

The Interactive Effect of Proactive Personality and Career Exploration on Graduating Students' Well-Being in School-to-Work Transition

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Abstract: Based on basic psychological needs theory of self-determination theory, this study investigates the interaction effect of proactive personality and career exploration on well-being for graduating students during school-to-work transition. Using a survey sample of 216 graduating students in China, we found that: 1) Proactive personality had a positive relationship with well-being. 2) Career decision-making self-efficacy mediated the relationship between proactive personality and well-being. 3) Career exploration negatively moderated the relationship between proactive personality and career decision-making self-efficacy. The relationship between proactive personality and career decision-making self-efficacy was stronger when career exploration was lower. 4) Career exploration also negatively moderated the whole mediation model. When career exploration was lower, the relationship between proactive personality and well-being through career decision-making self-efficacy was stronger. Therefore, it is useful to cultivate individuals' proactive personality or encourage them to conduct more career exploration behaviors to obtain career decision-making self-efficacy and well-being.

Keywords: Proactive personality; career exploration; career decision-making self-efficacy; well-being; graduating students; school-to-work transition

1 Introduction

Obtaining a “good life” is a goal of people all over the world. People pursue their own “good life” through various ways [1-3]. Some researchers believe that a “good life” refers to a flourishing life with a high level of well-being [3,4]. But there are only less than 20% of people who have a “good life” [3,5]. Therefore, it is worthy of attention that how people could gain well-being.

Among various population groups, emerging adults (aged from 18 to 29) have been described as one of the most stressful groups in part because of high levels of instability and uncertainty [6]. Graduating students are a special subgroup of emerging adults as they are up against a context of school-to-work transition. According to Super's [7] career development theory, graduating students are in the exploration stage of life. At this stage, individuals try to explore their career paths through school activities and social practices, and have a further understanding of themselves and their vocational interests. Under this circumstance, they begin to make decisions in their early career paths. With competition in labor market becoming more and more rigorous than ever, it is likely for graduating students to be trapped in psychological problems during job hunting. In this case, it is necessary to explore ways for graduating students to improve subjective well-being in the process of school-to-work transition.

Well-being is not only a goal in one's life, but also a popular research topic. In this research field, researchers have debated on the topic that whether subjective well-being is a trait or a state [8]. Some researchers believe that subjective well-being is the occurrence of positive affect and the absence of



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negative affect [9,10]. This view was labelled “hedonism” [10]. The other view was called “eudaimonism”, which conveyed the belief that well-being consisted of self-actualization and fulfillment [11]. One’s self-actualization will take a long time to achieve. However, participants in this study were at an early stage in careers and most of them may have not achieved self-actualization. Therefore, we adopted hedonistic view of subjective well-being in this research.

Besides, studies indicated that positive emotions were important as a key dimension of subjective well-being [12] and could significantly predict one’s well-being [13-16]. According to broaden-and-build theory of positive emotions [17,18], positive emotions could “broaden people’s momentary thought-action repertoires and build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources” (p.3) [18]. As a result, if individuals could experience positive emotions frequently, they will build resources and achieve self-actualization in the long run. Based on these ideas, we followed previous studies [19,20] to use the positive affect subscale of positive and negative affect scale [21] to measure well-being.

There are fruitful studies regarding to predictors of well-being, among which a large number of studies indicated that personality traits played an important role [22-24]. Proactive personality has earned much attention in recent years and a large number of studies have examined positive effects of proactive personality on one’s career development [25-27]. However, comparing to studies of proactive personality in the field of career development, the relationship between proactive personality and well-being still received insufficient attention. Career decision-making self-efficacy is the core concept of self-efficacy in career domain. This concept reflects the integration of career development and well-being. In this case, career decision-making self-efficacy may play a mediating role in the relationship of proactive personality and well-being in the process of job hunting.

With related researches going deep, boundary conditions for proactive personality to exert positive effects have become a new research focus [28]. This is in accordance with Bateman et al. [29] as they believed that the positive effect of proactive personality may be influenced by environment. Taking a dispositional approach, Bateman et al. [29] considered proactive personality as a tendency to conduct proactive behaviors and believed that proactive behaviors were a bridge between proactive personality and environment, as people can alter their current circumstances by conducting proactive behaviors [29,30]. But proactive behaviors such as career exploration could also be activated by situations or contexts [31-33]. Due to random contexts in life, proactive personality and proactive behaviors may differ in various situations and their relationship may be uncertain. As a result, to ascertain the relationship between proactive personality and proactive behaviors, it is necessary to carry out concerned studies in a particular context. This study keeps an eye on graduating students in universities. Most of graduating students are confronted with school-to-work transition and they are in a situation where job searching is very urgent for them. As a result, they may conduct more career exploration behaviors even if they don’t have proactive personality. This may influence the effect of proactive personality.

Overall, this study proposes a moderated mediation model where proactive personality has an indirect effect on well-being through career decision-making self-efficacy, with career exploration moderating the first stage. The aims of this study are twofold: a) to investigate the interactive effect of proactive personality and proactive behaviors, specifically, career exploration, in the context of school-to-work transition for graduating students; b) to test the proposed research model shown in Fig. 1.



Figure 1: Research model

2 Hypotheses Development

2.1 Proactive Personality and Well-being

According to basic needs theory of self-determination theory, individuals could obtain well-being through the fulfilment of three innate psychological needs, namely, the need for competence, relatedness and autonomy. The need for competence refers to one's sense of confidence and effectance in action for internal and external environments. The need for relatedness is regard to one's feeling of connection with others, as well as concern and care from others. The need for autonomy is a sense of choice and volition in the regulation of one's behaviors [9,34,35].

Proactive personality refers to a disposition of individuals to take actions and influence the surrounding environment [29,36-38]. Facing multiple career choices, people with proactive personality tend to take actions and seek for relevant information and ways to help make their own decisions [39]. As a result, their need for autonomy could be satisfied. Initiative people are future-oriented and have little fear of changes. They usually show strong career adaptability to cope with challenges in today's protean career era [40]. Research indicated that proactive personality enabled individuals to focus on self-improvement [41] and achieve more career success [27,38]. Therefore, individuals' need for competency could be sated by high level of proactive personality. Besides, studies have shown that highly motivated people often take initiative to build relationships with others, such as leader-member exchange relationship [42] and mentoring relationship [43], which can satisfy the need for relatedness. In conclusion, proactive personality can satisfy one's need for autonomy, need for competency and need for relatedness so as to improve one's well-being. Thus, this study proposes the following hypothesis:

H1: Proactive personality is positively related to one's well-being.

2.2 The Mediating Effect of Career Decision-Making Self-Efficacy

Career decision-making self-efficacy, proposed by Betz et al. [44], refers to the belief of individuals in their ability to obtain the expected outcomes of career decisions [44,45]. Individuals with high initiative will manage their career spontaneously, so that they can more easily identify and grasp career opportunities and continuously improve their professional skills [25,40]. These behaviors can satisfy the need for competency, and consequently improve one's confidence in making the right career decisions and obtaining career success. In addition, empirical research showed that proactive personality could positively predict career decision-making self-efficacy. Proactive individuals are more likely to create conditions in career development and more active in pursuing career success. Such positive characteristics of proactive personality are considered as critical sense of self-efficacy and in turn contribute to better occupational outcomes [46].

Career decision-making self-efficacy can promote one's well-being. Individuals with a high level of career decision-making self-efficacy are inclined to adopt a problem-focused coping style which involves efforts to solve problems or transform difficult situations and obtain more resources like social support [47,48]. Thus, their needs for autonomy and relatedness could be met. Besides, positive coping style can regulate people's psychological process and reduce negative feelings, so that they can obtain more

subjective well-being [49-51]. Thus, proactive personality can satisfy people's needs for autonomy, competency and relatedness through career decision-making self-efficacy. According to basic needs theory, people can feel more subjective well-being if these three basic psychological needs are met. Therefore, this study proposes the following hypothesis:

H2: Career decision-making self-efficacy mediates the relationship between proactive personality and well-being.

2.3 The Moderating Effect of Career Exploration

Career exploration is the first step for graduating students to start off their careers. In this process, they collect and analyze career-related (e.g., work, industries, organizations) and self-related information (e.g., characteristics, vocational interests) through the exploration of inner self and external environment [52].

For early adults, related studies believed that career exploration was under the influence of individual factors such as motivation [53] and personality [54], as well as external factors like parental behaviors [54-56]. Outcomes of career exploration in early adulthood mainly include career decision-making process, career knowledge and career adaptability [57,58]. For example, career exploration predicts individuals' career decision-making self-efficacy [59] and career adaptability [56]. Career exploration can also help to clarify occupational orientation and predict future career success and job satisfaction [60-62].

In the process of job hunting, individuals will conduct career exploration such as searching for career-related information. When conducting more career exploration behaviors, people with lower proactivity will acquire resources and information prepared for career decision-making, even if they are short of internal motivation. Therefore, they can feel more career decision-making self-efficacy and subjective well-being. Proactive people with high level of career exploration will also obtain career-related resources and information contributing to their career decision-making self-efficacy and subjective well-being. In this case, the effect of proactive personality on subjective well-being through career decision-making self-efficacy will be weaker.

When career exploration is at a relatively low level, the significance of proactive personality becomes apparent. People with lower proactivity will lack of internal motivation and information about their career development. Hence, they will have less confidence in their own career decisions and this will lead to lower well-being. Whereas people with high level of proactivity will improve their confidence in career decision-making in other ways so as to achieve higher career decision-making self-efficacy and well-being. As a result, when career exploration is at low level, the effect of proactive personality on well-being through career decision-making self-efficacy will become stronger. Therefore, this study proposes the following hypothesis:

H3: Career exploration negatively moderates the first stage of the mediating effect. When career exploration is at high level, the effect of proactive personality on well-being through career decision-making self-efficacy will be weaker. When career exploration is at low level, the effect of proactive personality on well-being through career decision-making self-efficacy will be stronger.

3 Methods

3.1 Participants and Procedure

Participants in this study were graduating students in universities or colleges in China. In this study, a time-lagged method was used when collecting data. Questionnaires were sent directly to participants through a Chinese social network application called Wechat and were finished online. In Time 1 (T1), data of proactive personality, career exploration, demographic characteristics and family socioeconomic status were collected. One month later, in Time 2 (T2), career decision-making self-efficacy and well-being were measured. Wechat ID was used to match data of T1 and T2 as every Wechat account could only have one fixed Wechat ID. In T1, we sent 600 questionnaires and received 413 valid responses. In T2, we received 216 valid responses. The effective rate was 36.00%. 66.40% of the participants were female and the average age was 21.79 (SD = 1.85).

3.2 Measures

3.2.1 Proactive Personality

Proactive personality was measured using the scale translated and revised by Shang et al. [28] from Bateman's et al. [29] Proactive Personality Scale (PPS). This scale was tested and validated in previous studies [63]. The original proactive personality scale has 17 items and Chinese version of proactive personality scale has 11 items after revision. Participants rated on a 7-point Likert scale (from 1 = *strongly disagree* to 7 = *strongly agree*). A sample item was "I am constantly on the lookout for new ways to improve my life." The Cronbach's alpha was 0.84.

3.2.2 Career Exploration

Career exploration was measured with two subscales (5 items for self-exploration and 6 items for environmental exploration) from the Career Exploration Survey [52]. These two subscales were translated in Chinese and were validated by empirical studies [56,63,64]. The survey asked questions about individuals' career exploration behaviors in the past three months. A sample item of the self-exploration scale was: "Reflected on how my past integrates with my future". A sample item of the environmental exploration scale was: "Sought information on specific areas of career interest". Li et al. [64] found that self-exploration and environmental exploration had a strong correlation ($r = 0.55$). So this study used the mean score of these two factors as the indicator of career exploration [64]. Participants rated on a 5-point Likert scale (from 1 = *little* to 5 = *a great deal*). The Cronbach's alpha was 0.87.

3.2.3 Career Decision-Making Self-Efficacy

Taylor et al. [45] developed the original Career Decision-Making Self-Efficacy Scale (CDMSE). Betz et al. [65] pruned the original scale to a short form with 25 items (CDMSE-SF). This study used CDMSE-SF to measure career decision-making self-efficacy. Participants rated on a 7-point Likert scale (from 1 = *no confidence at all* to 7 = *complete confidence*). Kuang et al. [66] translated and tested Chinese version of CDMSE-SF. Results showed that Chinese version of CDMSE-SF had good reliability and validity [66]. A sample item was "Choose a major or career that will fit your interests." The Cronbach's alpha was 0.95.

3.2.4 Well-Being

In this study, well-being was measured by positive affect subscale of the positive affect and negative affect scale (PANAS) [21] following a previous study [19]. There were 10 adjectives describing positive emotional experiences such as "exciting" "interesting" "enthusiastic". Participants were asked to evaluate the extent to which they had experienced these affects during two surveys on a 7-point Likert scale (from 1 = *very slightly or not at all* to 7 = *very much*). The Cronbach's alpha was 0.89.

3.2.5 Control Variables

Gender and age. The relationship between gender and subjective well-being is still undefined [67]. But previous research indicated that gender differences may influence subjective well-being [68]. Besides, age is also a causal factor of subjective well-being [69]. Therefore, this study controlled for the effect of gender and age.

Family socioeconomic status. A meta-analysis showed that socioeconomic status was significantly related to subjective well-being [70]. For graduating students, their socioeconomic status was often reflected by their family socioeconomic status. In addition, Conger et al. [71] found that children in high family socioeconomic status could attain more economic, educational and career resources which led to more well-being. As a result, this study controlled for the effect of family socioeconomic status. In most relevant studies, family socioeconomic status was measured by parents' educational level, career status and family income [72]. This study measured family socioeconomic status in accordance with previous studies. Participants were asked to choose one option which was consistent with real situation out of four options. For parents' educational level, those options were 1 = *junior high school and below*, 2 = *high school*, 3 =

undergraduate or junior college, 4 = postgraduate and above. For parents' career status, those options were *1 = staff person, 2 = first-line manager, 3 = middle-level manager, 4 = senior manager.* For family income, those options were *1 = low, 2 = relatively low, 3 = relatively high, 4 = high.*

3.3 Data Analysis

Previous studies indicated that proactive personality was related to career exploration [63]. Therefore, this study used SPSS 22.0 to conduct test for multicollinearity, as well as descriptive statistics and correlation analysis. Before testing the hypotheses, this study applied Mplus 7.0 to conduct confirmatory factor analysis (CFA).

In order to test indirect effects and the moderated mediation model, Preacher et al. [73] recommended a method called bootstrapping and a tool called Process. This study employed Model 4 and Model 7 of Process using bootstrapping approach to test indirect and the moderated mediation model. Bootstrap sample size was 5000. All variables were standardized before data analysis.

4 Results

4.1 Descriptive Statistics and Correlations

Tab. 1 presented the means, standard deviations and Pearson correlations of the measured variables. According to Tab. 1, proactive personality had a positive relationship with career decision-making self-efficacy ($r = 0.54, p < 0.001$) and well-being ($r = 0.38, p < 0.001$), supporting Hypothesis 1.

Table 1: Descriptive statistics and correlations ($N = 216$)

No.	Variables	Mean	SD	1	2	3	4	5	6
1	PP	5.27	0.84	—					
2	CE	3.22	0.73	0.33***	—				
3	CDSE	4.92	0.98	0.54***	0.63***	—			
4	WB	4.92	1.08	0.38***	0.49***	0.54***	—		
5	Gender	—	—	0.03	-0.11	-0.08	-0.04	—	
6	Age	21.79	1.85	-0.10	0.13*	0.10	0.07	-0.28***	—
7	FSES	1.75	0.63	-0.16*	0.28***	0.07	0.08	-0.12	0.27***

Notes. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. PP = proactive personality. CE = career exploration. CDSE = career decision-making self-efficacy. WB = well-being. FSES = family socioeconomic status.

4.2 Test of Multicollinearity

Before hypotheses test, test of multicollinearity was conducted. Tolerance and VIF were used as indicators of multicollinearity. If Tolerance was between 0 and 1, VIF was above 0.1 meanwhile below 10, there was no multicollinearity between independent variables [74].

Before tests of multicollinearity, all variables were standardized. Results were that Tolerances of variables were between 0.48 and 0.61, VIFs were between 1.09 and 2.14. This result suggested that there was no significant multicollinearity in this study.

4.3 Measurement Model Analysis

In this study, we used confirmatory factor analysis (CFA) to test discriminant validity of the multi-dimension scale (proactive personality, career success criteria clarity, family socioeconomic status and career decision-making self-efficacy). Before CFA, we conducted the KMO test and the Bartlett's test of sphericity. The KMO value of 0.91 and the result of Bartlett's test sphericity ($p < 0.001$) indicated that the sample was suitable for factor analysis [75].

In this paper, we used item pairs when conducting CFA in order to make the dataset more reliable [76],

more normally distributed [77] and more stable [78]. Following established practice [79,80], we used fit indices of χ^2/df , SRMR (standardized root-mean-square residual), CFI (comparative fit index), TLI (Tucker-Lewis index) and RMSEA (root mean square error of approximation) to evaluate model fit.

Tab. 2 showed the results of CFA in this study. It was noticeable that the four-factor model fit with data best, as compared with other three models. This result suggested that the hypothesized model of four factors was better than others. Distinctiveness of all scales used in this study was ensured.

Table 2: CFA of the items ($N = 216$)

Model	χ^2	Df	χ^2/df	SRMR	CFI	TLI	RMSEA
Four-factor model	567.34	399	1.42	0.05	0.95	0.94	0.04
Three-factor model	829.68	402	2.06	0.07	0.87	0.86	0.08
Two-factor model	1147.08	404	2.84	0.09	0.77	0.75	0.09
One-factor model	1277.53	405	3.15	0.10	0.73	0.71	0.09

Notes. Four-factor model = proactive personality, career exploration, career decision-making self-efficacy, well-being. Three-factor model = proactive personality + career exploration, career decision-making self-efficacy, well-being. Two-factor model = proactive personality + career exploration, career decision-making self-efficacy + well-being. One-factor model = proactive personality + career exploration + career decision-making self-efficacy + well-being.

4.4 Test of Hypotheses

Tab. 3 showed the results of indirect effect. Eq. (1) in Tab. 3 showed the results of the total effect model. Eqs. (2) and (3) showed the results of indirect effect. In all 3 equations, we controlled for the effect of gender, age and family socioeconomic status.

As Eq. (1) showed, proactive personality had a significantly positive effect on well-being ($\beta = 0.41, p < 0.001$), supporting Hypothesis 1. In Eq. (2), proactive personality was positively related to career decision-making self-efficacy ($\beta = 0.57, p < 0.001$). In equation 3, both proactive personality and career decision-making self-efficacy positively predicted well-being ($\beta = 0.15, p < 0.05$; $\beta = 0.45, p < 0.001$, respectively). In Tab. 4, 95% confidence interval of career decision-making self-efficacy was [0.14, 0.39], which didn't include zero. Therefore, Hypothesis 2 was supported. Career decision-making self-efficacy partly mediated the relationship between proactive personality and well-being.

Table 3: Results of mediation model ($N = 216$)

Variables	Eq. (1) DV: WB			Eq. (2) DV: CDSE			Eq. (3) DV: WB		
	β	SE	t	β	SE	t	β	SE	t
Gender	-0.02	0.07	-0.24	-0.05	0.06	-0.80	0.01	0.06	0.09
Age	0.07	0.07	1.05	0.10	0.06	1.69	0.03	0.06	0.41
FSES	0.13	0.07	1.92	0.13	0.06	2.17	0.07	0.06	1.13
PP	0.41	0.06	6.42***	0.57	0.06	10.08***	0.15	0.07	2.14*
CDSE							0.45	0.07	6.32***
R^2	0.17			0.33			0.30		
F	10.90***			26.48***			18.32***		

Notes. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. DV = dependent variable. FSES = family socioeconomic status. PP = proactive personality. CDSE = career decision-making self-efficacy. WB = well-being.

Table 4: Test of indirect effect ($N = 216$)

Mediator	β	SE	LLCI	ULCI
Career decision-making self-efficacy	.26	0.06	0.14	0.39

Tab. 5 showed the results of the moderated mediation model. As in Eq. (1), proactive personality positively predicted career decision-making self-efficacy ($\beta = 0.39, p < 0.001$). And the interaction variable (proactive personality \times career exploration) significantly predicted career decision-making self-efficacy ($\beta = -0.19, p < 0.001$). In Eq. (2), proactive personality was still positively related to well-being ($\beta = 0.15, p < 0.05$) and career decision-making self-efficacy positively predicted well-being ($\beta = 0.45, p < 0.001$).

Table 5: Results of the moderated mediation model ($N = 216$)

Variables	Eq. (1)			Eq. (2)		
	DV: CDSE			DV: WB		
	β	SE	t	β	SE	t
Gender	0.00	0.05	0.02	0.01	0.06	0.09
Age	0.07	0.05	1.53	0.03	0.06	0.41
FSES	-0.04	0.05	-0.80	0.07	0.06	1.13
PP	0.39	0.05	7.67***	0.15	0.07	2.14*
CE	0.52	0.05	10.02***			
PP \times CE	-0.19	0.05	-4.28***			
CDSE				0.45	0.07	6.32***
R^2	0.57			0.30		
F	46.06***			18.32***		

Notes. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. DV = dependent variable. FSES = family socioeconomic status. PP = proactive personality. CE = career exploration. PP \times CE = the interaction of proactive personality and career exploration. CDSE = career decision-making self-efficacy. WB = well-being.

To visualize the moderating effect of career exploration, we further conducted simple slope test. Fig. 2 and Tab. 6 depicted the relationship between proactive personality and career decision-making self-efficacy at both low (one SD below the mean) and high (one SD above the mean) levels of career exploration. As seen in Fig. 2, the two lines had an obvious tendency to cross which indicated that the moderating effect of career exploration was significant. Proactive personality was more strongly related to career decision-making self-efficacy when career exploration was lower ($\beta = 0.26$, 95% CI = [0.14, 0.39]). The relationship between proactive personality and career decision-making self-efficacy was weaker when career exploration was higher ($\beta = 0.09$, 95% CI = [0.02, 0.20]). Therefore, hypothesis 3 was supported.

Table 6: Results of conditional indirect effect ($N = 216$)

Career Exploration	Effect	Boot SE	95%CI	
			LLCI	ULCI
-1.00 (M -1 SD)	0.26	0.07	0.14	0.39
0.00 (M)	0.17	0.04	0.10	0.26
1.00 (M + 1 SD)	0.09	0.05	0.02	0.20

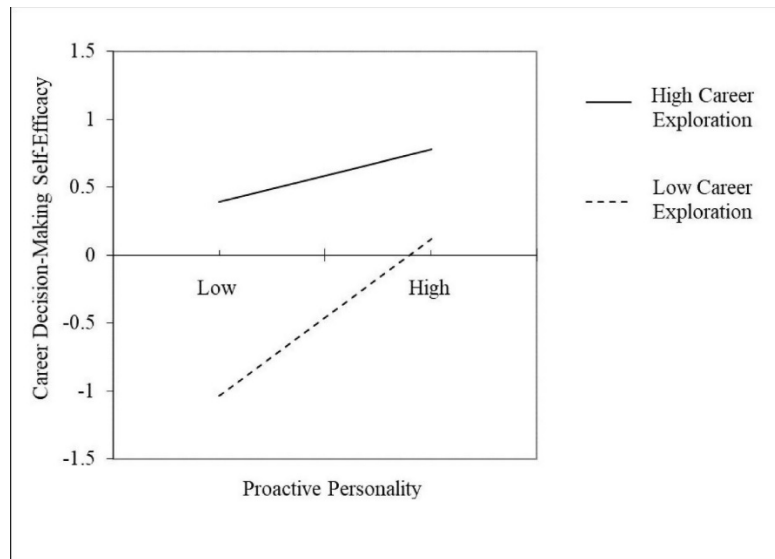


Figure 2: Moderating effect of career exploration

5 Discussion

Transition from school to work has a crucial impact on graduating students' future career development [81-83]. They may suffer from anxiety and stress in the process of job searching [6]. Those who are proactive can take the initiative and deal with this situation better [39,40]. However, cultivating proactive personality is not the only way to achieve well-being. From a perspective of self-determination theory, graduating students could improve their own subjective well-being in school-to-work transition by satisfying the need for competence, relatedness and autonomy [9,34,35] through reasonable behaviors such as career exploration.

As an indispensable stage in career development, career exploration could help graduating students to know more about themselves (e.g., work values, personal attributes) and external environment (e.g., labor market and social reality). During this process, graduating students will acquire career decision-making self-efficacy and those needs leading to subjective well-being could be met. Finally, under the special school-to-work context, even people with lower proactivity could obtain happiness after conducting career exploration behaviors.

5.1 Theoretical and Practical Implications

This study based on basic needs theory of self determination theory. This theory has been widely tested and used in work or education field [84,85]. This study contributed to the application of this theory in graduating students' career development. Besides, there is a lack of research about the boundary conditions of proactive personality [28]. Although research laid emphasis on environmental factors to be moderators for the effect of proactive personality, with the ambiguity of the relationship between proactive personality and proactive behaviors due to random contexts, this study set the background in school-to-work transition and regarded career exploration as a moderator in the relationship between proactive personality and well-being through career decision-making self-efficacy. Future studies may continue to explore the relationship between proactive personality and proactive behaviors in a particular context.

This study also has several practical implications. As proactive personality may predict one's career decision-making self-efficacy, well-being and career success, it is important for families, schools to cultivate adolescents' proactive personality. But it's worth noting that proactive personality is not the only way to success and well-being. Proactive behaviors such as career exploration may also contribute to one's career success and well-being as long as those behaviors could be activated. Cultivating a kind of

personality could be hard and time-consuming. But we can provide a proper environment or external forces to activate specific behaviors. This method also conforms to cognitive behavioral therapy (CBT). This study assumed that career exploration could to some extent make up for disadvantages due to a lack of proactive personality. Hence, career counselors could adopt a perspective of CBT to make use of career exploration to improve one's career decision-making self-efficacy and well-being in career development. This could expand the applied range of cognitive behavioral therapy to our daily life from the field of clinical medicine.

5.2 Limitations and Future Research

There are several limitations in this study. First, this study tried to discuss the effect of proactive personality and proactive career behaviors on individuals' well-being, whereas proactive career behaviors include not only career exploration, but also other behaviors such as career self-management [86,87]. Future research could compare the effect of different proactive career behaviors on life success and career success. Second, we adopted the positive affect subscale in the positive and negative affect scale (PANAS) to measure well-being. Future research could use a more comprehensive method to measure well-being. Third, we focused on the interaction of proactive personality and career exploration under the special context of school-to-work transition. Future research could pay attention to other contexts and investigate the interaction of proactive personality and proactive behaviors on other outcomes.

Previous researches showed that there were lots of causal factors of career success, such as personality, career behaviors, human capital [88]. However, few studies pay attention to the effect of those factors on life success such as subjective well-being [89]. This study responds to previous studies. Future studies can move on to further discussion about the relationship between career success and life success as well as the interaction or explanatory power of different causal factors.

6 Conclusion

This study paid close attention to graduating students and investigated the interactive effect of proactive personality and career exploration on well-being through career decision-making self-efficacy in school-to-work transition. This study found that career decision-making self-efficacy mediated the relationship between proactive personality and well-being, with career exploration negatively moderating the first stage of the mediation. Therefore, except for proactive personality, conducting more career exploration behaviors can also promote one's well-being through the enhancement of career decision-making self-efficacy.

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