Article

For the Future Sustainable Career Development of College Students: Exploring the Impact of Core Self-Evaluation and Career Calling on Career Decision-Making Difficulty

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Abstract: As one of the important factors to predict future sustainable development, the diffi-culty of career decision-making has aroused widespread concern in psychological research. Core self-evaluation and career calling have a positive impact on college students' career development, employees' organizational behavior, life satisfaction, and life meaning, thus promoting individual sustainable development. Based on the Social Cognitive Career Theory (SCCT), this study mainly discusses the positive role of core self-evaluation and career calling in overcoming college students' career decision-making difficulties, which provides support for strengthening theory and proposing educational countermeasures. This study investigates the relationship among core self-evaluation, career calling, and career decision-making difficulties for 483 Chinese college students. The results show that core self-evaluation positively predicts career calling, while core self-evaluation and career calling negatively predict career decision-making difficulties. Accordingly, career calling plays a partial mediating role between core self-evaluation and career decision-making difficulties. Therefore, college students' career calling can be enhanced by improving their core self-evaluation, so as to further solve the difficulties in career decision-making. In the future, effective strategies should be taken to reduce the career decision-making difficulty for students' sustainable development.

Keywords: Chinese college students; career decision-making difficulties; core self-evaluation; career calling; mediating role; sustainable development

1. Introduction

Nowadays, the employment of college students has attracted more and more public attention, especially the sustainable development of individual occupations [1,2]. As the main reserve resources of the future labor market, college students' future career develop-ment and contributions to society cannot be ignored [3]. How can college students adapt to the social development trend as soon as possible, and make definite their future career development? This requires college students to be able to wisely choose their own careers and realize their own value. However, especially in the current epidemic (COVID-19), the employment problem of college students has become particularly serious [4]. The main reasons are the individual occupational mismatch and feeble career planning, as well as the external environment caused by market talent requirements and financial crises [5–7]. Col-lege students suffer from various difficulties due to their own and environmental reasons in the process of career decision-making, which may affect their individual psychological state and social functions over time [8]. One of the main difficulties is career decision-making. Career decision-making difficulties refer to various difficulties or problems faced by individuals in the process of career decision-making, including lack of readiness (LR),

lack of information (LI), and inconsistent information (II) [5]. College students have certain career decision-making difficulties due to the lack of occupational information and self-information [9]. The career decision-making difficulties not only affect college students' employment, but also affect their solutions to the problems in career development [10].

With the promotion of the Career Development Theory [11], it is not only necessary to solve the current employment problem, but also to pay attention so as to cultivate college students' career planning and exploration abilities in advance [12]. Career decision-making is one of the important components of career development. College students will inevitably encounter various difficulties in the process of career decision-making, which hinder them from making the best decisions [13]. Faced with these difficulties, sometimes personality traits will play the same important role as emotional intelligence [14]. When college students have difficulties in making career decisions, it is necessary to analyze their own internal characteristics and drive their calling [15,16]. Some college students have difficulties in career decision-making because of a low level of core self-evaluation [17], lack of environment exploration [18], and lack of necessary occupational knowledge and skills in the key stages of determining career development goals [19]. As an individual's internal driving force, career calling shows a positive working attitude and the power to forge ahead in the career decision-making process, which can help individuals to enhance the recognition of their career development [20]. Therefore, it is of great significance for college students to have a high level of core self-evaluation and career calling when facing difficulties in career decision-making.

To sum up, in order for college students to choose a career smoothly and obtain employment, it is necessary to analyze from the long-term perspective of sustainable career development [21]. Therefore, based on the Social Cognitive Career Theory [22], this study aims to explore the mechanism of college students' core self-evaluation on career decision-making difficulties, and to explore whether career calling mediates their relationship, hoping to explore effective methods to solve career decision-making difficulties.

2. Theoretical Background and Hypotheses Development

2.1. Career Decision-Making Difficulties

Gati et al. (1996) define career decision-making difficulties as various difficulties encountered by individuals in the career decision-making process, which includes preparation for career decision-making [5]. In other words, career decision-making difficulties may already exist before the career decision-making process begins. According to the "ideal career decision-maker", Gati et al. (1996) divided career decision-making difficulties into the following three categories: lack of readiness before beginning the process of decision-making, lack of information, and inconsistent information during the process of career decision-making [5]. Saka and Gati (2008) further proposed the classification model of career decision-making difficulties (emotional and personality-related aspects of career decision-making difficulties) related to emotions and personality, which paid more attention to the emotional and personality factors in the source of career decision-making difficulties [23]. The measurement of career decision-making difficulties gradually emerged in the 1960s and 1970s. Up until now, there have been many kinds of measurement tools for career decision-making difficulty, including the Career Decision Scale (CDS) [24], Career Factor Inventory (CFI) [25], and Career Decision-Making Difficulty Questionnaire (CDDQ) [26,27]. Among them, CDDQ is the most widely used [28]. At present, researchers in many countries (such as China, South Korea, Turkey, and Croatia) have carried out localized verification on CDDQ [28–32]. Research has confirmed that CDDQ is a reliable and effective method for measuring an individual's performance of career decision-making difficulties.

Previous research on career decision-making difficulties mainly focused on the verification of scales [29,32], differences among cross-cultural groups [29,33], and the verification of the relationship between career decision-making difficulties and individual emotions and personality [32–35]. For example, some scholars studied the influence of personality

traits on career decision-making difficulties and found that a Big Five personality, including neuroticism, is correlated to three dimensions of difficulties [36,37]. In addition, previous research paid more attention to the impact of individual positive factors on career decision-making difficulties, including career adaptability [38], resilience [39], and core self-evaluation [17].

2.2. Core Self-Evaluation and Career Decision-Making Difficulties

Early research on career decision-making was based on the hypothesis of "complete rationality" in economics, following the "normative model", and emphasized the importance of cognitive factors in decision-making [40]. However, more studies have shown that individuals do not always use rational steps in the decision-making process, but are affected by personality factors [41,42]. Previous studies on the influence of personality on career decision-making difficulties have found that some personality variables related to self-perception and self-evaluation (how people view themselves) affect individual career decision-making [43]. For example, individuals with high self-esteem, self-identity, and self-efficacy experience fewer career decision-making difficulties [21,44].

Furthermore, scholars begin to pay attention to the impact of a positive and integrated self-concept, named core self-evaluation, on career decision-making difficulties [17,45]. Core self-evaluation refers to the most basic evaluation of an individual's own ability and value, which includes four elements: self-esteem, control point, general self-efficacy, and neuroticism [46]. At present, the research on core self-evaluation mainly focuses on the field of industrial and organizational psychology. Among them, research has been done on the relationships between core self-evaluation and various variables such as job performance [47], job satisfaction [48], and turnover intention [49,50]. Moreover, researchers have introduced core self-evaluation as a personality trait in the field of career [51,52].

Previous studies have also confirmed the influence and function of core self-evaluation on the career decision-making process [45]. Di Fabio and Palazzeschi (2012) showed that there is a correlation between core self-evaluation and career decision-making difficulties and career indecisiveness [53]. Kouumoundurou et al. (2011) explored the influence of core self-evaluation and family factors (family type and parents' authoritative style) on career decision-making difficulties in a 15-year-old Greek youth group [17], and found that, especially in the female group, the core self-evaluation had a significant influence on career decision-making difficulties. In the research of SCCT, self-efficacy has been found to be a trait that affects career decision-making [45]. The concept of core self-evaluation includes self-efficacy, that is, self-efficacy is the basis of core self-evaluation, so we assume that core self-evaluation will play a predictive role in career decision-making difficulties [54].

To summarize, the research on the relationship between core self-evaluation and career decision-making difficulties has a positive effect on career choice and career development. Therefore, combining these findings, the following assumption was made in this study.

Hypothesis 1 (H1). *Higher core self-evaluation is related to lower career decision-making difficulties and its three dimensions (lack of readiness, lack of information, and inconsistent information).*

2.3. The Mediating Role of Career Calling

The study of calling first appeared in the field of religion. As time goes by, religious meanings gradually fade. At present, the concept of career calling has not yet formed a unified definition [55]. Ballah et al. (1985) proposed that people have three different value orientations for their jobs, namely: job orientation, career orientation, and calling orientation [56]. People who hold job orientation think that a job is not the purpose of life, but a way to obtain the necessary material resources for life activities. Career-oriented individuals not only regard work as a channel to obtain material resources, but also try to constantly improve in their organizational structure so as to obtain higher social status, power, and self-esteem. Calling-oriented people regard work as an inseparable part of life, which means they work not for economic reward or career development,

but for realizing the individual value and making a social contribution through their work [57]. Following this conceptual description, Cardador et al. (2011) singled out calling separately, and defined it as an individual's view on his/her own work, that is, the work is purposeful, with intrinsic significance and value. Calling comes from external calls or inner feelings, so it is often shown as an incentive force [58]. Dik and Duffy (2009) defined calling as a transcendent summons, experienced as originating beyond the self, in order to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness, which holds other-oriented values and goals as primary sources of motivation [59]. Dobrow and Tosti-Kharas (2011) believe that calling is a consuming, meaningful passion that people experience toward a career domain [60]. It can be seen that calling embodies a driving force behind one's pursuit of vocational purposes and goals [61]. Previous research on calling has shown that calling is positively correlated with positive self-concept and core self-evaluation [62]. When individuals have positive self-evaluation, they are more likely to develop a calling. At the same time, an individual's calling is positively correlated with career decidedness and career choice comfort, and is negatively correlated with indecisiveness [63]. Considering the needs of this study and the localization of calling research in China, this study regards calling as a value orientation for occupation, and people with a calling regard work as having intrinsic significance and value.

According to SCCT, calling, which reflects outcome expectations, plays a key role in career selection. Individuals develop career calling through the self-evaluation of their experience in the basic social learning stage [54]. When individuals develop intrinsic work-related values, they are more likely to make career decisions [64]. According to the Value System Theory, general personality traits (such as core self-evaluation and the trait elements it contains) are antecedents of career calling [65].

Although career calling is relatively stable, it will be affected by self-reflection and self-evaluation. This viewpoint has been confirmed by the research that core self-evaluation significantly impacts the formation of career calling [61,66]. Dobrow et al. (2011) also believed that career calling is an individual's strong passion for a certain field [57]. It can be seen that career calling embodies a kind of motivating force for vocational purposes and goals. These findings indicate that career calling is beneficial to career decision-making, and core self-evaluation may have a significant impact on career calling. Based on these findings, the following assumptions were made in this study.

Hypothesis 2 (H2). *Higher career calling is related to lower career decision-making difficulties.*

Hypothesis 3 (H3). *Higher core self-evaluation is related to higher career calling.*

In addition, the research by Shen and Hu (2015) showed that career calling plays an intermediary role between proactive personality and the certainty of career goals and job search clarity [67]. The higher an individual's proactive personality, the more likely it is to form a career calling and find a career goal [54], which further explains SCCT's view that individual personality factors influence career decision-making results by forming value orientation. At present, there is no research on the mediating role of calling in the relationship between core self-evaluation and career decision-making difficulties. According to SCCT, we hypothesize that core self-evaluation, as a personality factor, including self-efficacy, affects career decision-making difficulties by influencing the value orientation (career calling). Therefore, the following assumption was made in this study.

Hypothesis 4 (H4). *The career calling partially mediates the negative predictive effect of core self-evaluation on career decision-making difficulties.*

2.4. Control Variables

According to previous studies, gender, subject, only child, and family region are important antecedents to career decision-making difficulties [68–70]. Hijazi et al. (2004) believed that gender differences are manifested as a lack of readiness, lack of motivation, and indecisiveness [54]. Wang (2010) found there are significant differences in the three dimensions of career decision-making difficulties between urban and rural students, and there are significant differences in the information exploration dimension of career decision-making difficulties between the only child and the non-only child [54]. Xie et al. (2011) believed that major differences have an impact on career decision-making difficulties [70]. Therefore, in this study, gender, subject, only child, and family area are tested to assess whether they are to be controlled as covariates.

3. Materials and Methods

3.1. Participants

In this study, 528 questionnaires were distributed from a university in China by simple random sampling, and a total of 483 valid questionnaires were collected (the effective rate of recovery was 91.5%). First, the selection of all participants was determined by random sampling to ensure that the selection probability was equal. Secondly, the questionnaire was distributed after the participants' informed consent. Third, all participants were anonymous. Finally, according to the results of data screening, 45 invalid questionnaires were excluded. The average age of all participants was 18.26 years old (SD = 0.66), and the specific information is shown in Table 1.

Table 1. General description.

	Variables	Quantity	Percent
Gender	Male	319	66.0%
	Female	164	34.0%
Subject	Natural science	358	74.1%
	Humanities and social sciences	125	25.9%
Only child	Yes	307	63.6%
	No	176	36.4%
Family Region	Big cities	74	15.3%
	Small and medium-sized cities	151	31.3%
	Counties and townships	156	32.3%
	Rural areas	102	21.1%

3.2. Instruments

3.2.1. Career Decision-Making Difficulty Questionnaire

The Career Decision-MMaking Difficulty Questionnaire (CDDQ) was assessed by the method of Gati et al. (2000), after revision [27] (see Table A1 of Appendix A). There were 35 items and the following 3 dimensions: LR, LI, and II. A nine-point score was used, ranging from 1 to 9, where 1 means strongly disagree and 9 means strongly agree. The higher the score, the greater the career decision-making difficulty. In this study, the internal consistency coefficient α of each sub-scale was 0.611, 0.915, and 0.789. respectively, and the internal consistency coefficient of the total scale was 0.895, which had a good reliability and could be used in Chinese college students.

3.2.2. Core Self-Evaluations Scale

The core self-evaluations scale (CSES) was assessed using the method of Bono and Judge (2003), after revision [71] (see Table A2 of Appendix A). There was one dimension and it contained eight items. A five-point score was used, ranging from 1 to 5, where 1 means strongly disagree and 5 means strongly agree. There were two items subject to positive scoring and six to negative scoring. The higher the score, the higher the CSE. In

this study, the internal consistency coefficient α of the scale was 0.753, which had a good reliability and could be used in Chinese college students.

3.2.3. Brief Calling Scale

The calling sub-scale in the Brief Calling Scale, devised by Steger et al. and revised by Shen, was used [67] (see Table A3 of Appendix A). The sub-scale consisted of two items. A five-point score was used, ranging from 1 to 5, where 1 means strongly disagree and 5 means strongly agree. The higher the score, the higher the level of career calling. In this study, the correlation between the two items was extremely significant, wherein r = 0.668 and $p < 0.01$, and the internal consistency coefficient α of the scale was 0.801, which had a good reliability and could be used in Chinese college students.

3.3. Data Analysis

In order to determine whether the measurement had satisfactory psychometric attributes, SPSS 22.0 software was used to analyze the scale, and the reliability of the sub-scale was evaluated by the Cronbach α coefficient. Secondly, descriptive statistics were used to carry out the quantitative distribution. Finally, structural equation modeling (SEM) via Amos 22.0 was used to construct a full model to explore the relationships among core self-evaluation, career calling, and career decision-making difficulties.

4. Results

4.1. Comparison of Various Variables Among Students with Different Demographic Characteristics

According to the statistics, no significant difference was observed in all of the variables for students, regardless of their gender or whether they are only children or non-only children. In terms of career decision-making difficulty, students from big cities get significantly lowered the scores for LI (4.40 $\pm$ 1.86) than those from small- and medium-sized cities (4.83 $\pm$ 1.67), counties, and townships (4.96 $\pm$ 1.49), or from rural areas (5.16 $\pm$ 1.56). No significant difference was observed in the other variables among students from different regions.

4.2. Correlation Analysis of Main Variables

Table 2 lists the Pearson correlation coefficients between the main variables and their dimensions, showing an extremely significant negative correlation between career decision-making difficulties (and three dimensions) and CSE and calling. The higher CSE and calling, the lower the level of career decision-making difficulty.

4.3. Analysis of the Mediating Role of Calling between CSE and Career Decision-Making Difficulty

According to the assumption of the study, the structural equation model 1 (Figure 1) was constructed, with CSE as its independent variable, calling as its mediating variable, and career decision-making difficulty as its dependent variable. To reduce the number of parameter estimates and to increase model parsimony [72], this study used an item-to-construct balance approach to parcel the items of CSE into two indicators of the scale (CSE A and CSE B). The three dimensions of career decision-making difficulty (LR, LI, and II) were taken as indicators of career decision-making difficulty. The mediating model was fitted using Amos 22.0, and the fit indexes of the model were as follows: x^2/df = 1.687, p = 0.070, GFI = 0.989, NFI = 0.982, CFI = 0.992, IFI = 0.992, TLI = 0.985, and RMSEA = 0.030. As all of the indexes were greater than 0.9 and the RMSEA was less than 0.08, the model was ideal.

Table 2. Correlation analysis of various variables (r).

Variables	CSE	Calling	LR	LI	II	Total Score for Career Decision-making Difficulty
CSE	1					
Calling	0.28 **	1				
LR	−0.34 **	−0.27*	1			
LI	−0.38 **	−0.33 **	0.56 **	1		
II	−0.34 **	−0.22*	0.45 **	0.58 **	1	
Total Score for Career Decision-Making Difficulty	−0.43 **	−0.33 **	0.82 **	0.87 **	0.79 **	1

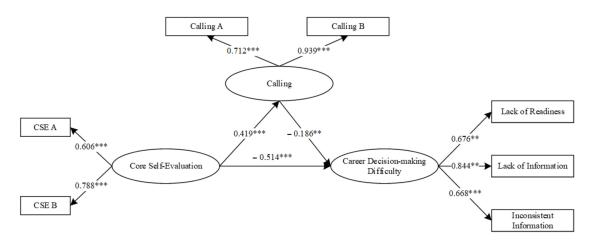Note: * $p < 0.05$; ** $p < 0.01$.

Figure 1. Path diagram of the mediating role of calling between the core self-evaluation (CSE) and career decision-making difficulty. Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The results show that the total effect of CSE in predicting career decision-making difficulty was −0.592 ($p < 0.001$). In the mediating model, CSE positively predicted calling (β = 0.419, $p < 0.001$), calling negatively predicted career decision-making difficulty (β = −0.186, $p < 0.01$), CSE negatively predicted career decision-making difficulty (β = −0.514, $p < 0.001$), and calling plays a partially mediating role between CSE and career decision-making difficulty (the mediating effect value a*b = −0.078, $p < 0.01$), with the mediating effect accounting for 13.2% of the total effect.

To further explore how CSE affects all the three dimensions of career decision-making difficulty through calling, the structural equation model 2 was constructed (Figure 2), in which CSE as an independent variable, calling was a mediating variable, the three dimensions of career decision-making difficulty were dependent variables, and family region was a control variable (considering it had a significant influence on the LI dimension of career decision-making difficulty). The single-dimensional scale of CSE was still parceled into two indicators (CSE A and CSE B). The item-to-construct balanced approach was also used to parcel the three dimensions (LR, LI, and II) of career decision-making difficulty, and three indicators were obtained for each dimension, with a total of nine indicators (LR A, LR B, and LR C for LR; LI A, LI B, and LI C for LI; and II A, II B, and II C for II). The fit indexes of the model were as follows: x^2/df = 1.359, p = 0.031, GFI = 0.974, NFI = 0.963, CFI = 0.990, IFI = 0.990, TLI = 0.985, and RMSEA = 0.027. As all of the indexes were greater than 0.9 and RMSEA was less than 0.08, the model was ideal.
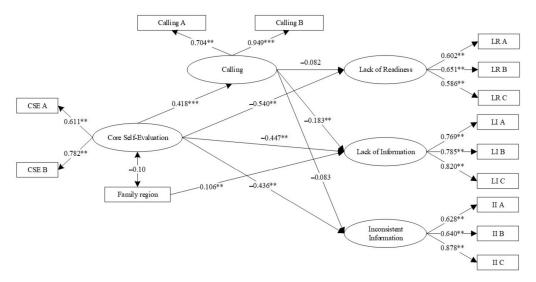
Figure 2. Path diagram of the mediating role of calling between CSE and the dimensions of career decision-making difficulty. Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

In the LR dimension of career decision-making difficulty, the total effect of CSE in predicting LR was -0.574 ($p < 0.01$). In the mediating model, CSE positively predicted calling ($\beta = 0.418$, $p < 0.01$), while calling had no significant effect on predicting LR ($\beta = -0.082$, $p > 0.05$). According to the mediating effect procedure, if either A or B was not significant, the Sobel Test should continue. In this model, a = 0.418, Sa = 0.052, b = -0.082, Sb = 0.083, and Z = -0.981 ($p > 0.05$) indicated that the mediating effect is not significant (note: a is standardized direct regression weight of calling on core self-evaluation; b is standardized direct regression weight of II on calling; Sa is the standard deviation of a; Sb is the standard deviation of b; and Z is the value of Z test).

In the LI dimension of career decision-making difficulty, the total effect of CSE in predicting LI was -0.524 ($p < 0.01$). In the mediating model, CSE positively predicted calling ($\beta = 0.418$, $p < 0.01$), calling negatively predicted LI ($\beta = -0.183$, $p < 0.01$), CSE negatively predicted LI ($\beta = -0.447$, $p < 0.01$), and calling played a partially mediating role between CSE and the LI dimension of career decision-making difficulty (the mediating effect value a*b = -0.076, $p < 0.01$), with the mediating effect accounting for 14.6% of the total effect.

In the II dimension of career decision-making difficulty, the total effect of CSE in predicting II was -0.471 ($p < 0.01$). In the mediating model, CSE positively predicted calling ($\beta = 0.418$, $p < 0.01$), while calling had no significant effect on predicting II ($\beta = -0.083$, $p > 0.05$). Therefore, the Sobel test continued. In this model, a = 0.418, Sa = 0.052, b = -0.083, Sb = 0.063, and Z = -1.300 ($p > 0.05$) indicated that the mediating effect was not significant.

Therefore, among the three dimensions of career decision-making difficulty, only the LI dimension was predicted by CSE through the mediating role of calling.

5. Discussions

5.1. Differences in Career Decision-Making Difficulty among Students from Different Regions

The results of this study showed there were significant differences among students from different regions in the LI dimension of career decision-making. Specifically, compared with students from big cities, those from remote areas were more likely to encounter career decision-making difficulties due to the lack of self-information and career information. This was consistent with the results of prior studies [69].

On the one hand, the quantity and quality of urban information were better than those in rural areas, which made urban college students have more advantages in information search and utilization. On the other hand, although they received the same undergraduate education, the way of thinking, lifestyle, and behavior of rural students did not change.

Compared with urban students, they thought and worried about more problems when facing difficulties in career decision-making. In addition, for Chinese college students at the present stage, the social capital and resources they needed and possessed when they left the campus and entered the society mainly came from families, and the important role of social capital in personal career decision-making and employment was self-evident. Social capital and resources could provide them with solid and reliable economic support and could reduce unemployment risk. At the same time, it could also reduce the cost of job hunting and help to realize the value of human capital. Therefore, compared with urban college students with high economic levels and rich social capital, rural college students found it more difficult to make career decisions.

5.2. The Mediating Role of Calling between CSE and Career Decision-Making Difficulty

This study found that CSE can negatively predict career decision-making difficulty. CSE includes four components, namely: self-esteem, locus of control, neuroticism, and generalized self-efficacy. Prior studies have proven that self-esteem and generalized self-efficacy are negatively correlated with career decision-making difficulty [21], while occupational external control and neuroticism are positively correlated with career decision-making difficulty [73]. In this study, CSE, a basic personality that integrates four variables, showed a significant negative correlation with career decision-making difficulty, indicating that the more positively one evaluates his/her own ability and value, the less difficult he/she would feel when making career decisions. Scholars believe that positive personality traits play a positive role in the career decision-making process. Individuals with such traits tended to view themselves and their surrounding environment more positively and could better cope with career decision-making difficulties [74]. This conclusion also proved that CSE, as an independent structure, could help undergraduate students make career decisions, just like its subsidiary characteristics.

This study further explored the mechanism of CSE on career decision-making difficulty. The results of the mediating test showed that CSE could not only directly affect career decision-making difficulty, but could also indirectly affect it through calling. Therefore, the effect of CSE on career decision-making difficulty was partly mediated by calling. Individuals with a high CSE had a high sense of self-efficacy and internal control personality. They believed human effort was a decisive factor and had a strong motivation to accomplish tasks, and therefore were more eager to pursue calling in specific domains. Calling, as the motivation to work in specific domains, can guide college students in pursuing their career goals and encourage them to be more proactive in exploring themselves, their careers, and making career plans, thus perceiving fewer difficulties in career decision-making. Calling accelerated students' career development and made even first-grade students feel a sense of a decided future. CSE, as a personality trait, further influenced career behaviors through the influence of value orientation. This result confirmed the theoretical hypothesis of SCCT.

5.3. The Mediating Role of Calling between CSE and the Three Dimensions of Career Decision-Making Difficulty

In further exploring the impact of CSE on the three dimensions of career decision-making difficulty through calling, this study found that, when the family region was controlled, CSE still affected the LI dimension through calling. However, regarding the other two dimensions (LR and II), the mediating effect of calling was not significant. It, therefore, could be seen that the transmission effect of calling between CSE and career decision-making difficulty was mainly reflected in the LI dimension. In other words, CSE affects one's acquisition and use of information needed in career decision-making through calling. This proves that positive personality traits in SCCT produced more positive behaviors (acquiring information) by forming positive value orientation, whereas decision-making difficulties at deeper levels, such as LR and II, were directly related to personality traits, and the role of calling as value orientation on LR and II needed longer-time observations.

Compared with common personality traits, CSE could be improved through practicing, counseling, and training, and there are already studies on calling enhancement. The results of this study revealed that it is one of the research directions to consider in order to intervene in career decision-making difficulty from the perspective of CSE and calling orientation improvement.

6. Conclusions and Limitations

(1) Career decision-making difficulty and its dimensions are negatively correlated with CSE and calling, that is, the higher the CSE and calling, the lower the level of career decision-making difficulty.

(2) Calling plays a mediating role between CSE and career decision-making difficulty and its LI dimension. Therefore, college students' CSE affects the level of career decision-making difficulty through calling.

(3) Because participants are limited to one university, they are not representative of the whole. Future research should expand the sample size and scope to eliminate the deviation caused by sample selection.

(4) According to previous studies, career decision-making difficulties are affected not only by individual factors, but also by family and social and cultural factors. Influenced by the family systems perspective, researchers mainly focus on the impact of family interaction on career decision-making difficulties, among which family expectation, parental attachment, parenting style, and parental support are paid more attention by researchers [75,76]. As for the influence of social culture on career decision-making, researchers find that living environment, spiritual and religious factors, and social service motivation have an impact on career decision-making difficulties. Students from different countries and regions have different career decision-making difficulties [30,32]. At the same time, it is found that cultural value is an important variable in career decision-making research. It is found that collectivism is related to work values of interpersonal relationships and interdependence, while individualism is positively related to work values of independence and personal interests [77]. As for the influence of family and cultural factors, there is no detailed analysis in this study, and this could be further studied in the future.

7. Future Suggestions

Career sustainable development is a long-term process. In the process of growth, individuals need to experience complete psychological and physiological behaviors, so as to cultivate continuous consciousness and stimulate initiative and ability. Priest (2008) pointed out that college students must keep sustainability in career decision-making in order to ensure the success and development of their future careers [78]. McDonald and Hite (2018) also explained that facing the changing world, it is very important to develop a system to promote career sustainability and to prepare individuals to accept the changing career environment [79]. Therefore, for college students who are about to enter the workplace, this study puts forward the following three suggestions based on the survey results.

First of all, career education in colleges and universities should pay more attention to the middle- and low-level students of social and economic status, and provide them with more vocational information searching skills and external conflict (internal self and family expectations) coping guidance.

Secondly, as an intervening personality variable, core self-evaluation has a positive contribution to calling and career decision-making. Therefore, it is necessary to continuously strengthen students' clear and positive cognition and evaluation of themselves in college career education. Targeted intervention can be carried out through systematic self-exploration training and self-efficacy promotion practice.

Thirdly, calling plays a dynamic and intermediary role in the process of college students' career decision-making. In addition to individual training, colleges should also enhance students' calling and identity for their career through rendering the cultural

environment and by constructing a career exploration platform, so as to help them get employed smoothly.

Appendix A

Table A1. Career decision-making difficulties scale.

No.	Items
1	I know that I have to choose a career, but I do not have the motivation to make the decision now ("I do not feel like it").
2	Work is not the most important thing in one's life and therefore the issue of choosing a career does not worry me much.
3	I believe that I do not have to choose a career now because time will lead me to the "right" career choice.
4	It is usually difficult for me to make decisions.
5	I usually feel that I need confirmation and support for my decisions from a professional person or somebody else I trust.
...	
31	I find it difficult to make a career decision because the occupation I am interested in involves a certain characteristic that bothers me (for example, I am interested in medicine, but I do not want to study for so many years).
32	I find it difficult to make a career decision because my preferences cannot be combined in one career, and I do not want to give any of them up (e.g., I would like to work as a free-lancer, but I also wish to have a steady income).
33	I find it difficult to make a career decision because my skills and abilities do not match those required by the occupation I am interested in.
34	I find it difficult to make a career decision because people who are important to me (such as parents or friends) do not agree with the career options I am considering and/or the career characteristics I desire.
35	I find it difficult to make a career decision because there are contradictions between the recommendations made by different people who are important to me about the career that suits me or about what career characteristics should guide my decisions.

Table A2. Core self-evaluation scale.

No.	Items
1	Sometimes, I feel depressed.
2	Sometimes when I fail, I feel worthless.
3	Sometimes, I do not feel in control at my work.
4	Overall, I am satisfied with myself.
5	I am filled with doubts about my competence.
6	I do not feel in control of my success in my career.
7	I am capable of coping with most of my problems.
8	There are times when things look pretty bleak and hopeless to me.

Table A3. Brief calling scale.

No.	Items
1	I have a calling to a particular kind of work.
2	I have a good understanding of my calling as it applies to my career.

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