196[c]	.038	.035	.98	.01	6.70	1.00	920.00	.01
4	.207[d]	.043	.039	.98	.00	4.39	1.00	919.00	.04
a. Predictors: (Constant), Gender									
b. Predictors: (Constant), Gender, Place of origin.									
c. Predictors: (Constant), Gender, Place of origin and Major									
d. Predictors: (Constant), Gender, Place of origin, Major and Educational background									
e. Dependent Variable: Career management									

Table 5: Coefficients[a] of Multiple Regression Related to Factors

Model	Unstandardized Coefficients		Standardized Coefficients	t	p	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	-.469	.231		-2.032	.042	-.921	-.016
Gender	-.158	.075	-.076	-2.113	.035	-.305	-.011
Place of origin	.212	.065	.106	3.257	.001	.084	.339
Major	.128	.050	.090	2.576	.010	.030	.225
Educational background	.140	.067	.070	2.094	.037	.009	.271
a. Dependent Variable: Career planning management							

A multiple regression was conducted with "Gender, Education level, Major, Educational background, Family role, Place of origin" as independent variables and "Career planning management "as dependent variable for stepwise regression analysis, and after automatic identification by the model, a total of four independent variables - "Gender, Major, Educational background, Place of origin" were left. In table 4, the R-squared value was 0.043, meaning that the four independent variables could explain 4.3% of the variation in "Career planning management". Moreover, the model passed the F-test (F=10.286, p=0.000<0.05), indicating that the model is valid. Table 5 shows the model equation is: Career planning management = -0.469 - 0.158*Gender + 0.128*Major + 0.140*Educational background + 0.212*Place of origin. As Table 5 shows, the regression coefficient value for gender is -0.158 (t=-2.113, p=0.035<0.05), which implies that gender can have a significantly negative relationship on Career planning management. The regression coefficient value of major is 0.128 (t=2.576, p=0.010<0.05), implying that major has a significantly positive influence on Career management. The regression coefficient value for "Educational background" is 0.140 (t=2.094, p=0.037<0.05), implying that "Educational background" will have a significant positive influence on Career planning management. The value of regression coefficient of "Place of origin" is 0.212 (t=3.257, p=0.001<0.01), implying that "Place of origin" will have a significantly positive influence relationship on "Career planning management".

To conclude the analysis, "Major, Educational background, Place of origin" have a significantly positive influence on "Career planning management". In addition, "Gender" has a significantly negative influence on "Career planning management".

5. Suggestions on Improving University Students' Self-Management Abilities

If university students become more independent and self-aware, they will have the ability to analyse and solve problems, and are interested in new things and like to study their intrinsic laws

and characteristics. In addition, due to the social competition and the pressure of job hunting and employment, they attach great importance to the cultivation of their professional skills and practical abilities, to improve their overall quality and to constantly improve themselves.

5.1 Strengthening the Cultivation and Implantation of the Concept of Self-Management

Suhomlinski, a famous educator, once said that the real education it what can stimulate students to carry out self-education. Therefore, universities should build a team of counselors with excellent ideas and comprehensive quality, improve the pertinence and effectiveness of student work, innovate the carrier of student work, and build a platform for improving students' self-management. The self-management theory and method education, together with safety education and thanksgiving education, integrity education, school history and school situation education, career education, etc., are included in the content of freshmen education, so that students can improve their self-awareness, learn to effectively supervise, control, negotiate, coordinate their own behavior, mentality and emotions, shorten the waiting period for freshmen as soon as possible, and make their career positioning as soon as possible. Through holding self-management experience tour, self-management theme forum, salon, etc., we will promote mutual education and common improvement of college students.

5.2 Strengthening the Method Guidance of Management by Objectives

The improvement of college students' self-management ability must be realized through the transformation of students' consciousness and thought. When freshmen enter the school, they should strengthen the penetration of the method of goal management. With the influence of career planning and freshmen navigation courses, they should assist in psychological guidance techniques such as career fantasy travel and personality type analysis, and combine career assessment to enable students to understand social needs, recognize the gap between ideal and reality, between themselves and society, and determine medium and long-term goals on the basis of full self-awareness, Then use SWOT analysis method and ISMART principle to formulate and adjust short-term goals. At the same time, teachers and counselors must establish a clear relationship of help and assistance with students, and strengthen guidance and supervision to ensure the scientificity, effectiveness and development of management by objectives.

5.3 Attaching Importance to Cultivating Positive, Healthy and Correct Values

In the big data era, the Internet exerts an important impact on college students' thoughts, psychology and even physiology, and multiculturalism has a huge impact on college students' values. The weak sense of autonomy and immature identification ability make college students vulnerable to the erosion of bad culture and gradually lose themselves. The incompleteness of social values and people's behavior, and the contradiction and conflict between ideal and real life make it difficult for college students to choose or identify with a value system, so they are very easy to fall into the situation of deviation of value orientation and loss of moral rules. Therefore, colleges and universities should create a positive campus cultural atmosphere, influence students' behavior and habits imperceptibly in the form of colorful campus activities, interviews with advanced figures, lectures of outstanding students, elegant art on campus, social practice, academic forums, psychological counseling, art festivals, etc., form a good atmosphere of self-management, and virtually guide students to form a healthy and correct outlook on life and values.

6. Conclusion

In conclusion, this study tried to explore the mutual relationship and interactive effect of different variables in four factors. As previous literature discussed and results discussed in this study, college students' self-management is a systematic and comprehensive work, which requires the joint efforts family, university, society and individuals to build a good development level for the improvement of college students' self-management ability.

Acknowledgement

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