



# The Influence of College Students' Career Values on their Self-Development Ability in the Digital Era

Haixia Yang  <sup>1\*</sup>

<sup>1\*</sup> Ph.D Candidate, Department of Educational Administration, International College, Krirk University, Bangkok, Thailand

\* **Corresponding Author:** 13755107846@163.com

**Citation:** Yang, H. (2024). The Influence of College Students' Career Values on their Self-Development Ability in the Digital Era. *Educational Administration: Theory and Practice*, 30(4), 15-31. doi: 10.52152/kuey.v30i4.1167

## ARTICLE INFO

Received: 10 Nov 2023  
Accepted: 30 Jan 2024

## ABSTRACT

In Hunan Province, where socioeconomic dynamics and educational systems are important, self-development ability (SDA), career values (CV), and professional decision-making self-efficacy must be examined. For academic institutions and governments, understanding how students transfer from academia to the workforce is crucial. The aim of this research is to examine the influence of college students' career values (CV) on the self-development ability (SDA) of university students in Hunan Province, China, in the era of digital intelligence. Career decision-making self-efficacy (CDMSE) serves as a mediating factor in the relationship between college students' career values and self-development ability, contributing to a comprehensive understanding of how these factors interact and affect the labor-market readiness of college students. Using a standardized questionnaire, the research compiled 301 valid samples from five colleges in the province of Hunan, China. SPSS and AMOS were applied to conduct a statistical analysis of the valid data. The results indicate that college students initially exhibit significant variations in general knowledge regarding professional values, self-efficacy in making career decisions, and capacity for self-development. This study offers an exhaustive analysis of the impact of college students' career values on self-improvement among university students in Hunan Province, China. The findings are highly relevant to academic institutions, including colleges and universities, as they explore college students' career development. Additionally, the research provides substantial theoretical insights and practical recommendations for higher education.

**Keywords:** Career Values, Decision-Making Self-Efficacy, Self-Development Ability, Digital Intelligence Era

## INTRODUCTION

Exploring the interconnection between college students' career values, career decision-making self-efficacy, and Self-development ability is pivotal in comprehending how individuals navigate their career paths in educational settings and professional life. Empirical research has highlighted the significance of these constructs in shaping career-related decisions and behaviors among college students (Petrie, Brady, Stuart, Brown, & Gould, 2020). However, despite extensive exploration, a comprehensive understanding of how these constructs interrelate within the context of the rapidly evolving digital era remains relatively underexplored within the current literature (Sumo, Zhang, & Sumo, 2023). Hence, this research endeavors to bridge this gap by elucidating the comprehensive relationships among CV, self-efficacy, and self-development among college students, considering the influence of demographic variables as control factors.

Information technology has transformed our lives and education. Digital literacy has a big influence on kids in the digital age. Digital literacy—the capacity to critically analyze digital information—is essential for children.

It helps people traverse huge web resources and get reliable information (Zhong, 2023). Digital literacy also helps students communicate effectively through online discussions, collaborative projects, and other interactive mediums used in modern academic settings. Technology clearly improves academic performance. Interactive textbooks, multimedia tools, and instructional apps are accessible to a wide range of learners (Hines, Vega, Mayes, Harris, & Mack, 2019). Online platforms encourage collaborative learning, which develops communication and collaboration skills essential in our linked world. Technology-enabled adaptive learning, which tailors academic experiences to individual pupils, improves learning. Technology integration into education is not without obstacles. Digital gadgets might distract pupils during study sessions (Ramaprasad, Rao, Rao, Prabhu, & Kumar, 2022). The accessibility of information raises plagiarism concerns, requiring a greater focus on academic integrity. Students' rising reliance on technological devices for communication may lead to social isolation, which may harm conventional social skills. Additionally, excessive screen time harms physical health. Students who use digital gadgets often may suffer eye strain and postural issues (Zhang, Yuen, & Chen, 2018).

Prior empirical studies have substantiated the importance of College Students' CVs as crucial determinants in shaping their career trajectories and decision-making processes (Wyllie, Levett-Jones, DiGiacomo, & Davidson, 2021). These values encapsulate individuals' beliefs, preferences, and priorities concerning their professional aspirations and play a fundamental role in guiding their career choices (McSweeney, McSweeney, Webb, & Sandoval, 2022). However, while existing research has established the influence of CV on career-related decisions, there is a paucity of empirical evidence elucidating the precise mechanisms through which these values manifest in self-efficacy beliefs and subsequently impact self-development abilities among college students (Ho, Minshew, & McLaughlin, 2023). Moreover, the effectiveness of people's career decisions and pursuit of their objectives is significantly influenced by their confidence in their capacity to achieve desired outcomes (Wolf, Auerswald, Seinsche, Saul, & Klocke, 2021). Previous research has emphasized the role of self-efficacy beliefs in influencing behaviors associated with career development (Masdonati, Massoudi, Blustein, & Duffy, 2022). Nevertheless, empirical studies specifically clarify the mediating role of CDMSE among college students. The current literature lacks comprehensive coverage of CV and SDA (Xu, Liu, Li, Guan, & Zhou, 2021). The purpose of this study is to investigate how self-efficacy beliefs influence the connection between CV and self-development in college students.

Moreover, SDA signifies individuals' capability to grow personally and professionally through proactive engagement in learning experiences and skill-enhancement activities (Weil, Seidel, Schindler, & Gröschner, 2020). Existing literature has highlighted the importance of self-directed learning behaviors and proactive self-development in shaping individuals' career paths and adaptability to changing work environments (Ramaprasad et al., 2022). However, empirical studies that comprehensively explore the direct relationship between CDMSE and SDA among college students are scarce (Alboliteh et al., 2022). Hence, this research seeks to shed light on this direct relationship within the context of career development among students.

Furthermore, the digital era has brought about rapid transformations in the job market and educational landscapes, influencing how individuals perceive their CVs, make career decisions, and engage in self-development activities (Zedan, 2021). Despite the acknowledgment of this digital shift, empirical studies investigating the specific implications of the digital era on the relationships between CV, self-efficacy, and self-development among college students remain relatively scarce (Zhong, 2023). Therefore, this research aims to explore these relationships within the contemporary digital context, providing insights into how technological advancements impact career development processes.

Additionally, demographic variables such as gender, grade level, place of origin, major, and sibling status often act as influential factors that might moderate or influence the relationships between CV, self-efficacy, and self-development among college students (Hines et al., 2019). However, there is limited empirical evidence comprehensively examining the role of these variables as control factors within the relationships between CV, CDMSE, and SDA among college students (Zucker et al., 2021). Thus, this research seeks to consider and evaluate the influence of these demographic variables to provide a more nuanced understanding of the interplay between the primary constructs under study. In summary, while prior research has acknowledged the individual significance of College Students' CV, CDMSE, and SDA, a comprehensive examination of their interconnectedness within the context of the digital era and the influence of demographic variables remains relatively scarce. This study aims to address these research gaps by empirically investigating the relationships among these constructs, thereby contributing to the existing literature on career development among college students. The objectives of the study are:

To examine the role of Gender, Grade, Place of Origin, Major on Career value, Career decision-making self-efficacy, and self-development ability.

To examine the impact of Career Value on Self-development ability.

To examine the impact of Career value on career decision-making self-efficacy.

To examine the impact of Career decision-making self-efficacy on Self-development ability.

To examine the mediating role of Career decision-making self-efficacy on the relationship between career value and self-development ability.

By empirically exploring these connections, this research can offer crucial insights into how CV influence self-efficacy beliefs, subsequently impacting students' abilities to engage in self-directed learning and skill enhancement activities. Such insights hold practical implications for educational institutions, career counselors, policymakers, and employers, enabling the development of targeted interventions, educational policies, and workplace strategies that better support students' career aspirations, facilitate informed decision-making, and foster a more adaptable and skilled workforce poised for success in today's evolving professional landscape.

## LITERATURE REVIEW

Despite substantial studies on professional growth variables, gender, grade level, location of origin, and major choice remain important. Donaldson, González-Serrano and Moreno (2023) revealed that gender differences in career value patterns emphasize the necessity for personalized career development interventions. Research also suggests that grade level affects career decision-making self-efficacy by influencing career exploration, specialized knowledge and abilities, and practical experiences that promote self-confidence in career choice (Zhang et al., 2018). The location of origin strongly influences career trajectories, and regional disparities in job opportunities and problems are the main cause of variation (Whiston & Keller, 2004). Majors also influence job paths by influencing a person's view of a vocation's practicality and trust in their professional judgment (Wille et al., 2020). STEM majors may have a different self-image and confidence than social science or liberal arts majors. Major, upbringing, gender, social position, and social standing impact an individual's personal and professional growth paths, defining their self-improvement ability. Legislators, counselors, and educators must understand the interrelationship of these components to manage professional growth. Customized interventions that support individual career paths can make educational professional development more accessible and egalitarian. This may be done by analyzing how gender, grade level, location of origin, and major selection affect self-development, decision-making, and career worth.

H1: Gender, Grade, Place of Origin, Major has a significant impact on Career value, Career decision-making self-efficacy, and self-development ability.

### College students' Career Values and Self-Development Ability

In today's rapidly evolving digital era, the College students' Career Value of college students wield a profound influence on their ability to develop themselves professionally and personally. These career values comprising beliefs, preferences, and priorities related to their professional aspirations, play a pivotal role in shaping their trajectory (Xu et al., 2021). The theory of Career Development posits that individuals undergo various phases where their career values evolve, significantly impacting their self-development (Super, 1992). In the contemporary context, these values are multifaceted, influenced by technological advancements, and the vast array of opportunities across diverse fields. The relationship between career values and self-development among college students is intricate and multidimensional. Xu et al. (2021), research highlights that individuals' career adaptability, a central aspect of self-development, is deeply impacted by their career values. Those who value passion, skill development, and personal growth are more adaptable and succeed in the ever-changing digital work market (Lam, Timmons, & Zalewska, 2023). Moreover, studies by Li and Tong (2023) emphasize that students' career values significantly influence their motivation levels. When students align these values with their personal goals and aspirations, they show increased motivation to engage in self-improvement activities, leveraging digital resources such as online courses, skill-building platforms, and networking opportunities. The digital era has significantly transformed the landscape of self-development for college students. Technology has provided unprecedented access to information and resources, enabling self-directed learning (Li, 2023). Platforms offering online courses, skill development tools, and networking opportunities have empowered students to tailor their learning experiences according to their CV, fostering autonomy and adaptability in their self-development efforts. However, concerns have emerged regarding the potential drawbacks of excessive reliance on digital tools (Blustein, Duffy, Kenny, Gutowski, & Diamonti, 2019). Some researchers caution about the possibility of shallow understanding of concepts and reduced critical thinking skills among students due to over-dependence on technology. Hence based on the above literature, the following hypothesis is proposed.

H2: Career Value has a significant impact on Self-development ability.

### College Students' Career Values and Career Decision-Making Self-Efficacy

Understanding the correlation between college students' CV and their CDMSE is crucial in the realm of higher education. CVs, which include an individual's beliefs, preferences, and priorities regarding their professional goals, have a substantial impact on the decision-making process for their future career routes (Reyes & Redoña, 2021). The Social Cognitive Theory highlights the importance of self-efficacy, which refers to an individual's belief in their capacity to successfully perform activities and make effective decisions (Schade & Schuhmacher, 2022). The interaction between CV and CDMSE is a crucial factor in determining the path of students' professional lives. Several studies have investigated the relationship between CV and CDMSE among college students. According to Petrie et al., (2020), persons who closely match their CV with their objectives have greater levels of CDMSE. When students possess a comprehensive comprehension of their principles and their correlation to their desired professional trajectories, they tend to exhibit enhanced assurance in formulating well-informed career choices. Furthermore, a study conducted by Lazarides et al. (2023) supports this correlation, suggesting that students who have a profound understanding of their CV have increased self-efficacy in navigating career decision-making processes. Furthermore, Zucker et al. (2021) highlight the mediating role of CDMSE in the connection between CV and career choices. They propose that persons with higher self-efficacy beliefs are more inclined to convert their CVs into proactive career decisions. This highlights the crucial importance of self-efficacy as a catalyst that connects one's CV with the activities taken to pursue corresponding career pathways. The changing nature of career development in the digital era has emphasized the importance of this relationship (Jetha et al., 2023). With the abundance of career possibilities and opportunities that technology provides, the CVs of college students become more varied and complex. The digital era requires individuals to be adaptable and skilled in navigating complex career landscapes, challenging traditional career trajectories. The study conducted by Alboliteh et al. (2022) suggests that cultivating CDMSE is especially important in the digital era. This enables students to explore a wide range of career possibilities that are in line with their values and to adjust to the evolving demands of the labor market. Hence, the following hypothesis is proposed based on the above literature.

H3: Career value has a significant impact on career decision-making self-efficacy.

### Career Decision-Making Self-Efficacy and Self-Development Ability

Understanding the intricate relationship between career decision-making self-efficacy and SDA among individuals has been a significant focus in the field of career psychology. Career decision-making self-efficacy, rooted in Social Cognitive Theory, pertains to an individual's belief in their capacity to make effective career-related decisions (Salim, Istiasih, Rumalutur, & Situmorang, 2023). SDA, on the other hand, encapsulates the capability to grow personally and professionally through various experiences, learning opportunities, and skill development. The interaction between these constructs plays a crucial role in shaping an individual's career trajectory and overall growth. Several studies have delved into the impact of career decision-making self-efficacy on SDA (Bosma et al., 2023). Wall-Bassett and Babatunde (2023) posited that individuals with high levels of self-efficacy tend to engage more actively in seeking diverse learning experiences and challenges. In the context of career development, social cognitive theory suggests that individuals with higher career decision-making self-efficacy are more inclined to pursue opportunities that foster personal and professional growth. This aligns with Hines et al. (2019) conceptualization, emphasizing the influence of self-efficacy beliefs on the actions individuals undertake to shape their careers and foster self-development. Moreover, research by Ramaprasad et al., (2022) emphasizes the mediating role of career decision-making self-efficacy in the relationship between career goals and self-development. They suggest that individuals who possess stronger self-efficacy beliefs are more likely to set ambitious career goals and actively pursue opportunities for self-improvement and skill development. This illustrates the pivotal role of self-efficacy as a catalyst that facilitates individuals' proactive engagement in self-development activities, thereby fostering their personal and professional growth. The digital era has further accentuated the importance of career decision-making self-efficacy in driving self-development among individuals. In a rapidly evolving job market characterized by technological advancements and diverse career opportunities, individuals with higher self-efficacy are better equipped to adapt and navigate through changing career landscapes.

H4: Career decision-making self-efficacy has a significant impact on Self-development ability.

### Career Decision-Making Self-Efficacy as Mediator

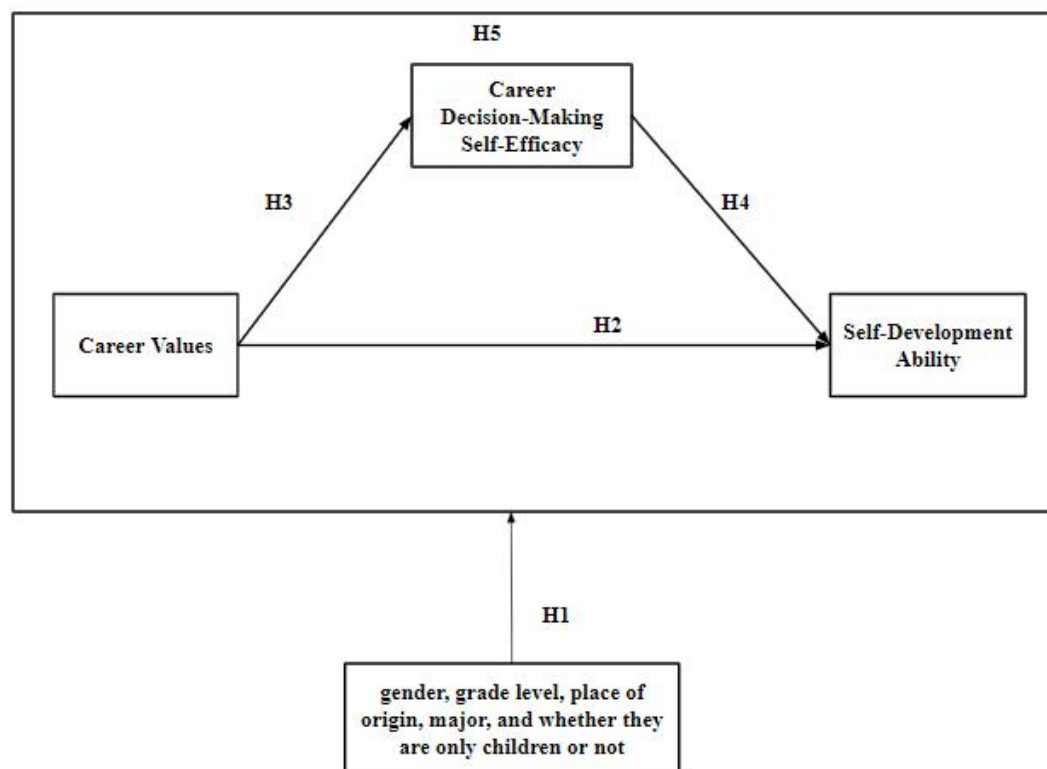
The examination of the complex relationship between college students' CV, CDMSE, and SDA has been a topic of considerable interest in the field of career development research. CVs, which refer to people's beliefs and priorities about their professional objectives, have a significant influence on structuring their career paths (Kleine, Schmitt, & Wisse, 2021). The Social Cognitive Theory emphasizes the notion of self-efficacy, which refers to an individual's belief in their capacity to make effective decisions and successfully complete activities. The role of

CDMSE in mediating the relationship between college students' CV and SDA has been a central focus in understanding the interaction of these dimensions (Ng et al., 2023). A multitude of research studies have examined the mediating role of CDMSE in the relationship between CV and self-development capacity among college students. Zhang et al.(2018) found that persons who have stronger CVs that coincide with their objectives are more likely to have higher levels of CDMSE. This alignment cultivates a sense of purpose and direction, hence enhancing self-efficacy in making career-related decisions. In addition, Lu et al. (2023) highlighted the important role of CDMSE as a mediator, suggesting that students who have well-defined CVs are more inclined to utilize their self-efficacy beliefs to pursue opportunities for personal growth. Baehr et al., (2023) proposed that self-efficacy beliefs impact individuals' proactive engagement in seeking learning experiences and undertaking necessary actions for personal improvement. In the context of college student's career development, the mediation model proposes that a higher level of CDMSE serves as a link between their CV and their capacity to participate in self-development activities. The study conducted by Kleine et al. (2021) provided evidence for the mediation model, demonstrating that CDMSE plays a substantial role in mediating the relationship between CV and self-directed learning behaviors in college students. Moreover, in the digital age, the CVs of college students are influenced by several things, such as technological advancements and the changing employment market. The role of CDMSE in this context becomes increasingly important. Technology provides a wide range of resources for self-development, and persons with higher self-efficacy are more likely to navigate and utilize these resources effectively (LaForett & De Marco, 2020). This enhances the importance of self-efficacy as an intermediary, enabling the conversion of CV into proactive self-development behaviors in the digital environment.

H5: Career decision-making self-efficacy mediates the relationship between career value and self-development ability.

### Hypothetical Model

The hypothetical model was developed based on past research and ideas. Within this framework, we claimed that professional values and digital intelligence are factors that may be used to predict the ability to build one's own self-development skills. Furthermore, according to research, self-efficacy in making professional decisions and digital literacy were two moderators of the link between career values and the ability to develop one's digital intelligence. The model that is hypothetical is seen in **Figure 1**.



**Figure 1.** Hypothetical Model



## METHODOLOGY

### Procedure

The population of this study was college students of ordinary universities in Hunan province. This demographic was selected to investigate the impact of career values, digital intelligence, career decision self-efficacy, and digital literacy on career development potential in a specific educational and cultural context. The college students from those universities provide a diverse and relevant pattern for examining the interplay between academic heritage, technological publicity, and career aspirations (**Table 1**). The sample length for this observation was determined by the usage of G-Power software, a device commonly utilized in social science studies for statistical energy analysis. The evaluation took into consideration a couple of regression approaches, given more than one predictor in the study, and aimed for a strength of 0.95, with an effect length of 0.15 and an alpha level of 0.05. Based on these parameters, G-Power indicated a minimal sample length of a hundred and seventy participants to acquire dependable and valid consequences. In order to account for ability non-response or incomplete responses, 390 questionnaires have been disbursed. Out of these, 301 whole and legitimate questionnaires had been received, yielding a reaction charge of approximately 77%. This sample size exceeds the minimal requirement suggested by G\*Power, improving the statistical validity of the study's findings. The study used a stratified random sampling technique to make sure illustrations from various colleges and disciplines within the everyday universities in Hunan Province. This method allowed for identical representation throughout unique fields of study, making sure that the pattern reflects the diverse CV and Digital publicity of college students in diverse instructional disciplines. Data were accumulated via a structured questionnaire allotted both online and in paper shape. The questionnaire became divided into sections similar to each variable of hobby within the study: CV, Digital intelligence, career choice-making self-efficacy, Digital literacy, and career improvement capacity. Each section protected established scales suitable for the college student population, with moderate modifications to make sure cultural and contextual relevance.

**Table 1.** Demographic Profile of Respondents

Variable	Categories	Frequency	Percentage (%)
Gender	Male	151	50.2
	Female	147	48.8
	Prefer not to say/Other	3	1
Grade	1st Year	79	26.2
	2nd Year	71	23.6
	3rd Year	93	30.9
	4th Year and Above	58	19.3
Place of Origin	Hunan Province	101	33.6
	Other Provinces	149	49.5
	International	51	16.9
Major/Area of Study	Humanities	41	13.6
	Social Sciences	91	30.2
	Science and Technology	75	24.9
	Business and Economics	59	19.6
	Other	35	11.6
Only Child	Yes	121	40.2
	No	179	59.4

### Measurement Instrument

In this study, a range of measures were used to evaluate the key constructs of CV, profession improvement capacity, and CDMSE. Each construct was measured by the use of a series of items designed to capture the numerous dimensions of these ideas.

Career Values: CV were measured using a 22-item scale adopted from Ling et al., (1999). The Cronbach's Alpha is 0.932.

Skill (Self-Development Ability: A 6-item scale was used to measure career development ability adopted by He and Lu (2012). The Cronbach's Alpha is 0.899.

Career Decision-Making Self-Efficacy: CDMSE was measured using a 25-item scale adopted by Zhao et al.

(2005). The Cronbach's Alpha is 0.953.

### Analytical Method

The collected facts have analyzed the usage of AMOS (Analysis of Moment Structures), a software recognized for its structural equation modeling (SEM) talents. SEM turned into hired to test the hypothesized relationships among the variables, together with the direct effects and the proposed moderating outcomes of career choice-making self-efficacy and Digital literacy. AMOS's strong capabilities in coping with complex fashions and offering distinctive diagnostics and fit indices made it the ideal preference for this study's analytical wishes. Ethical issues were meticulously adhered to in the course of the study's procedure. Participants were informed approximately the motive of the examination and confident of their anonymity and confidentiality in coping with their responses. Informed consent was obtained from all members, emphasizing that their participation changed into voluntary and that they could withdraw at any time without penalty. The study also ensured that the data were used solely for research purposes and stored securely to prevent unauthorized access. All procedures were carried out in accordance with the ethical guidelines and standards set by the institutional review board overseeing research involving human subjects.

## RESULTS

### Measurement Model

Following an analysis of the factor loadings in the measurement model, we made the decision to retain 53 of the items (**Figure 2**). Throughout the course of the experiment, the standardized factor loadings of all variables varied from 0.432 to 0.813, and all of the item factor loadings were found to be statistically significant. Items on the list that had a value that was lower than 0.4 were removed from consideration. Each and every one of the error variances had t-values that were statistically significant, and each and every one of the error variances was positive (**Table 2**). Additionally, the samples exhibited both univariate and multiple normality despite the presence of numerous variables. Jang et al. (2021) found that the values of skewness varied from 0.402 to 1.536, while the values of kurtosis ranged from 0.666 to 2.891. Both of these values were found to be significant. According to Saleem and Anwar (2023) and Suhariadi et al. (2023), the value of Mardia's coefficient, which is 257.47, is lower than the value of  $p(p+2) = 528$ . This is the conclusion reached by the researchers. In terms of model fit, the statistics demonstrate that there is a satisfactory degree of congruence between the measurement model and the samples. According to Hwang and Park (2022), the chi-square value is 626.00 ( $p.001$ ), the chi-square divided by degrees of freedom is 3.170, the root mean square error of approximation is 0.085, the comparative fit index is 0.97, the normed fit index is 0.85, the goodness of fit index is 0.86, the Tucker-Lewis index is 0.83, and the parsimonious normed fit index is 0.713. All of these values are based on the data. The outcomes of the evaluation served as the basis for these values.

**Table 2.** The Mean, SD, Standardized Regression Coefficient (SRC), and T Value in Career Values (CV), Self-Development Ability (SDA), Career Decision-Making Self-Efficacy (CDMSE)

Variables	No.	Items	Mean	SD	SRC	T Value
College Students' Values						
Prestige	Q3	Having a high social status	3.33	0.821	0.504	7.297***
	Q4	Higher level of organisation served	3.30	0.835	0.597	6.558***
	Q5	Higher economic status	3.72	0.881	0.432	7.187***
	Q8	Large size of organisation served	3.31	0.826	0.473	6.578***
	Q9	Organisation served is in a big city	3.46	0.838	0.500	7.647***
Health Care	Q10	There are five social insurance and one housing fund	4.22	0.860	0.665	8.146***
	Q11	Career stability	4.13	0.907	0.689	7.073***
	Q12	Good welfare	4.20	0.786	0.67	9.594***
	Q13	Housing can solve the problem of two places' separation	3.98	0.820	0.731	8.176***
	Q14	The professional environment is elegant	3.85	0.810	0.723	8.373***
	Q15	High income	4.15	0.867	0.646	8.957***
	Q16	In line with hobbies and interests	3.85	0.895	0.700	7.646***
	Q17	study for practical applications	3.80	0.873	0.744	7.466***
	Q18	Being able to use your talents	3.89	0.868	0.768	7.67***

Variables	No.	Items	Mean	SD	SRC	T Value
	Q19	Equal opportunities and fair competition	4.15	0.868	0.798	2.894***
	Q20	The transportation is convenient and fast	3.95	0.811	0.803	4.568***
	Q21	Autonomy and freedom from constraints	3.92	0.785	0.635	6.556***
	Q22	Can provide opportunities for continuing education	3.90	0.868	0.749	7.994***
	Career Decision-Making Self-Efficacy					
Self-Evaluation	CD1_1	Accurately assessing your abilities	3.45	0.924	0.689	4.661***
	CD1_2	Determine what your ideal career (job) is	3.54	0.885	0.657	6.385***
	CD1_3	Judge what you think is most valuable in a career (job)	3.70	0.782	0.607	8.029***
	CD1_4	List what you are willing or unwilling to sacrifice to achieve your career goals	3.63	0.795	0.576	7.277***
	CD1_5	Details on the type of lifestyle you like	3.87	0.781	0.511	8.002***
Career Information	CD2_1	Find the career (job) information that you are interested in	3.63	0.840	0.671	7.047***
	CD2_2	Discover the prospects of a career (job) in the next decade	3.30	0.921	0.716	6.057***
	CD2_3	Determine the average annual income for a specific occupation	3.43	0.844	0.659	7.476***
	CD2_4	Find someone who is engaged in a career (job) that you are interested in	3.47	0.870	0.64	6.129***
	CD2_5	Find information about universities or job training institutions	3.41	0.862	0.711	6.632***
Set Goals	CD3-1	Choose one from the alternative careers you are considering	3.43	0.905	0.742	6.772***
	CD3-2	Select a job that aligns with your abilities	3.68	1.012	0.749	6.187***
	CD3-3	Select a job that suits your desired way of life	3.57	0.840	0.68	7.665***
	CD3-4	Make career decisions without worrying about whether they are right or wrong.	3.37	0.955	0.671	6.118***
	CD3-5	Choose a job that matches your interests	3.54	0.850	0.669	7.289***
Future Planning	CD4_1	Create a future plan for the next five years in alignment with your objectives	3.40	0.888	0.688	6.495***
	CD4_2	Find and make use of the employment counseling services at the school	3.28	0.903	0.684	6.009***
	CD4_3	Prepare a good resume	3.50	0.933	0.651	6.164***
	CD4_4	Identify employers related to occupation(job) you may pursue	3.49	0.911	0.699	6.343***
	CD4_5	Successfully cope with the job interview process	3.30	0.986	0.723	5.124***
Problem-Solving	CD5_1	When unable to make the first choice, identify some reasonable alternative careers	3.46	0.854	0.697	7.217***
	CD5_2	When facing challenges in the chosen career, develop a reasonable action plan.	3.43	0.901	0.684	5.996***
	CD5_3	Even when discouraged, still insist on your career (work) goals and work hard	3.52	0.870	0.66	7.294***
	CD5_4	Devise a strategy to cope with unfinished academic tasks	3.47	0.862	0.614	6.86***
	CD5_5	When dissatisfied with your current occupation, consider making a suitable career transition.	3.33	0.928	0.665	6.205***
Self-Development Ability	EA1	I always arrange my time very reasonably	3.43	0.860	0.755	6.238***
	EA2	I have different goals and requirements for myself at each stage	3.51	0.863	0.812	7.561***
	EA3	I can always quickly learn new knowledge and skills to adapt to the changing working environment	3.53	0.854	0.779	7.72***
	EA4	I always work hard for my goal	3.63	0.841	0.813	7.817***
	EA5	I never give in easily when I encounter difficulties and setbacks	3.65	0.806	0.757	7.565***
	EA6	I always like to try using different methods to solve problems	3.57	0.803	0.725	7.21***



Variables	No.	Items	Mean	SD	SRC	T Value
-----------	-----	-------	------	----	-----	---------

Note: \*\*\* p<0.01

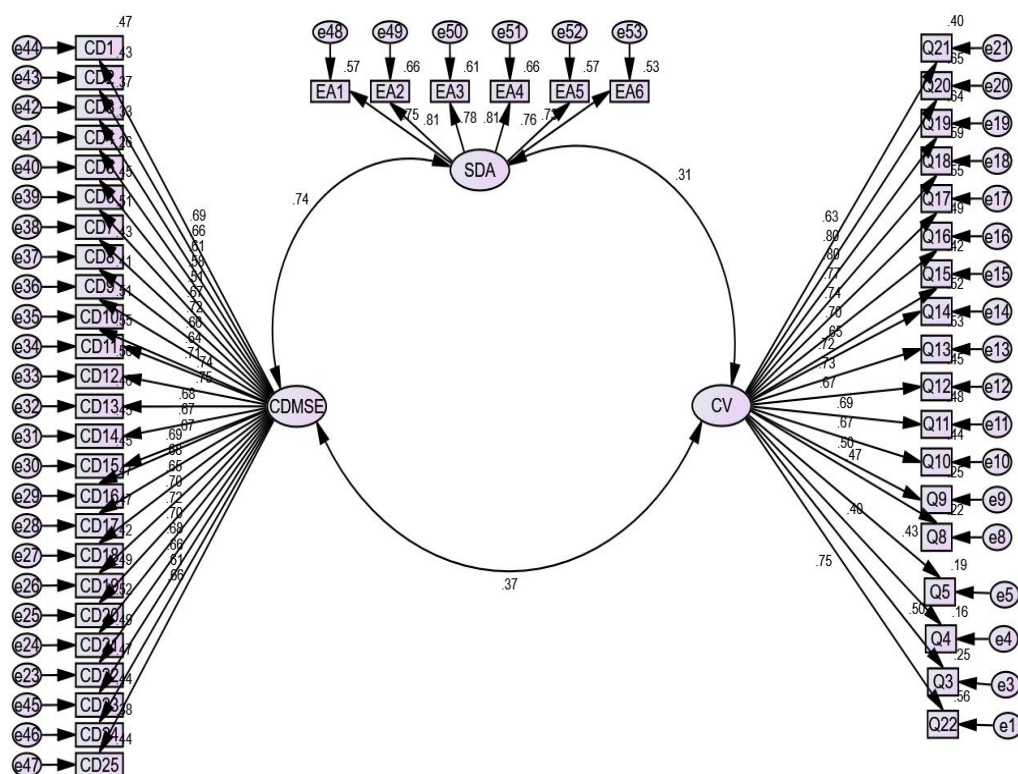


Figure 2. Measurement Model

The data in Table 3 shows that the values of Cronbach's alpha, Cronbach's correlation coefficient, and average variance extracted (AVE) for each variable varied between 0.899 and 0.953, 0.913 and 0.963, and 0.542 and 0.612, respectively. The observed values exhibited a certain degree of variability. We were able to calculate the correlation coefficient with a 95% confidence interval by employing bootstrap estimation. According to Aslan (2023), the measurement model's discriminant validity can be proven by the absence of any data points falling within the confidence intervals. After careful analysis, we determined that the measurement model had a significant level of reliability and validity. This was evident from the appropriate factor loadings, model fit, reliability, convergent validity, and discriminant validity that were observed.

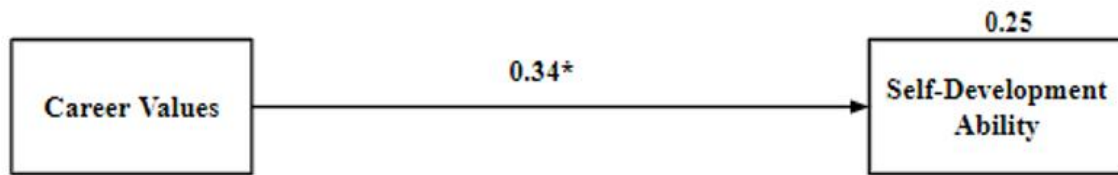
Table 3. Cronbach's Alpha, CR and AVE

Index	CV	CDMSE	SDA
Cronbach's Alpha	0.932	0.953	0.899
CR	0.961	0.963	0.913
AVE	0.572	0.612	0.542

### Main Effect

This study focused primarily on the combination of CV and SDA as the major factors to take into consideration. Because the standardized regression coefficients for this component were found to be 0.279, it may be concluded that there is a substantial association between this factor and the specimen data. The main effect was found to have a satisfactory fit to the data, as indicated by the  $\chi^2$  value of 32.14 ( $p < .01$ ), the  $\chi^2/df$  ratio of 3.24, the RMSEA value of 0.062, the GFI value of 0.94, the CFI value of 0.96, the NFI value of 0.98, the TLI value of 0.98, and the PNFI value of 0.63 (Guennouni et al., 2022). At a significance level of  $p < .01$ , the CV was shown to account for 25% of the variance in mental health, hence providing support for hypothesis H2. Figure 3

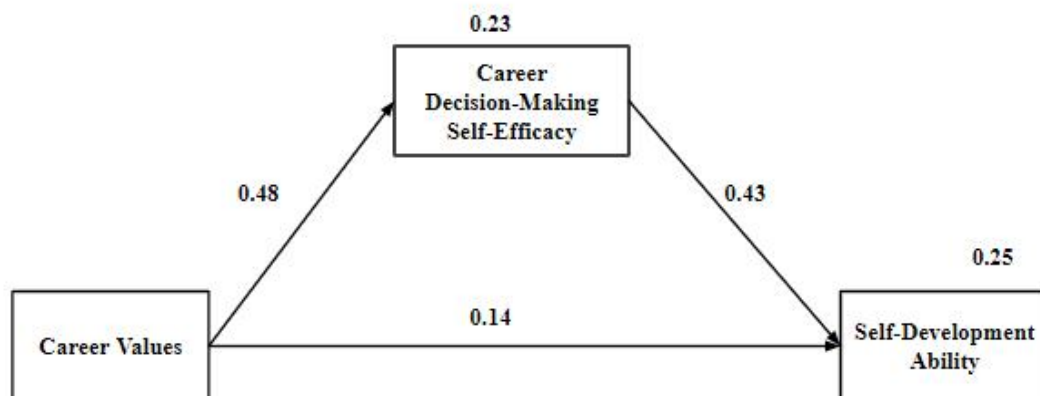
displays the information that pertains to the primary component of the effect.



**Figure 3.** Main Effect

### Structural Model

The structural model is depicted in **Figure 4**, which also includes the route coefficients and the variations that are mentioned. It was found that the structural model had standardized regression coefficients that ranged from 0.62 to 0.83. Upon examination, it is evident that the structural model exhibited a satisfactory level of fit, as evidenced by the following values:  $\chi^2 = 845.27$  ( $p < .001$ ),  $\chi^2/df = 4.90$ , RMSEA = 0.09, GFI = 0.83, CFI = 0.86, NFI = 0.84, TLI = 0.87, and PNFI = 0.79 (Guenouni et al., 2022). Within the framework of the structural model, it was demonstrated that the CV was responsible for 21 per cent of the variation in the self-efficacy of career choice-making ( $\gamma = 0.48$ ,  $p < .001$ ). It was found that the association between self-efficacy in choosing vocational choices ( $\gamma = 0.43$ ,  $p < .001$ ) and self-determination of action (SDA) accounted for 25% of the variability in SDA.



**Figure 4.** Structural Model

### Mediating Effects

The research demonstrated a significant positive correlation between career worth and self-development potential when professional decision-making self-efficacy was not accounted for. The magnitude of the impact was determined to be 0.34 ( $t = 2.41$ ,  $p < .01$ ). Later on, the concept of professional decision-making self-efficacy was proposed as a possible mediator in the relationship between career value and SDA. The study revealed that the direct influence of career value on SDA decreased to 0.167 ( $t = 7.502$ ,  $p < .05$ ) as a result of this event. Through a comprehensive examination of the structural model (**Table 4**), it was found that professional decision-making self-efficacy served as a complete intermediary between career value and self-development capacity. This mediator included the overall influence, immediate consequence, secondary consequence, and individual secondary consequences.

**Table 4.** Bootstrap Method Estimates 95% Confidence Interval

Total, Direct, and Indirect Effect	Path Coefficient	T Value	P Value	Bise-Corrected	
				Lower	Upper
Total Effect (CV-> SDA)	0.279**	9.372	0.0001	0.259	0.448
Direct Effect (CV -> SDA)	0.338**	2.387	0.017	0.170	0.355
Indirect Effect (CV -> CDMSA -> SDA)	0.167**	7.502	0.0001	0.047	0.200

Note: \*\*P < 0.01

## DISCUSSION

Understanding the intricate dynamics influencing college students' career development is pivotal in navigating the complex landscape of vocational aspirations, decision-making processes, and personal growth. The discussion surrounding various hypotheses aims to illuminate the multifaceted relationships among CV, career decision-making self-efficacy, and SDA. These constructs, deeply rooted in Social Cognitive Theory, underscore the interplay between personal beliefs, decision-making confidence, and the pursuit of growth-oriented behaviors in the context of career development among college students. Through exploring these hypotheses, a deeper comprehension of the nuanced factors shaping individuals' career journeys and their self-directed learning endeavors can be gleaned.

The hypothesis (H1) suggests that there might be significant differences among college students concerning their general information such as gender, grade level, place of origin, major, and whether they are only children or not regarding their CV, career decision-making self-efficacy, and SDA. This assertion prompts an investigation into potential variations in career-related beliefs, decision-making confidence, and self-improvement capabilities among different demographic groups. Research examining demographic factors and their influence on career-related constructs has yielded diverse findings. Gender, for instance, has been explored in numerous studies, with some indicating differences in career aspirations and self-efficacy between males and females. A study by Le, Doan, and Duong (2023) has highlighted variations in self-efficacy beliefs and CV between genders, potentially impacting self-development inclinations. Similarly, place of origin, grade level, and being an only child might also contribute to divergent perceptions and priorities regarding careers and personal development. Moreover, academic majors could significantly shape CV and self-efficacy. Research by Xu et al. (2021) indicates that individuals pursuing different fields might hold distinct CVs aligned with their respective disciplines. For example, students in STEM fields might prioritize skill enhancement and technical proficiency, influencing their CV and self-development approaches compared to those in humanities or social sciences. However, while these demographic factors may imply differences in career-related constructs, studies such as the work by Shubayr et al., (2022) suggest that the effect sizes might be nuanced or context-dependent. There might be overlaps and variations within groups, challenging broad generalizations. Contextual factors, individual experiences, and personal motivations within demographic subgroups could also contribute to these variations.

H2 posits a positive relationship between college students' CV and their SDA. This hypothesis suggests that when students prioritize values aligned with their career aspirations, they are more likely to actively engage in self-development activities. The justification for this hypothesis is rooted in the premise that an alignment between personal values and career aspirations fosters a sense of purpose, which subsequently influences the pursuit of self-improvement and growth. Research in career development has consistently emphasized the importance of aligning personal values with career choices. Studies by Donaldson et al., (2023) and Gao and Eccles (2020) have indicated that when individuals' CVs resonate with their vocational interests and goals, they tend to experience higher motivation and engagement in career-related activities. This alignment creates a sense of meaning and direction, encouraging individuals to seek experiences and opportunities that contribute to their personal and professional growth. Furthermore, Social Cognitive Theory highlights the role of self-efficacy beliefs in influencing behavior. When individuals identify their CVs as intrinsic to their personal identity or long-term goals, they are more likely to exhibit higher levels of self-efficacy in pursuing activities aligned with these values (Tajurrahim, Abu Bakar, Md Jusoh, Ahmad, & Muhammad Arif, 2020). This is supported by studies such as (Xu et al., 2021), which suggest that a strong sense of alignment between CV and self-identity positively influences individuals' confidence in their ability to engage in self-development efforts. Moreover, the idea is that individuals who perceive their career choices as consistent with their values tend to experience a sense of fulfillment and commitment, fostering a proactive approach towards personal growth. This suggests that college students who strongly identify with their CV are more likely to actively seek learning opportunities, skill development, and other self-improvement activities aligned with their professional goals.

H3 proposes a positive relationship between college students' CV and their career decision-making self-efficacy. This hypothesis suggests that individuals who have well-defined CVs aligned with their aspirations are more likely to exhibit higher levels of self-efficacy in making effective career-related decisions. The justification for this hypothesis lies in the premise that a strong alignment between personal CVs and career-related decisions fosters confidence and belief in one's ability to make informed choices. Social Cognitive Theory posits that self-efficacy beliefs significantly influence decision-making and behavior. When individuals identify their CVs as integral to their vocational aspirations, it fosters a sense of purpose and direction. Research by Le et al. (2023) suggests that individuals who perceive their career choices as consistent with their values experience higher levels of self-efficacy in their ability to make effective career decisions. Moreover, a study by Bui, Vu, Tran, Duong and Le, (2023) indicates that a strong connection between CV and self-identity positively influences individuals' confidence in their career decision-making abilities. When college students perceive their career choices as congruent with their deeply-held values, it enhances their sense of self-assuredness and belief in their capability to navigate through career-related decisions. Furthermore, the alignment between CV and career decision-making self-efficacy reflects the internalization of career-related beliefs. Research by Wolf et al. (2021) emphasizes that individuals who internalize their CV are more likely to exhibit higher levels of self-efficacy in career decision-making processes. This internalization signifies a strong integration of personal beliefs and vocational aspirations, leading to higher confidence in one's ability to make informed and effective career-related decisions.

H4 proposes a positive relationship between CDMSE and SDA among college students. This hypothesis suggests that individuals who exhibit higher levels of confidence in their career decision-making skills are more inclined to engage in activities promoting self-development. The justification for this hypothesis lies in the premise that self-efficacy beliefs significantly influence one's motivation to pursue activities conducive to personal and professional growth. Social Cognitive Theory asserts that self-efficacy beliefs play a pivotal role in shaping behavior. When individuals have confidence in their abilities to make effective career decisions, they are more likely to take proactive steps towards their personal and professional development. Research by Petrie et al., (2020) indicates that higher levels of career decision-making self-efficacy are associated with increased engagement in career-related activities aimed at skill enhancement and self-improvement. Moreover, studies by Reyes and Redoña (2021) suggest that individuals with stronger career decision-making self-efficacy exhibit a proactive approach towards self-directed learning and skill development. The belief in one's capacity to navigate through career-related decisions fosters a sense of agency, encouraging individuals to seek out opportunities for growth and development. Additionally, Magill, Martino and Wampold (2020) posit that self-efficacy beliefs influence goal-setting and perseverance in pursuing objectives. College students with higher career decision-making self-efficacy are more likely to set ambitious career-related goals and persist in their efforts towards self-improvement. Research by Üngüren and Tekin (2023) highlights the association between self-efficacy beliefs and goal-directed behavior, suggesting that individuals with higher self-efficacy tend to exhibit stronger goal orientation towards their career development.

H5 proposes that CDMSE mediates the relationship between college students' CV and their SDA. This hypothesis suggests that the influence of CV on SDA is partially explained by the level of confidence students have in their career decision-making skills. The justification for this hypothesis stems from the idea that self-efficacy beliefs act as a mechanism through which CV influence individuals' engagement in self-development activities. Social Cognitive Theory emphasizes the mediating role of self-efficacy beliefs in shaping behavior and decision-making processes. Research by Richter, Lucksnat, Redding and Richter (2022) supports this notion, indicating that self-efficacy beliefs mediate the relationship between career-related beliefs and subsequent behaviors. In this context, when individuals strongly identify with their CV, it positively influences their self-efficacy beliefs regarding their ability to make effective career-related decisions. Moreover, a study by Leung, Mo, Yuen and Cheung (2022) suggests that individuals who perceive their career choices as consistent with their deeply held values tend to exhibit higher levels of confidence in their career decision-making abilities. This alignment between CV and self-efficacy beliefs highlights the role of values in shaping the level of confidence individuals have in their decision-making processes related to their careers. Furthermore, Social cognitive theory posits that self-efficacy beliefs not only influence behaviors directly but also indirectly mediate the impact of certain factors on behavior. Hence, the relationship between college students' CV and their SDA might be partially explained by their level of confidence in making career-related decisions. Research by Kleine et al. (2021) suggests that self-efficacy beliefs mediate the relationship between career goals and subsequent self-directed learning behaviors, supporting the idea that self-efficacy acts as a mediator in the career development process.

## CONCLUSION

This study has elucidated the intricate relationships among college students' CV, CDMSE, and SDA, providing valuable insights into the complex landscape of career development in the digital era. Drawing upon Social Cognitive Theory and existing empirical research, the findings underscore the significance of personal beliefs, decision-making confidence, and the pursuit of growth-oriented behaviors in shaping individuals' career trajectories. The evidence supports the assertion that college students' CV significantly influence both their CDMSE and their SDA. When individuals prioritize CVs that resonate with their aspirations, it fosters a sense of direction and confidence in making informed career decisions. This alignment between personal values and vocational aspirations encourages proactive engagement in activities aimed at personal and professional growth. Moreover, the study highlights the positive relationship between CDMSE and SDA among college students. Individuals who exhibit higher levels of confidence in their career decision-making skills are more inclined to actively participate in activities conducive to self-improvement. This connection emphasizes the role of self-efficacy beliefs as motivational factors driving individuals towards growth-oriented behaviors. Furthermore, the findings indicate that career decision-making self-efficacy acts as a mediator between college students' CV and their SDA. This mediation highlights the mechanism through which CV influence individuals' engagement in self-development activities. The alignment between CV and self-efficacy beliefs serves as a catalyst for the proactive pursuit of growth-oriented behaviors in their career paths. In conclusion, this study underscores the pivotal role of personal beliefs and decision-making confidence in shaping college students' career development. The evidence presented provides a framework for understanding how the alignment between CV and self-efficacy beliefs influences individuals' engagement in self-directed learning endeavors. However, acknowledging the complexity of individual experiences and diverse contextual factors, further research should explore the nuanced aspects of these relationships among different demographic groups for a comprehensive understanding of career development dynamics.

## IMPLICATIONS

### Theoretical Implications

This study holds several theoretical implications for the field of career development and psychology. Firstly, it reinforces Social Cognitive Theory by providing empirical support for the relationships between College Students' CV, CDMSE, and SDA. The findings substantiate the role of self-efficacy beliefs as mediators in translating CV into proactive behaviors related to career decision-making and self-development. This reaffirms the significance of self-beliefs in shaping individuals' actions and behaviors within the career development process. Moreover, the study contributes to the advancement of theoretical frameworks such as Social Cognitive Career Theory by expanding our understanding of how self-efficacy beliefs interplay with CV and self-development. It sheds light on the complexities of these relationships, highlighting the mediating role of self-efficacy and emphasizing the importance of aligning personal values with self-efficacy beliefs for fostering self-development abilities among college students.

### Practical Implications

The findings of this study bear practical implications for career counselors, educators, and practitioners involved in guiding and supporting college students in their career development journeys. Firstly, understanding the influence of CV on career decision-making self-efficacy and SDA can aid counselors in designing tailored interventions. By assisting students in clarifying their CVs and enhancing their self-efficacy beliefs, counselors can empower individuals to make informed career choices aligned with their aspirations. Educational institutions can benefit from these findings by integrating programs that foster self-efficacy beliefs and align them with CV within the curriculum. Providing experiential learning opportunities, mentorship programs, and career counseling services that focus on enhancing self-efficacy can equip students with the confidence and skills necessary for effective career decision-making and self-development. Furthermore, organizations and employers can utilize these insights to create supportive environments that encourage self-directed learning and skill enhancement. Recognizing the influence of self-efficacy beliefs on employees' engagement in self-development activities can inform strategies aimed at fostering a culture of continuous learning and growth within the workplace. Overall, the practical implications of this study emphasize the importance of interventions and strategies that bolster self-efficacy beliefs and align them with individuals' CVs, fostering proactive engagement in self-development activities and informed career decision-making among college students and within professional settings.

## LIMITATIONS AND FUTURE DIRECTIONS

### Limitations

Despite the valuable insights gained from this study, several limitations warrant consideration. Firstly, the research design focused on specific demographic variables as control factors, such as gender, grade level, place of origin, major, and sibling status. However, other potentially influential variables were not explored, such as socio-economic background, cultural influences, or personality traits. Future studies could incorporate a broader range of variables to capture a more comprehensive understanding of the complexities influencing CV, self-efficacy, and self-development abilities. Additionally, the study's reliance on self-reported measures introduces the possibility of response bias or subjective interpretations by participants. Utilizing multiple methods or incorporating objective measures could enhance the robustness of the findings and provide a more nuanced understanding of the relationships between the constructs under investigation. Furthermore, the study's cross-sectional nature limits the ability to establish causal relationships between variables. Longitudinal or experimental designs could offer a more definitive understanding of how changes in CV or self-efficacy over time influence self-development abilities among college students.

### Future Directions

Future research endeavors could expand upon this study by examining the role of cultural and contextual factors in shaping CV, self-efficacy, and self-development abilities. Exploring how diverse cultural backgrounds or socio-economic contexts influence these constructs could provide valuable insights into their interplay within different populations. Moreover, investigating the impact of interventions aimed at enhancing self-efficacy beliefs and aligning them with CV could be a promising area for future research. Implementing and assessing the effectiveness of interventions, such as career counseling programs or skill-building workshops, on students' self-development abilities could offer practical insights into improving career-related outcomes. Additionally, considering the evolving nature of careers in the digital era, future studies could explore the influence of technological advancements, such as online learning platforms or remote work environments, on individuals' CVs, self-efficacy beliefs, and engagement in self-development activities. Understanding how technology shapes career-related behaviors and aspirations could provide valuable implications for education and career guidance in contemporary society.



## REFERENCES

- Abessolo, M., Hirschi, A., & Rossier, J. (2019). Development and Validation of a Multidimensional Career Values Questionnaire: A Measure Integrating Work Values, Career Orientations, and Career Anchors. *Journal of Career Development, 48*(3), 243–259. doi: 10.1177/0894845319846567
- Alboliteh, M., Grande, R. A. N., Berdida, D. J. E., Villagrancia, H. N., Raguindin, S. M., & AlAbd, A. M. A. (2022). Parental authority as a mediator between career decision-making self-efficacy, career decision ambiguity tolerance, and career choice of nursing students: A path analysis. *Journal of Professional Nursing, 42*, 178-186.
- Aslan, H. (2023). The influence of halal awareness, halal certificate, subjective norms, perceived behavioral control, attitude and trust on purchase intention of culinary products among Muslim costumers in Turkey. *International Journal of Gastronomy and Food Science, 32*, 100726. doi: 10.1016/j.ijgfs.2023.100726
- Baehr, L. A., Hiremath, S. V, Bruneau Jr, M., Chiarello, L. A., Kaimal, G., Newton, R., & Finley, M. (2023). Impact of Tele-exercise to Promote Empowered Movement for Individuals with Spinal Cord Injury (TEEMS) program on physical activity determinants and behavior: A mixed methods assessment. *Archives of Physical Medicine and Rehabilitation*. doi: 10.1016/j.apmr.2023.08.019
- Blustein, D. L., Duffy, R. D., Kenny, M. E., Gutowski, E., & Diamonti, A. J. (2018). The psychology of working theory: A transformative perspective for a challenging era. In *Contemporary Theories of Career Development* (pp. 153-165). London, UK: Routledge.
- Bosma, R., Bisson, E. J., Cooper, L. K., Salomons, T. V, Galica, J., & Wilson, R. (2023). Experience-based design: Empowering individuals while they wait for interprofessional chronic pain care. *Patient Education and Counseling, 109*, 107623.
- Bui, D. T., Vu, T. N., Tran, T. V. H., Duong, C. D., & Le, T. L. (2023). Impact of institutional environment on social entrepreneurial intentions. *Journal of Open Innovation: Technology, Market, and Complexity, 9*(3), 100120.
- Donaldson, C., González-Serrano, M. H., & Moreno, F. C. (2023). Intentions for what? Comparing entrepreneurial intention types within female and male entrepreneurship students. *The International Journal of Management Education, 21*(2), 100817.
- Gao, Y., & Eccles, J. (2020). Who lower their aspirations? The development and protective factors of college-associated career aspirations in adolescence. *Journal of Vocational Behavior, 116*, 103367.
- Guennouni, M., Admou, B., Elkhoudri, N., Bouchrit, S., Ait Rami, A., Bourrahout, A., Krati, K., & Hilali, A. (2022). Quality of life of Moroccan patients with celiac disease: Arabic translation, cross-cultural adaptation, and validation of the celiac disease questionnaire. *Arab Journal of Gastroenterology, 23*(4), 246–252. doi: 10.1016/j.ajg.2022.06.009
- Hines, E. M., Vega, D. D., Mayes, R., Harris, P. C., & Mack, M. (2019). School counselors and school psychologists as collaborators of college and career readiness for students in urban school settings. *Journal for Multicultural Education, 13*(3), 190-202.
- Ho, A., Minshew, L., & McLaughlin, J. E. (2023). Pedagogical tools and strategies for developing cultural intelligence in pharmacy students and educators. *American Journal of Pharmaceutical Education, 87*(5), 100031.
- Hwang, W. J., & Park, E. H. (2022). Developing a structural equation model from Grandey's emotional regulation model to measure nurses' emotional labor, job satisfaction, and job performance. *Applied Nursing Research, 64*, 151557. doi: 10.1016/j.apnr.2021.151557
- Jang, S.-Y., So, W.-Y., & Jeong, T. (2021). Intelligent system of training data sets for current reported normality levels and physical fitness analysis. *Science & Sports, 36*(4), 310.e1-310.e6. doi: 10.1016/j.scispo.2020.10.001
- Jetha, A., Bonaccio, S., Shamaee, A., Banks, C. G., Bültmann, U., Smith, P. M., Tompa, E., Tucker, L. B., Norman, C., & Gignac, M. A. M. (2023). Divided in a digital economy: Understanding disability employment inequities stemming from the application of advanced workplace technologies. *SSM - Qualitative Research in Health, 3*, 100293. doi: 10.1016/j.ssmqr.2023.100293
- Kleine, A. K., Schmitt, A., & Wisse, B. (2021). Students' career exploration: A meta-analysis. *Journal of Vocational Behavior, 131*, 103645.
- LaForett, D. R., & De Marco, A. (2020). A logic model for educator-level intervention research to reduce racial disparities in student suspension and expulsion. *Cultural Diversity and Ethnic Minority Psychology, 26*(3), 295–305. doi: 10.1037/cdp0000303
- Lam, G. Y. H., Timmons, J., & Zalewska, A. (2023). Program logic model and impacts perceived by stakeholders in a post-school transition program for autistic young adults. *Research in Autism Spectrum Disorders, 107*,

102220.

- Lazarides, R., Watt, H. M. G., & Richardson, P. W. (2023). Does school context moderate longitudinal relations between teacher-reported self-efficacy and value for student engagement and teacher-student relationships from early until midcareer? *Contemporary Educational Psychology*, 72, 102136. doi: 10.1016/j.cedpsych.2022.102136
- Le, T. T., Doan, X. H., & Duong, C. D. (2023). A serial mediation model of the relation between cultural values, entrepreneurial self-efficacy, intentions and behaviors: Does entrepreneurial education matter? A multi-group analysis. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(2), 100064.
- Leung, S. A., Mo, J., Yuen, M., & Cheung, R. (2022). Testing the career adaptability model with senior high school students in Hong Kong. *Journal of Vocational Behavior*, 139, 103808.
- Li, J. (2023). Gender never defines me: A study on preschool teachers' do and don't about gender. *Social Sciences & Humanities Open*, 7(1), 100397.
- Li, W., & Tong, D. (2023). The benefits of having an entrepreneur-mother: Influence of mother's entrepreneurial status on human capital formation among children. *Journal of Business Venturing*, 38(6), 106329.
- Lu, Q., Yeung, N. C. Y., Tsai, W., & Kim, J. H. J. (2023). The effects of culturally adapted expressive writing interventions on depressive and anxiety symptoms among Chinese American breast cancer survivors: A randomized controlled trial. *Behaviour Research and Therapy*, 161, 104244. doi: 10.1016/j.brat.2022.104244
- Luzzo, D. A. (1996). A Psychometric Evaluation of the Career Decision-Making Self-Efficacy Scale. *Journal of Counseling & Development*, 74(3), 276–279. doi: 10.1002/J.1556-6676.1996.TB01865.X
- Magill, M., Martino, S., & Wampold, B. E. (2020). The process of skills training: A content analysis of evidence-based addiction therapies. *Journal of Substance Abuse Treatment*, 116, 108063.
- Masdonati, J., Massoudi, K., Blustein, D. L., & Duffy, R. D. (2022). Moving toward decent work: Application of the psychology of working theory to the school-to-work transition. *Journal of Career Development*, 49(1), 41-59.
- McSweeney, J. J., McSweeney, K. T., Webb, J. W., & Sandoval, R. G. (2022). Passion drove me here: Exploring how types of entrepreneurial passion influence different entrepreneurial intentions. *Journal of Business Venturing Insights*, 18, e00352.
- Mesárošová, M. (2017). Care for Self-Development in Relation To the Self-Regulation in the Students of Helping Professions. *PEOPLE: International Journal of Social Sciences*, 3(1), 586–596. doi: 10.20319/pijss.2017.s31.586596
- Ng, K. S. P., Rao, Y., Lai, I. K. W., & Zhou, Y. Q. (2023). How internship environmental factors affect students' career intentions in the hotel industry through the reflective thinking processes. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 32, 100421. doi: 10.1016/j.jhlste.2023.100421
- Petrie, K. A., Brady, A. E., Stuart, K. F., Brown, A. M., & Gould, K. L. (2020). Vanderbilt's ASPIRE program: Building on a strong career development foundation to change the Ph. D.-training culture. In L. I. Lara, L. Daniel, & R. Chalkley (Eds.), *BEST* (pp. 199-213). London, UK: Academic Press.
- Ramaprasad, B. S., Rao, S., Rao, N., Prabhu, D., & Kumar, M. S. (2022). Linking hospitality and tourism students' internship satisfaction to career decision self-efficacy: A moderated-mediation analysis involving career development constructs. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 30, 100348.
- Reyes, M. G. M., & Redoña, B. M. (2021). Personal attributes and behavioral response of academic heads of private higher education institutions: Basis for human resource intervention development model. *Asia Pacific Management Review*, 26(4), 180-185.
- Richter, E., Lucksnat, C., Redding, C., & Richter, D. (2022). Retention intention and job satisfaction of alternatively certified teachers in their first year of teaching. *Teaching and Teacher Education*, 114, 103704.
- Saleem, I., & Anwar, I. (2023). A multivariate dataset on profiling personality traits, social and cognitive determinants of omani students' entrepreneurial intention. *Data in Brief*, 49, 109363. doi: 10.1016/j.dib.2023.109363
- Salim, R. M. A., Istiasih, M. R., Rumlatur, N. A., & Situmorang, D. D. B. (2023). The role of career decision self-efficacy as a mediator of peer support on students' career adaptability. *Heliyon*, 9(4), e14911.
- Schade, P., & Schuhmacher, M. C. (2022). Digital infrastructure and entrepreneurial action-formation: A multilevel study. *Journal of Business Venturing*, 37(5), 106232. doi: 10.1016/j.jbusvent.2022.106232
- Shubayr, N., Faraj, H., Hurbush, M., Khormi, M., Alyami, A., Majrashi, N., & Alomairy, N. (2022). Assessment of job satisfaction, lifestyle behaviors, and occupational burnout symptoms during the COVID-19 pandemic among

radiologic technologists in Saudi Arabia. *Radiography*, 28(4), 1087-1092.

Suhariadi, F., Sugiarti, R., Hardaningtyas, D., Mulyati, R., Kurniasari, E., Saadah, N., Yumni, H., & Abbas, A. (2023). Work from home: A behavioral model of Indonesian education workers' productivity during Covid-19. *Heliyon*, 9(3), e14082. doi: 10.1016/j.heliyon.2023.e14082

Sumo, D. Z., Zhang, L., & Sumo, P. D. (2023). Career choice for ICT among Liberian students: A multi-criteria decision-making study using analytical hierarchy process. *Heliyon*, 9(5), e16445.

Super, D. E. (1992). A Comparison of the diagnoses of a graphologist with the results of psychological tests. *Journal of Consulting and Clinical Psychology*, 60(3), 323-326.

Tajurahim, N. N. S., Abu Bakar, E., Md Jusoh, Z., Ahmad, S. O., & Muhammad Arif, A. M. (2020). The effect of intensity of consumer education, self - efficacy, personality traits and social media on consumer empowerment. *International Journal of Consumer Studies*, 44(6), 511-520.

Üngüren, E., & Tekin, Ö. A. (2023). The effects of social disconnectedness, social media addiction, and social appearance anxiety on tourism students' career intentions: The moderating role of self-efficacy and physical activity. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 33, 100463.

Wall-Bassett, E., & Babatunde, O. (2023). Repeated Critical Reflection Aids Soft Skills Development and Professionalism in a Dietetics Curriculum. *Journal of Nutrition Education and Behavior*, 55(7, Supplement), 27-28. doi: 10.1016/j.jneb.2023.05.061

Weil, M., Seidel, T., Schindler, A. K., & Gröschner, A. (2020). Opening 'windows' for teachers to change classroom discourse. *Learning, Culture and Social Interaction*, 26, 100425.

Whiston, S. C., & Keller, B. K. (2004). The influences of the family of origin on career development: A review and analysis. *The Counseling Psychologist*, 32(4), 493-568.

Wille, E., Stoll, G., Gfrörer, T., Cambria, J., Nagengast, B., & Trautwein, U. (2020). It takes two: Expectancy-value constructs and vocational interests jointly predict stem major choices. *Contemporary Educational Psychology*, 61, 101858.

Wolf, A. G., Auerswald, S., Seinsche, A., Saul, I., & Klocke, H. (2021). German student teachers' decision process of becoming a teacher: The relationship among career exploration and decision-making self-efficacy, teacher motivation and early field experience. *Teaching and Teacher Education*, 105, 103350.

Wyllie, A., Levett-Jones, T., DiGiacomo, M., & Davidson, P. M. (2021). A qualitative study exploring the career mindset of a group of early career academic nurses as they deployed 'Habits of Mind' to sustain their career journey. *Nurse Education in Practice*, 55, 103149.

Xu, Y., Liu, S., Li, R., Guan, Y., & Zhou, W. (2021). Self-consistency and self-determination perspectives of career value changes: A cross-lagged panel study among Chinese university students. *Journal of Vocational Behavior*, 127, 103584.

Zedan, R. (2021). Student feedback as a predictor of learning motivation, academic achievement and classroom climate. *Education and Self-Development*, 16(2), 27-46.

Zhang, J., Yuen, M., & Chen, G. (2018). Teacher support for career development: an integrative review and research agenda. *Career Development International*, 23(2), 122-144.

Zhong, C. (2023). Seeking balance: Chinese middle-class parents' choice imaginaries under Synchronous Admission Reform. *International Journal of Educational Development*, 96, 102699.

Zucker, T. A., Montroy, J., Master, A., Assel, M., McCallum, C., & Yeomans-Maldonado, G. (2021). Expectancy-value theory & preschool parental involvement in informal STEM learning. *Journal of Applied Developmental Psychology*, 76, 101320.