

Relationship between Future Time Orientation, Career Adaptability Focusing on the Mediating Role of Procrastination

Wenyu Li¹, Soo Jin Lee²

¹ Student, Psychology Department, Kyungsoong University, Korea, 18813045210@163.com

² Professor, Psychology Department, Kyungsoong University, Korea, leesooj@gmail.com

Corresponding author: Soo Jin Lee

Abstract: Recently China has enacted many strict measures due to the COVID-19 pandemic. As college students spend most of their time taking online classes, procrastinating due to the lack of management has become a common thing. All these have intensified the confusion and anxiety among college students as they think about their future career. To explore the relationship between future time orientation and career adaptability and the mediating role of procrastination, this study took 1029 Chinese college students as research targets through online questionnaires which adopt the Future-orientation Questionnaire, the Career Adaptability Questionnaire and the Short General Procrastination Scale in 2022. Data were analyzed by SPSS 26.0 and Mplus 8.0, include descriptive statistics, t test and other methods. The results showed that (1) there were significant differences in future time orientation, career adaptability and procrastination considering demographic variables (sex, only child, studying abroad, and education). (2) There was a significant positive correlation between future time orientation and career adaptability. There was a significant negative correlation between procrastination and future time orientation and career adaptability. (3) Procrastination acted as a partial mediator in the relationship between future time orientation and career adaptability. The results can provide new ideas for how to improve the adaptability of college students.

Keywords: Future Time Orientation, Career Adaptability, Procrastination, Mediating Effect

1. Introduction

A person's life is a process of thinking, making decisions and implementing decisions about the future. Future time orientation drives individuals to plan and execute, and students with procrastination often struggle completing tasks on time. Facing the current pandemic situation, many colleges and universities have opened online classes and college students are taking classes at home. This leads to the lack of online supervision from teachers and the learning atmosphere in schools. Therefore, students lose their achievement, motivation, and opportunity to foster good study habits. Procrastination has been becoming one of the most common phenomena among students. The life of the epidemic has changed the way of social interaction of students, and students lack of social activities and thinking about the future. But future time orientation allows us to embrace the future and procrastination is a kind of living habit which focuses on the present. China faces enormous opportunities and challenges due to the current global economic and multipolar trends, as well as the impacts of counter-globalization and the new coronavirus pandemic. Difficult employment situation increase the students' confusion and uncertainty

Received: January 12, 2023; 1st Review Result: February 26, 2023; 2nd Review Result: March 22, 2023
Accepted: April 30, 2023

about the future. Future orientation can not only solve problems such as procrastination[1] and academic burnout[2], but also improve academic performances[3] and career maturity[4]. Savickas points out that anticipating the future, making career decisions, exploring yourself and your career, and shaping your own attitudes, beliefs and abilities are core elements of career resilience[5]. This is a very important construction in the theory of career construction. Therefore, in order to promote the development of college students' physical and mental health and help them improve their career adaptability with skills to cope with the uncertainty of the future, this study attempts to first analyze whether there are differences in future orientation, procrastination and career adaptability when it comes to demographic variables, and second to investigate the relationship between future time orientation, procrastination and career adaptability.

2. Theoretical Background

2.1 Career Adaptability

Career adaptability originates from the career development theory founded by Super[6], the core concept of which is career maturity, from which career adaptability evolves. Then Savickas[5] enriched the meaning of career adaptability and proposed the theory of career construction. In this theory, the author discusses how individuals construct their professional careers through purposeful, meaningful, professional preparation activities and work time experiences. Career construction theory can help college students to have a better understanding of future career development, help them to better set career goals and directions, and build a clearer understanding of the future workplace, so as to help college students adapt to the role of work more quickly after graduation and integrate into working life[7].

Among them, the core concept in the theory of career construction, career adaptability, refers to the readiness of individuals to adjust themselves to different work tasks and role changes. Career adaptability is a social adaptation and an important ability that people should possess in their career development. Career adaptability includes four dimensions: career concern, that is, attention to your future career, career control, that is, a sense of control over your career, career curiosity, that is, curiosity about future careers, career confidence, that is, the degree to which an individual is confident that his or her career problems will be solved[8][9]. Adolescents with high career resilience often have better levels of career decision making, planning, exploration, or confidence during career transitions[10]. Moreover, individuals with high career adaptability can also achieve mutual adaptation between themselves and the environment through active career planning and career exploration[11]. Career adaptability is the result of the evolution of career maturity and is more in line with the needs of the rapidly developing society[12].

2.2 Future Time Orientation

In 1949, Freud had argued that humans had a "future-oriented" nature, because Freud believed that individual actions were directed toward a goal. Gjesme[13] thought future time orientation (or future orientation) as the degree of involvement in the future, including thought and action. Nuttin[14] suggested that time orientation is the preferred direction of individual thought and behavior. Under the influence of Erikson's self-identity, Nurmi[15] argued that future time orientation is an individual's vision for the future, which is complex and multi-stage.

To sum up, future time orientation is not only the preferred direction of an individual's thoughts and actions towards the future, but also the process of thinking and for the future. It is different from future time insight, which is a personality trait of knowing and experiencing future time. Cabras and Mondo

[16] found in a study of students in Spain and Italy that future time orientation mediates career adaptability and life satisfaction. Wang Dan[17] intervened in learning engagement with future orientation, and the research confirmed that career tutorials promote future orientation by mental health classes. Research by Ginevra[18] shows that future time orientation of Italian adolescents mediates career adaptability and career interests. Liao[4] holds that the future orientation is conducive to the development of high school students' career maturity. Research by Yang et al.[1] shows that future time orientation promotes college students' career maturity.

2.3 Procrastination

Procrastination is when an individual voluntarily postpones an act that should have been performed within a specified period of time, despite knowing that the act would have adverse effects on him or her or the future[19][20]. This phenomenon is widespread in society, especially among the student population[21]. Procrastination has a negative impact on college students' interpersonal relationships, academic performance, happiness, and can also trigger negative emotions such as anxiety and depression[22-24]. Yang[26] has found that group career planning can improve the procrastination of college students. Zhang's[27] research shows that academic career guidance can be an effective intervention in procrastination. Yang et al.[1] found a negative correlation between future orientation and procrastination in junior middle school students. Future time orientation can not only directly influence procrastination in junior middle school students, but also indirectly affect procrastination through other variables.

At present, it is more urgent for college students to think about how to choose in the future. There is a lack of research on the relationship between future orientation and career adaptability in China. In the face of the online learning environment, whether college students can maintain good study habits, procrastination is becoming more and more common, whether it has an impact on college students' career adaptability, and whether they can find ways to improve their career adaptability in this relationship becomes the significance of this study.

3. Method

3.1 Participants

This study adopts the form of an online anonymous questionnaire, using "questionnaire star", which is distributed after the approval of the school's responsible person. Students understood the study design and responded voluntarily. The questionnaire is filled in according to personal situation. If there is any discomfort, the respondents may stop answering at any time. The collected data will only be used for this statistical analysis and will not be used for other purposes. The researchers kept the data confidential.

The study surveyed 1,029 college students of Chinese nationality online, including Junior college students, undergraduates, master's students, doctoral students. Ineffective questionnaires such as short response times and consistent options were screened, leaving 1,009 valid questionnaires. Of these, 835 were women and the remaining 174 were men.

3.2 Instruments

Future time orientation. Original Future Time-Orientation Scale by Nurmi et al.'s compilation, which looks at the three main areas of future development for adolescents in education, work and marriage, mainly reflects two processes: the level of exploration of goals and commitment to them, and the degree

to which they are achieved. In this scale, there are seven topics for exploring the fields of education and occupation, and six topics for exploring the fields of marriage and family. The five-point Richter score was used. After translation revision by Chinese scholar Zhang Lingling et al., it still has good reliability and Cronbach $\alpha > 0.53$.

Career adaptability. The Career adaptability Scale (CAAS) was originally developed by Savickas and later translated and revised by Chinese scholar Hou Zhijin et al. There are four dimensions to the scale, including career concern, career control, career confidence and career curiosity. Each dimension has six topics, with 24 questions. With a five-point score, 1 to 5 indicates a level from very nonconforming to very conforming, the higher the score, the better the participants' career adaptability. The Chinese scale has a good measuring index, the internal consistency coefficient is greater than 0.6 in all dimensions, and the Cronbach α coefficient is greater than 0.8 in the total scale.

Procrastination. The Short General Procrastination Scale (SGPS) was revised by Sirois et al. on the basis of the General Delay Scale (GDSS). There are nine topics using the Richter 5-point scale, three of which are reverse scores. A scale of 1 to 5 indicates a level from very nonconforming to very conforming. Higher overall scores mean more delays. The Chinese version was revised by Zhang Yali and others. The Cronbach α is 0.87 and has good structural validity.

($\chi^2/df=2.66, RMSEA=0.07, CFI=0.96, TLI=0.94.$)

3.3 Procedure

Data were analyzed using SPSS 26.0 and Mplus8.0. First the data were simply screened Ineffective questionnaires such as short response times and consistent options were screened. Second scores for procrastination, career adaptability and dimensions, as well as future time orientation were calculated and standardized by SPSS. Third, to the sex, academic qualifications, whether or not only son(daughter), whether or not there is a foreign study experience to carry out different tests, namely t test and analysis of variance. Fourth, the Pearson correlation analysis of variables and sub-dimensions is carried out. Fifth, the role of procrastination mediating was analyzed using Mplus8.0.

4. Results

4.1 Preliminary Analysis

First, questionnaires with shorter response times (less than 90 s) were eliminated, variable scores were standardized, and outliers with standard scores greater than 4 were removed, resulting in a sample size of 1,009 college students. Then, using SPSS 26 software, whether sex, only child, and foreign study experience were significantly different among the variables were analyzed using T-test. *T-test*. In the end, the single factor ANOVA analysis was used to examine the academic differences among the variables. The results are shown in [Table 1].

As can be seen from [Table 1], procrastination has significant differences in gender and academic qualifications. Career adaptability has significant differences in gender, whether the person is the only child, whether he or she has overseas study experience and academic qualifications, Specifically, career concern has significant differences in gender, whether the person is the only child, and whether he or she has overseas study experience, career control has significant differences in gender and academic qualifications; career curiosity and career confidence have significant differences in gender, whether the person is the only child, whether he or she has overseas study experience and academic qualifications. Moreover, future time orientation has significant differences in gender and academic qualifications.

[Table 1] Differential Testing Analysis

	1	2	3	4	5	6	7	N
Male	-.19±1.09	.18±1.18	.31±1.18	.41±1.17	.36±1.15	.36±1.21	.34±1.23	174
Female	.03±0.97	-.03±.93	-.06±.93	-.08±.93	-.07±0.94	-.07±.92	-.07±.92	835
<i>t</i>	-2.51*	2.22*	3.81***	5.12***	4.57***	4.38***	4.18***	
Only child	-.06±.99	.11±.95	.01±.99	.10±.94	.11±.98	.09±.96	.07±.97	463
Non-only child	.02±.99	-.05±1.00	.00±.99	-.05±1.00	-.06±.99	-.04±1.00	-.04±1.00	546
<i>t</i>	-1.21	2.41*	.09	2.21*	2.54*	2.08*	1.67	
Study abroad	-.01±.98	-.00±.97	-.01±.98	-.01±.99	-.02±.98	-.01±.98	-.00±.98	968
No study abroad	.14±1.18	.24±1.22	.34±1.15	.31±1.04	.48±1.09	.39±1.14	.16±1.16	41
<i>t</i>	-.82	-1.52	-2.24	-2.02*	-3.15**	-2.57*	-1.01	
Junior college	-.41±.09	.23±1.33	.21±1.28	.27±1.25	.33±1.32	.30±1.35	.50±1.27	128
Undergraduate	.06±.95	-.05±.90	-.04±.93	-.05±.93	-.08±.90	-.07±.89	-.11±.91	807
Graduate	.03±1.17	.30±1.08	.21±.97	.15±1.05	.34±1.07	.28±1.07	.36±.99	74
<i>F</i>	12.45***	8.06***	5.28***	6.78**	14.27**	10.84***	27.45***	

1: procrastination; 2: career concern; 3: career control; 4: career curiosity; 5: career confidence; 6: career adaptability; 7: future orientation

*** $p < .001$; ** $p < .01$; * $p < .5$

4.2 Relevance Analysis

A correlation analysis of the variables using SPSS 26.0 showed a significant correlation between all variables, as shown in [Table 2].

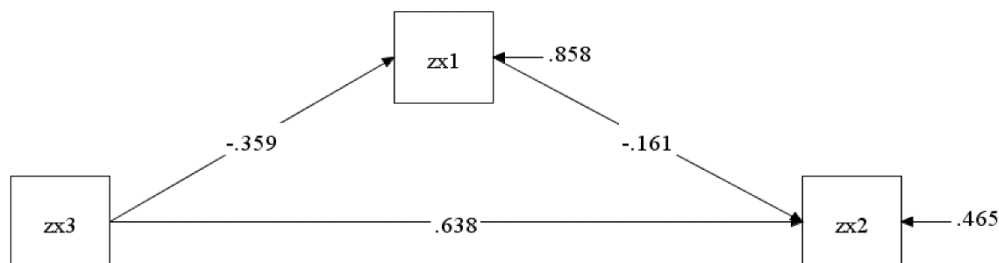
[Table2] Relevance of Procrastination, Career Adaptability and Future Orientation

	1	2	3	4	5	6	7
1.procrastination	-						
2.career concern	-.37**	-					
3.career control	-.29**	.63**	-				
4.career curiosity	-.30**	.62**	.73**	-			
5.career confidence	-.40**	.64**	.67**	.76**	-		
6.career adaptability	-.39**	.83**	.87**	.90**	.88**	-	
7.future orientation	-.36**	.64**	.55**	.61**	.62**	.70**	-

** $p < .01$; * $p < .5$

4.3 Mediating Effect

Mediation analysis using Mplus8.0 was performed as follows: $CFI=1 \geq 0.9$, $RMSEA=0 \leq 0.08$, $SRMR=1 \leq 0.05$. Procrastination significantly partially mediates the relationship between future orientation and career adaptability. The resulting model is shown in [Fig. 1].



[Fig. 1] Relationship with Future Time Orientation, Career Adaptability and Procrastination

zx1: procrastination ; zx2: career adaptability; zx3: future orientation

5. Discussion

This study explores the relationship between future orientation, procrastination, career adaptability, and makes it clear that future orientation influences the development of career adaptability through procrastination. Specific findings and discussions are as follows:

First procrastination has significant differences in gender and academic qualifications. Specifically, boys scored significantly higher than girls. However, in Gan’s study, even though boys were more likely to procrastinate in their daily lives than girls, there was no significant difference[21]. This difference may be related to the statistical sample size. In the relatively free semi-social university, the more colorful campus life tends to attract people with uncertain future goals. At the same time, the mental age of male students is generally lower than that of female students, and the future employment environment is stricter for female students. Accordingly, female students need to make more efforts in all aspects such as study, while male students are more easily tempted by games. This the reason why they are more likely to procrastinate than female students.

Second, in terms of career adaptability, there were significant differences in gender, being an only child, having experience of studying abroad and academic qualifications. There are significant gender differences in career adaptability, and male students are more likely to adapt well than female students. The results were consistent with those of Wu in Taiwan and Wan[28][29]. This result can be explained by traditional Chinese thinking which supports that boys' careers are always highly valued by their parents and spouses, while girls' careers are less valued by their parents. The traditional belief that men are afraid of getting into the wrong line of work and women are afraid of marrying the wrong man is still affecting us.

The results of this study show that single children have significantly higher career adaptability than non-single children, since children receive more attention and resources than non-single children. Besides, in the process of growing up, single children are accustomed to dealing with multiple situations alone, with no other siblings competing for resources, and are therefore more adaptable in their future careers.

Students who have studied abroad have less career adaptability than those who have no experiences abroad. Because of the different employment environment and situation at home and abroad, some students who choose to return home after graduation lack understanding of the domestic environment and have fewer career resources to support them. Another group of students who choose to stay abroad face the same problem of the lack of awareness and resources about the employment environment in other countries.

With regard to academic qualifications, junior college students and graduate students have significantly higher career adaptability than undergraduate students. In China, junior colleges are mostly graduate from vocational and technical schools which mainly focus on vocational education. Students learn skills at school. Many schools have employment agreements with enterprises, and there are a number of cooperative enterprises for students to choose after their graduation. But the graduate students' network resources, the academic qualification level are superior to the undergraduate student. This may explain the relatively low adaptability of undergraduate careers.

Third there are significant differences in future time orientation in terms of gender and academic qualifications. Influenced by traditional Chinese thinking, men are responsible for raising the family, and male university students think and plan more about their future during their studies, including careers, partners, families and parents' retirement. In terms of academic qualification, undergraduate students are significantly lower than junior and graduate students. Junior college students, with their low academic qualifications and short learning hours (usually three years) in vocational school, need to think about whether to get further education or get employed directly after their graduation. While graduate students, with more in-depth study about their major, are more likely to think about their future orientation. Undergraduates who have relatively few career resources and career enlightenments show a confusion about their future when they are enrolled by universities.

Lastly, there are correlations between future time orientation, career adaptability and procrastination, and procrastination has mediating effects on the relationship between future time orientation and career adaptability. The positive correlation between future time orientation and career adaptability and this is consistent with the Rui study in which researchers found that students with higher levels of future orientation were more aware and interested in the future and more curious about their careers. However, procrastination negatively affects future time orientation and career adaptability, mediating the relationship between other two variables. This is consistent with the results of Li and Teng[29][30]. This may be because students who have plans and positive expectations of the future, although they may be afraid of learning or other work, will take the initiative actions to solve problems rather than procrastinate. Accordingly, students with higher future orientation scores were less likely to procrastinate. Students who lack executive power in their study and life do not have a clear career plan, have the sense of lacking control over their own lives and feel confused. Thus, students with low career adaptability are affected by procrastination.

When universities offer career education courses, they can help students break the bad habit of procrastination by guiding them to imagine the future and plan their future lives, so as to awaken career consciousness and improve career adaptability. Career counseling can also help college students (or clients) to think about their future, make plans, set goals, set due dates for each plan. This can help visitors reduce procrastination[30]. We can also help them reduce their bad habits of procrastination through learning about their habits and ways of living, exploring the impacts of procrastination.

6. Conclusion

The conclusions of this study are as follows: (1) Future time orientation, career adaptability and procrastination had significant differences in some demographic variables. (2) There was a significant positive correlation between future time orientation and career adaptability. There was a significant

negative correlation between procrastination and future time orientation and career adaptability. (3) Procrastination partially had mediating effects on the relationship between future orientation and career adaptability.

7. Limitations and implications for Further Research

The sample size in this study is large, but the sample size is uneven. There are some problems such as the large number of female samples, the small number of graduate students and the small number of international students. In addition, there are fewer related studies for college since past studies focus on high school students. Besides, sample types are simple, lacking comparison, and future studies can diversify sample types. Finally, procrastination in this study refers to procrastination in general. In the study targeting students, procrastination can be broken down into academic procrastination and employment procrastination.

References

- [1] YANG Yumeng, WANG Junwu, SUN Shiyue, Influence of future orientation on academic procrastination in middle school students: The mediating role of emotional resilience, *China Journal of Health Psychology*, (2020), Vol.28, No.7. DOI: <http://dx.doi.org/10.13342/j.cnki.cjhp.2020.07.027>
- [2] XIE Xiaodong, YU Chengfu, and LI Dingding, The relationship between future orientation and learning burnout among adolescents in the Pearl River Delta: the mediating role of coping styles. *China Journal of Health Psychology*, (2016), Vol.24, No.10, pp.1468–72. DOI: <https://doi.org/10.13342/j.cnki.cjhp.2016.10.009>
- [3] BING Qian, and FENG Yiqiao, The role of the development of future orientation in the career planning of secondary vocational students. *Education and Occupation*, (2013), No.24, pp.88–89.
- [4] LIAO Yanfang, The Impacts of Experiential Career Group Counseling on Future Orientation of High School Students, Fujian Normal University, Master Thesis, (2017)
- [5] M. L. Savickas, The theory and practice of career construction, *Career development and counseling: Putting theory and research to work*, (2005), Vol.1, pp.42-70.
- [6] D. E. Super, E. G. Knasel, The Development of a Model, Specifications, and Sample Items for Measuring Career Adaptability (vocational Maturity) in Young Blue-collar Workers: Final Report to Canada Employment and Immigration, National Institute for Careers Education and Counselling, (1979)
- [7] M. C. Ginevra, P. Magnano, E. Lodi, C. Annovazzi, E. Camussi, P. Patrizi, L. Nota, The role of career adaptability and courage on life satisfaction in adolescence, *Journal of adolescence*, (2018), Vol.62, pp.1-8. DOI: <https://doi.org/10.1016/j.adolescence.2017.11.002>
- [8] J. Rossier, Career adaptability and life designing, *Hogrefe*, (2015)
- [9] J. Rossier, G. Zecca, S. D. Stauffer, C. Maggiori, J. P. Dauwalder, Career Adaptabilities Scale in a French-speaking Swiss sample: Psychometric properties and relationships to personality and work engagement, *Journal of Vocational behavior*, (2012), Vol.80, No.3, pp.734-743. DOI: <https://doi.org/10.1016/j.jvb.2012.01.004>
- [10] Germeijs, V., & Verschuere, K, High school students' career decision-making process: Consequences for choice implementation in higher education, *Journal of vocational behavior*, (2007), Vol.70, No.2, pp. 223-241. DOI: <https://doi.org/10.1016/j.jvb.2006.10.004>
- [11] Urbanaviciute, I., Kairys, A., Pociute, B., & Liniauskaitė, A, Career adaptability in Lithuania: A test of psychometric properties and a theoretical model. *Journal of Vocational Behavior*,(2014),Vol. 85, No.3, pp. 433-442. DOI: <https://doi.org/10.1016/j.jvb.2014.09.005>

- [12] P. Steel, The Nature of Procrastination: A Meta-Analytic and Theoretical Review of Quintessential Self-Regulatory Failure, *Psychological Bulletin*, (2007), Vol.133, No.1, pp.65-94.
DOI: <https://doi.org/10.1037/0033-2909.133.1.65>
- [13] T. Gjesme, On the concept of future time orientation: Considerations of some functions' and measurements' implications, *International journal of psychology*, (1983), Vol.18, No.1-4, pp.443-461.
DOI: <https://doi.org/10.1080/00207598308247493>
- [14] J. R. Nuttin *Future time perspective and motivation: Theory and research method*, Leuven-Hillsdale: Leuven University Press-Erlbaum, (1985)
DOI: <https://doi.org/10.4324/9781315802244>
- [15] J. E. Nurmi, How do adolescents see their future: A review of the development of adolescents' future orientate-on and planning, *Developmental Review*, (1991), Vol.11, pp.1-59.
DOI: [https://doi.org/10.1016/0273-2297\(91\)90002-6](https://doi.org/10.1016/0273-2297(91)90002-6)
- [16] C. Cabras, M. Mondo, Future orientation as a mediator between career adaptability and life satisfaction i-n university students, *Journal of Career Development*, (2018), Vol.45, No.6, pp.597-609.
DOI: <https://doi.org/10.1177/0894845317727616>
- [17] Wang Dan, A study on future orientation promotes learning engagement of vocational school students, Huaibei Normal University, Master Thesis, (2018)
- [18] M. C. Ginevra, P. Magnano, E. Lodi, C. Annovazzi, E. Camussi, P. Patrizi, L. Nota, The role of career adaptability and courage on life satisfaction in adolescence, *Journal of adolescence*, (2018), Vol.62, pp.1-8.
DOI: <https://doi.org/10.1016/j.adolescence.2017.11.002>
- [19] D. E. Super, E. G. Knasel, Career development in adulthood: Some theoretical problems and a possible solution, *British journal of guidance and counselling*, (1981), Vol.9, No.2, pp.194-201.
DOI: <https://doi.org/10.1080/03069888108258214>
- [20] PANG Weiguo, HAN Guining, Study on the Popularity and Causes of Academic Procrastination of Chinese Undergraduates, *Tsinghua Journal of Education*, (2009), Vol.30, No.6, pp.59-65.
- [21] GAN Liangmei, The Correlation Research Between Procrastination and Personality Academic Performance of Undergraduates, Nanjing University, Master Thesis, (2007)
- [22] A. Gareau, M. Chamandy, K. Kljajic, P. Gaudreau, The detrimental effect of academic procrastination on sub-sequent grades: the mediating role of coping over and above past achievement and working memory capacity, *Anxiety, Stress, and Coping*, (2019), Vol.32, No.2, pp.141-154.
DOI: <https://doi.org/10.1080/10615806.2018.1543763>
- [23] SHAN Hongbo, ZHANG Luyao, WEI Min, XIN Yongjuan, QUAN Shanai, LI Yan, Mediating Effect of Self-control on Relationship between Procrastination and Anxiety in College Students, *Chinese Mental Health Journal*, (2016), Vol.30, No.8, pp.624-628.
DOI: <http://dx.doi.org/10.3969/j.issn.1000-6729.2016.08.012>
- [24] D. M. Tice, R. F. Baumeister, Longitudinal Study of Procrastination, Performance, Stress, and Health: The Costs and Benefits of Dawdling, *Psychological Science*, (1997), Vol.8, No.6, pp.454-458.
DOI: <https://doi.org/10.1111/j.1467-9280.1997.tb00460.x>
- [25] ZHANG Yang, The Application Study on Efficiency of Group Career Guidance on College Students' Academic Procrastination, Liaoning Normal University, Master Thesis, (2013)
- [26] ZHANG Jie, Research on Academic Career Training in Improving University Students' Academic Procrastination, *Journal of Weifang University*, (2016), Vol.16, No.5, pp.116-118.
DOI: <http://dx.doi.org/10.3969/j.issn.1671-4288.2016.05.031>
- [27] WU Shuwan, A Study on Career Adaptability for University Students and Related Research, National Chiayi University, Master Thesis, (2008)
- [28] WAN Hengyang, The Relationship between Career Adaptability, Perceived Barriers and Life Satisfaction of High School Students, Nanjing Normal University, Master Thesis, (2014)

- [29] LI Qianyi, Effects of Future Orientation and Self-control on Academic Procrastination of Senior High School Students and Its Intervention, Jilin Normal University, Master Thesis, (2021)
- [30] TENG Shanjie, LING Hairong, and CHEN Shi, Procrastination Trait and Future Time Perspective among College Students: The Chain Mediating Roles of Future Work Self Silence and Career Adaptability, *Psychology: Techniques and Applications*, (2022), Vol.10, No.3, pp.174-182.
DOI: <http://dx.doi.org/10.16842/j.cnki.issn2095-5588.2022.03.004>