



Employability affecting employment performance of graduates majoring in physical education: Chain-mediating role of career self-efficacy and job search behavior

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Abstract

The research aimed to examine the impact of employability on employment performance and explore the chain-mediated effects of career self-efficacy and job search behavior. Using a stratified proportional sampling method, data were collected from 629 graduates majoring in physical education in Guizhou Province, China. Structural equation modeling (SEM) indicated that employability was a significant predictor of employment performance ($\beta = .647$, C.R. = 8.993, $p < .001$). Career self-efficacy did not play a mediating role ($\beta = .070$, $p = .085$), while job search behavior demonstrated a significant mediating effect ($\beta = .141$, $p < .001$). Furthermore, a significant chain-mediated effect of career self-efficacy and job search behavior was observed between employability and employment performance ($\beta = .084$, $p < .01$). The study expanded the application scope of the Social Cognitive Model of Career Self-Management (CSM), confirming the direct positive impact of employability on the employment performance of university graduates majoring in physical education. Additionally, the research identified the mediating role of job search behavior and the chain-mediated effect of career self-efficacy and job search behavior, thereby enhancing our comprehension of the individual's career decision-making process.

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Introduction

The employment quality of physical education graduates reflects a country's emphasis on physical education and the development level of its sports industry (Anagnostopoulos et al., 2014). Although China has hosted both the Summer and Winter Olympics, the employment quality for physical

education graduates remains low (Razavi et al., 2020). This issue is particularly evident in Guizhou Province. Over the past decade, Guizhou has ranked among the top in the country for GDP growth (Qiu et al., 2021). Post-COVID-19 period, Guizhou resumed several competitions, including the "National Cross-Country Championship" and the "Guizhou Provincial Games."

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Additionally, grassroots sports events like the “Village Basketball Association (Village BA)” and the “Village Football Association (Village FA)” have garnered global attention (Hou, 2024). Despite the economic prosperity and diversification of sports events indicating increased career opportunities in sports-related fields, the stable employment rate for prominent sports graduates in Guizhou Province was only 78.01 percent in 2023, with a professional match employment rate of merely 70.05 percent both below the national average (Guizhou Province General Higher Education Institution Graduates Employment Office, 2024). Scholars have identified China’s current employment issues as the mismatch between graduates’ skills and market demands (Uwakwe et al., 2023). Therefore, it is imperative to reassess the impact of physical education graduates’ employability on employment quality. Studying the employment issues of physical education graduates in Guizhou Province can offer insights into other rapidly developing regions facing similar challenges.

Employment performance emerged as a burgeoning concept in higher education, replacing the traditional notion of employment quality, which delved deeper than concepts like employment rates or success, with significant impacts on future career development, job sustainability, and job satisfaction (Shen, 2015). Factors such as employability (Zhiwen & van der Heijden, 2008), self-efficacy (Tims et al., 2014), and job-search behavior (Hu et al., 2020) were identified as influencing job search outcomes of graduates. These factors align with the evidence chain of the Social Cognitive Model of Career Self-Management (CSM) (Lent & Brown, 2013). Despite existing research on the relationship between graduates’ employability and employment performance, the specific mechanisms remain unclear, and there is a lack of focused studies on physical education graduates in Guizhou Province. Therefore, the research questions of this study were; (1) What is the relationship between employability and employment performance of physical education graduates in Guizhou Province? ; and (2) How do career self-efficacy and job search behavior influence this relationship?

This study applied the Career Self-Management (CSM) model proposed by Lent and Brown (2013) to investigate the relationship between employability and employment performance among sports graduates in Guizhou Province. It also examined the chain-mediated effects of career self-efficacy and job search behavior. Understanding these interrelationships is crucial for developing the sports sector, as it helps elucidate the

underlying causes of the mismatch between graduates’ employability and market demands. The findings of this research provide practical strategies for enhancing the employment performance of sports graduates, contributing to the overall development of physical education and increasing its social and economic value.

Literature Review

Social Cognitive Model of Career Self-Management (CSM)

The Social Cognitive Model of Career Self-Management (CSM) originated from the Social Cognitive Career Theory (SCCT) (Lent & Brown, 2013). Divergent from SCCT, CSM provides a comprehensive theoretical framework to address the potential career development process rather than attempting to predict its content (Lent & Brown, 2019; Petruzzello et al., 2021). It incorporates critical variables such as personal inputs (e.g., ability), self-efficacy, outcome expectations, action, and outcome. Within the framework of CSM, numerous scholars have explored the proximal and distal mechanisms of employment outcomes. For instance, Hua Wang’s research confirmed the mediating role of career decision-making self-efficacy between career social support and career management competency (Wang & Jiao, 2023). Regrettably, as an emerging theoretical model, the CSM framework has not yet garnered a complete evidence chain similar to that of SCCT.

Employment Performance

The concept of employment performance was first clearly defined by a Chinese scholar. She proposed that studying employment performance solely based on whether an individual found employment was insufficiently comprehensive. Employment performance should encompass both process performance and outcome performance. The former considers individuals’ behavior when selecting jobs. It analyzes their efficiency and attitudes during employment activities, while the latter considers the results of their job choices and analyzes the outcomes and satisfaction of their employment activities (Wang, 2006). The former refers to an individual’s competitiveness, satisfaction, smoothness of employment, and salary level, while the latter pertains to an individual’s performance and competitiveness in the workplace (Li & Liu, 2011). Some existing studies have explored factors influencing employment performance,

including individual capabilities and experience (Wujema et al., 2022), self-efficacy (Tims et al., 2014), and job-seeking behavior (Hu et al., 2020), but comprehensive integration of these factors in a single model is yet to be observed.

Employability, Career Self-Efficacy, and Job Search Behavior of Physical Education Graduates

Employability is a fundamental factor influencing employment performance. Holmes (2013) posited that graduate employability involves actively seeking and successfully attaining an ideal job that aligns with one's qualifications, following a proper assessment of self-situation and labor market demands. Among the various theoretical frameworks addressing employability, the Career EDGE model has consistently influenced the literature on higher education graduates' employability (Wujema et al., 2022). However, scholars in China predominantly derived their understanding of employability from experience, input from colleagues, and common knowledge, often overly relying on professional knowledge and skills (Tien & Wang, 2017). Research on the employability of Chinese physical education graduates necessitates a more profound integration of theoretical models.

Self-efficacy has been demonstrated to influence performance. In response to Bandura's emphasis on domain-specific self-efficacy (Bandura, 2012), Lent operationalized this concept in the career domain, introducing career self-efficacy, which is defined as decision-makers self-assessment or confidence in their ability to complete tasks required in the career decision-making process (Lent et al., 2016). In employment research, extensive evidence supports a positive relationship between self-efficacy and performance (Alhadabi & Karpinski, 2020; Stajkovic & Luthans, 1998). However, recent studies indicated that self-efficacy may exhibit weak correlations, no ties, or even negative correlations with subsequent performance (Vancouver, 2008; Vancouver et al., 2014). Therefore, the role of self-efficacy in career development and performance may be influenced by various factors, warranting a more detailed exploration and explanation. This presents a fruitful direction for future research.

Behavior is a critical factor in achieving performance. Blau posited that job search behavior refers to specific actions individuals take during the job search process, involving time and effort (Blau, 1994). He categorized job search behavior into preparatory and active. Active job search behavior typically leads to interviews and

job opportunities (Saks & Ashforth, 2000). Focused job seekers actively plan by aligning employment goals with needs, skills, and experiences to approach the optimal choices that motivate them to attain higher-quality jobs (Van Hooft et al., 2021). This underscores the crucial role of job search behavior in individual career development while emphasizing the importance of self-regulation and dynamic goal-setting in the job search process.

Previous research has highlighted varying definitions and implications in the context of employability. While some scholars, like Holmes (Holmes, 2013), view employability as possessing specific attributes, others argue that it is a dynamic process influenced by external factors (Fugate et al., 2004). This study adopts a comprehensive perspective, acknowledging both internal attributes and external influences on employability. Similarly, the concept of career self-efficacy has been debated. While Lent and Brown (2013) emphasize its role in career decision-making, Vancouver et al. (2014) suggest that its impact on performance may vary depending on situational stressors. This study critically examines these differing viewpoints to provide a nuanced understanding of the factors affecting employment performance among physical education graduates.

Research Hypothesis and Theoretical Model

Effects of Employability on Employment Performance

Currently, employability has become a crucial factor for the success of university students in the contemporary career management process (Cheng et al., 2021). Fugate's research indicated that enhancing employability could improve the unemployed population's adaptability, vocational identity, and human capital, thereby assisting them in reemployment and enhancing the consequential employment performance (Fugate et al., 2004). Furthermore, employability positively predicted starting salaries and job satisfaction (Gupta & Ansari, 2023). According to the perspective of the CSM model, abilities may also play a crucial role in the performance of adaptive career behaviors, such as job search behaviors. This helps determine the extent to which individuals implement certain behaviors and their likelihood of achieving success (Lent & Brown, 2013). Hence, it is posited that:

H1: Employability positively affects the employment performance of physical education graduates.

The Mediating Role of Career Self-Efficacy

Employability may impact employment performance indirectly. In a quantitative study conducted in six provinces in mainland China, Wang (Wang et al., 2022) found a positive correlation between college students' self-efficacy and employability levels. Higher levels of self-efficacy often lead students to approach job searching with greater confidence after graduation (Lian et al., 2021). CSM explains the research above, suggesting that abilities, self-efficacy, outcome expectations, and performance goals determine individual work performance levels (Lent & Brown, 2019). However, there are differing opinions on this viewpoint. A recent study in China indicated that the impact of self-efficacy on performance depends on the strength of stress challenges (Du et al., 2023). While there is controversy over the influence of self-efficacy on performance, the positive impact of abilities on self-efficacy seems well-established. Additionally, the undeniable influence of abilities on performance leads us to formulate H2 and its sub-hypotheses.

H2: Career self-efficacy of physical education graduates plays a mediating role between employability and employment performance.

H2a: Employability positively affects the career self-efficacy.

H2b: Career self-efficacy positively affects employment performance.

The Mediating Role of Job Search Behavior

Although employability would influence the quality of employment, changes in job search behavior are likely to impact this relationship indirectly. CSM posits that abilities play a crucial role in the performance of adaptive career behaviors, determining the extent to which individuals implement certain behaviors and their likelihood of success (Lent & Brown, 2013). Fugate and Kinicki suggested that stronger employability could help job seekers identify and seize job opportunities, making them more proactive during the job search process (Fugate et al., 2004). Another possibility has been highlighted in the research of Saks and Ashforth (Saks & Ashforth, 2000), who proposed that individuals who perceive difficulties in finding a job may intensify their efforts in job seeking. Despite the ongoing debate regarding the impact of job search behavior on employment performance, most mainstream perspectives still endorse the positive influence of employability on

job search behavior, subsequently affecting employment performance. Therefore, this study attempts to propose H3 and its sub-hypotheses:

H3: Job search behavior of physical education graduates plays a mediating role between employability and employment performance.

H3a: Employability positively affects job search behavior.

H3b: Job search behavior positively affects employment performance.

Chain Mediating Effects of Career Self-efficacy and Job Search Behavior

In the framework of CSM, performance is likely to depend on abilities and self-efficacy, contributing to individuals harnessing their capabilities (Lent & Brown, 2019). Saks and Ashforth's study confirmed the mediating role of job-seeking self-efficacy in the relationship between employability and job search behavior, as well as distal job-seeking outcomes (Saks & Ashforth, 2000). Guan and Deng proposed that higher levels of career self-efficacy would motivate individuals to persist and take more effective actions when faced with job-seeking challenges, increasing the likelihood of finding employment post-graduation (Guan et al., 2013). Therefore, H4 was posited:

H4: Career self-efficacy and job search behavior play a chain mediation role between employability and employment performance.

H4a: Career self-efficacy positively affects job search behavior.

The theoretical basis for this study is CSM. Considering the lack of empirical research that explicitly integrates relevant factors of employment issues into the CSM model, the conceptual model in Figure 1 is proposed to guide the research.

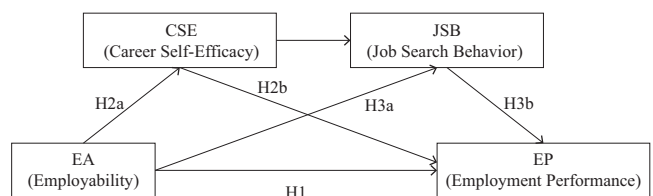


Figure 1 Conceptual model

Methodology

Participants and Data Collection

Following the cessation of COVID-19 pandemic control measures in China in March 2022, sports events and educational activities gradually resumed, normalizing the employment situation for 2023 sports graduates. Investigating the employment status of these graduates provides insights into employment trends and challenges under normal educational conditions, offering robust data for policy formulation and educational reform. Guizhou Province's sports development and student employment issues are particularly representative. In 2023, Guizhou Province had 29 undergraduate universities, 14 offering sports programs across 9 cities. According to the 2019 enrollment brochures of these 14 universities, the 2023 cohort included 1,022 sports graduates. This study utilized cross-sectional data from a finite population. The minimum sample size was estimated using Cochran's formula (Cochran, 1977) for social surveys (Equation (1)):

$$n_0 = \frac{Z^2 \cdot p \cdot (1-p)}{E^2} \quad (1)$$

Note: n_0 is the sample size, the confidence level coefficient $Z = 1.96$, the estimated proportion $p = .5$, and the margin of error $E = 0.05$.

The minimum sample size calculated was 385. Considering using SEM for hypothesis testing and the 58 survey items, Hair et al. (2009) recommended a sample size of at least 10 times (Hair et al., 2009), the number of items need a minimum of 580 participants. Therefore, a sample size of 600 was deemed appropriate. To account for potential invalid responses, the team sampled 650 participants, representing 65 percent of the population, ensuring reliability and validity.

The educational institutions provided the study's data and facilitated access to the graduates. A stratified proportional sampling method was employed, selecting about 65 percent of the 2023 graduates majoring in Physical Education from 14 public undergraduate institutions across 9 cities. The survey was primarily distributed online via Questionnaire Star. Ethical approval was obtained from "The Chair of Research Ethics Committee Mahachulalongkornrajavidyalaya University" (Reference Number: MCU 8007/R.374). Data collection occurred in December 2023, approximately 6 months post-graduation, allowing for comprehensive job-search reflections. Out of 650 questionnaires collected,

629 valid responses were obtained after data cleaning, yielding an effective response rate of 96.7 percent. The valid sample included 382 males (aged $22.25 \pm .62$), 60.7 percent, and 247 females (aged $22.45 \pm .53$), 39.3 percent.

Research Instruments

The employment performance scale referenced the six-question scales previously used by Liu (Li & Liu, 2011). The scale measured employability using six questions, and through literature tracing, the ultimate source was identified as Wang (2006). The questionnaire covered aspects such as job-seeking initiative, ease of job search, job satisfaction, and intention to continue working. In this study, the Cronbach's $\alpha = .84$.

The Employability scale was developed by Pool and Qualter (Dacre Pool et al., 2014). In Pool's study, there was no explicit clarification of generic skills; instead, "problem-solving skills" was used to represent generic skills. Therefore, we made careful adjustments to "problem-solving skills" to ensure its applicability to the cohort of sports graduates, specifically; (1) Considering that the majority of employment prospects for sports graduates lie in the education and training industry, which does not heavily require mathematics, we removed "I am satisfied with my level of numeracy; and (2) Based on Rodrigo Ojeda-Nahuelcura's research on generic skills for sports graduates, the most critical factors include ethical commitment and autonomous learning (Ojeda-Nahuelcura et al., 2023). Thus, we added "G4: I am confident in my ability for autonomous learning" and "I am aware of the ethical commitment required to be a professional in the sports industry, and I can uphold it." The adjusted Employability Scale comprised 28 items; Cronbach's α reached .96.

The Career Self-Efficacy scale employed was derived from the instrument designed by Lent and Ezeofor (Lent et al., 2016). It measured 2 dimensions: brief decisional self-efficacy and decisional coping efficacy, encompassing 12 items. A sample item included was "Figure out which career options could fit your personality well." In this study, Cronbach's $\alpha = .92$.

The three scales used a 5-point Likert scale to rate items, with 1 indicating strong disagreement and 5 denoting strong agreement.

The Job Search Behavior construct was measured by the revised Chinese version of the Job Search Intensity Questionnaire developed by Blau (1994), comprising 12 items. A sample item was "Discuss potential job opportunities with relatives and friends." Cronbach's $\alpha = .89$. The Likert 5-point scale was employed, ranging from never 1 to very frequently 5.

Data Analysis

All required criteria must be met before evaluating the structural model (Hair Jr et al., 2020). Therefore, SPSS version 19.0 and AMOS version 24.0 software were employed to assess the reliability and validity of the measurement model, including factor loadings, average variance extracted (AVE), composite reliability (CR), and Cronbach's Alpha (CA). Subsequently, the conceptual model was evaluated using SEM path modeling. Finally, bootstrapping was utilized to examine the effects of mediation.

Results and Discussion

Measurement Model Analysis

The study involved four constructs: Employability (EA), Job Search Behavior (JSB), Career Self-Efficacy (CSE), and Employment Performance (EP). The results

of the reliability test and CFA are presented in Table 1. The Cronbach's α (CA) values for the four constructs were .962, .896, .927, and .840, demonstrating excellent reliability for each measurement scale. The factor loadings for all latent variables ranged from .660 to .977, reaching statistical significance. Each construct's composite reliabilities (CR) ranged from .858 to .962. These results adhere to the standards set by Hair and Joe (Hair et al., 2016) and Fornell and Larcker (Fornell & Larcker, 1981).

Discriminant validity was examined using the average variance extracted (AVE) and its square root, comparing the values with the correlation coefficients, as presented in Table 2. The AVE values for the four constructs were .837, .843, .839, and .505, all exceeding .50, indicating good fit validity. Additionally, the square root of the AVE for each variable exceeded the correlation coefficients between that variable and other variables, providing preliminary support for discriminant validity (Fornell & Larcker, 1981).

Table 1 Construct reliability, validity, and factor loadings ($n = 629$)

Constructs	Item	No. of items	CA	Factor Loading	SE	<i>t</i> value	SMC	AVE	CR
EA	CDL	5(Q1–5)	.962	.839	-	-	.704	.837	.962
	DSK	5(Q6–10)		.933	.105	13.241	.870***		
	GS	5(Q11–15)		.977	.094	14.196	.955***		
	WLE	2(Q16–17)		.888	.090	13.468	.789***		
	EISG	11(Q18–28)		.932	.094	14.032	.869***		
JSB	PB	6(Q29–34)	.896	.954	-	-	.910	.843	.912
	AB	6(Q35–40)		.876	.079	12.208	.767***		
CSE	BD	8(Q41–48)	.927	.977	.058	16.136	.955***	.839	.914
	CE	4(Q49–52)		.855	-	-	.731		
EP	PP	3(Q53–55)	.840	.660	-	-	.536	.505	.858
	OP	3(Q56–58)		.811	.108	14.966	.658***		

Note: EA = Employability, CDL = Career Development Learning, DSK = Degree Subject Knowledge, GS = Generic Skills, WLE = Work & Life Experience, EISG = Emotional Intelligence & Self-Management; JSB = Job Search Behavior, PB = Job Preparation Behavior, AB = Active Job Search Behavior; CSE = Career Self-Efficacy, BD = Brief Decisional Self-Efficacy, CE = Decisional Coping Efficacy; EP = Employment Performance, PP = Process Performance, OP = Outcome Performance; *** $p < .001$.

Table 2 Correlation of constructs

Constructs	Mean	SD	Discriminant Validity			
			EA	CSE	JSB	EP
EA	3.666	.537	.92			
CSE	3.369	.660	.69***	.92		
JSB	3.655	.595	.55**	.53**	.92	
EP	2.718	.604	.71**	.70**	.69***	.71

Note: The bolded values on the diagonal are the square root of the variable's AVE. ** $p < .01$, *** $p < .001$.

Structural Model Analysis

Firstly, the fit indices of the model were observed. The model's $\chi^2/df = 2.900 < 3$. GFI and AGFI were .805 and .785, respectively, and thus deemed acceptable. The RMSEA = .055 < .08 meets the required criteria and makes the model suitable for further investigation. To enhance result stability, the recommended approach by Hair et al., (2019). utilizes 5000 bootstrapping samples with the least squares method in AMOS to test the significance of the latent path coefficients (Figure 2 and Table 3).

Employability positively impacted employment performance ($\beta = .647$, C.R. = 8.993, $p < .001$), supporting H1. Employability also significantly positively affected career self-efficacy ($\beta = 1.147$, C.R. = 12.018, $p < .001$), confirming H2a. However, although career self-efficacy did not considerably impact employment performance ($\beta = .061$, C.R. = 1.723, $p = .08$), H2b was rejected. Employability positively influenced job search behavior ($\beta = .061$, C.R. = 4.468, $p < .001$), supporting H3a. Career self-efficacy also significantly impacted job search behavior ($\beta = .246$, C.R. = 3.486, $p < .001$),

supporting H4a. Job search behavior positively affected employment performance ($\beta = .297$, C.R. = 8.529, $p < .001$), and H3b was supported.

The results of research H1 remained consistent with the majority of previous studies. Cheng (Cheng et al., 2021) asserted that employability had become a crucial factor in the contemporary career management process for university students to secure employment successfully. However, the relationship between ability and outcomes constitutes two distant variables in CSM models (Lent & Brown, 2013). Therefore, further clarification of the underlying mechanisms is necessary. The study once again confirmed the impact of employability on employment quality, emphasizing the ongoing importance of enhancing employability skills for sports major undergraduates or higher education in general. Additionally, most of the sub-hypotheses of H2 and H3 were supported, laying the groundwork for the examination and analysis of mediating effects.

Mediating Effects Test

To investigate the indirect effects of the dependent variable through the mediating variables, percentile bootstrap and bias-corrected percentile bootstrap were conducted with 5000 bootstrap samples at a 95 percent confidence interval (Taylor et al., 2008). Following the recommendations of Preacher and Hayes (Preacher & Hayes, 2008), the study also computed confidence intervals for upper and lower limits to examine the significance of indirect effects. The relevant results are presented in Table 4.

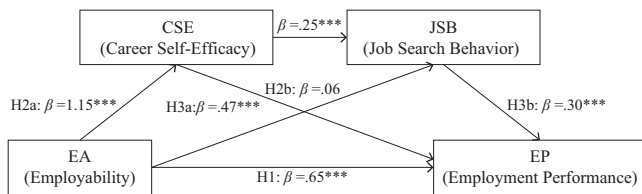


Figure 2 The results of the structural model
Note: *** $p < .001$.

Table 3 Structural Model Paths

Hypothesis	Paths	Std. Estimate	Loading	Unstd. Estimate	Loading	SE	CR	SMC
H1	EA-->EP	.555		.647***		.072	8.993	.308
H2a	EA-->CSE	.789		1.147***		.095	12.018	.623
H3a	EA-->JSB	.344		.475***		.106	4.468	.118
H2b	CSE-->EP	.076		.061		.035	1.723	.006
H3b	JSB-->EP	.351		.297***		.035	8.529	.123
H4a	CSE-->JSB	.259		.246***		.071	3.486	.067

Note: EA = Employability, CSE = Career Self-Efficacy, JSB = Job Search Behavior, EP = Employment Performance; *** $p < .001$; Estimate indicates the estimated values of path coefficients, SE represents a standard error, and CR represents a critical ratio.

Table 4 Mediating effects on the structural model paths

Hypothesis	Paths	Point Estimate	Product Of Coefficients		Bootstrapping					Test Result
					Bias-corrected		Percentile		Two-Tailed	
					95% CI		Method 95% CI		Significance	
			<i>SE</i>	<i>Z</i>	Lower	Upper	Lower	Upper	<i>p</i>	
H2	EA-->CSE-->EP	.070	.051	1.372	-.038	.168	-.039	.167	.085	Rejected
H3	EA-->JSB-->EP	.141	.036	3.916	.083	.225	.079	.219	.000***	Supported
H4	EA-->CSE--> JSB-->EPC	.084	.031	2.709	.032	.155	.030	.151	.003**	Supported

Note: Unstandardized estimating of 5000 bootstrap sub-sample, two-tailed test. EA = employability, CSE = Career Self-Efficacy, JSB = Job Search Behavior, EP = Employment Performance. ** $p < .01$, *** $p < .001$.

The Mediating Role of Career Self-Efficacy

Based on the results of the bootstrapping test (Table 4), there was no significant mediating effect of career self-efficacy in the relationship between employability and employment performance ($\beta = .070$, $p = .085$). The Bias-corrected 95 percent CI ranged from $-.019$ to $.22$, including 0. Therefore, H2 was rejected.

The strength of this study's findings lies in its challenge to traditional viewpoints, offering new perspectives. It provided empirical evidence on the relationship between self-efficacy and employment performance across different cultures and environments. Particularly within the collectivist cultural context of mainland China, these results contributed to understanding the impact of culture on individual psychology and behavior. Most studies posited that self-efficacy could help individuals take more proactive actions or demonstrate greater resilience when facing setbacks (Alhadabi & Karpinski, 2020; Bandura, 1983; Gupta & Ansari, 2023). However, the results of this study offered a new perspective, indicating that in specific contexts, self-efficacy may not be a significant mediating variable for job performance. A few studies, such as those by Du & Wu (Du et al., 2023), showing a weak association between self-efficacy and subsequent performance.

The limitation of this study was its inability to deeply explore the reasons for the weak relationship between self-efficacy and job performance, especially under different cultural and environmental conditions. Previous research suggested that the strength of the relationship between self-efficacy and performance is contingent upon the temporal variations in challenges and ecological conditions (Bandura, 2012). In the sociocultural context of mainland China, where a collectivist culture prevails, this may pose an inevitable constraint. Cultural values oriented toward collectivism can have unpredictable effects on the relationship between individual self-efficacy and performance (Huang, 2015; Jin et al., 2009). In Southeast Asian societies, collectivist culture emphasizes integrating social relationships and compliance with collective decision-making, potentially weakening the relationship between efficacy and performance (Chen et al., 2019).

Regarding the employment environment and external pressures, the timing of this study in the unique year of 2023 is noteworthy. For students majoring in physical education, many schools and institutions may have reduced budgets for physical education, leading to decreased recruitment or layoffs (Sheptak & Menaker, 2020).

These issues could result in reduced educational resources and a decline in quality for physical education students. Although the results indicated that self-efficacy was not a significant mediating variable, the study did not investigate the reasons behind this phenomenon. Future research must explore possible mediating mechanisms, such as social support, cultural values, and environmental factors.

The Mediating Role of Job Search Behavior

Job search behavior significantly mediated the relationship between employability and employment performance ($\beta = .141$, $p < .001$). The bias-corrected 95 percent confidence interval ranged from $.083$ to $.225$, excluding 0. Therefore, H3 was supported.

The results indicated that sports graduates could better translate their employability into actual employment performance through proactive job-seeking behavior. The findings were consistent with most previous studies, supporting the view that job search behavior is a mediating variable between employability and job performance, providing empirical support for existing career management models (Van Hooft et al., 2021). The mechanism linking employability cognition with employment quality is job search behavior (Gupta & Ansari, 2023). In other words, having inclinations and intentions alone does not lead to employment success. The efforts invested, and the behavioral paths followed by job seekers during the job search process are crucial (Kanfer et al., 2001). From the framework of CSM, abilities (e.g., cognitive and interpersonal skills) may also play a crucial role in the performance of adaptive career behaviors, aiding in determining the extent to which individuals engage in certain behaviors and their likelihood of success.

This finding had practical implications for sports students. Strong employability did not necessarily translate to better job performance; enhancing job search behavior was essential to bridge the gap between individual abilities and societal demands. However, while the study confirmed the mediating role of job-seeking behavior, it did not detail which specific behaviors were most effective. Additionally, this research was conducted within a specific cultural context and timeframe, which may limit the generalizability of the results.

Chain Mediating Effect of Career Self-Efficacy and Job Search Behavior

Career self-efficacy and job search behavior were found to play a significant chain or remote mediating role in the relationship between employability and employment performance ($\beta = .084, p < .01$). The bias-corrected 95 percent confidence interval ranged from .032 to .155, excluding 0. H4 was supported.

This study extended the Social Cognitive Model (CSM) application scenarios and theoretical implications. The mediating roles of self-efficacy and job search behavior in the relationship between employability and employment performance were verified. According to the CSM, self-efficacy is influenced by personal inputs, such as ability, enabling individuals to interact with the external environment and achieve desired goals effectively. Self-efficacy pertains to how individuals perceive their capabilities to perform activities and tasks, and it is a primary regulatory factor in human behavior (Lent & Brown, 2013). Moreover, Fugate argued that higher employability builds confidence consistent with behavioral and self-cognitive aspects, further influencing an individual's goals of attaining high-quality employment (Fugate et al., 2004). Zikic's studies linked job search behaviors and outcomes (e.g., job opportunities, employment status) with self-efficacy beliefs, job search intentions, and clarity (Zikic & Saks, 2009). For graduates, competency development is just the initial step; successful employment requires additional effort. This may involve strengthening self-efficacy through psychological counseling and guiding graduates in proactive and appropriate job search behaviors through innovative entrepreneurship education and employment counseling, among other strategies.

The limitation of this result was that the sample primarily consisted of sports graduates from Guizhou Province, which may restrict the generalizability of the findings. Additionally, there may have been uncontrolled confounding variables in the study, such as cultural environment and employment pressure, which could impact job performance.

Conclusion and Recommendation

Theoretical Contributions and Implications

The research contributed two theoretical insights. On the one hand, it applied the Social Cognitive Model

of Career Self-Management (CSM) in physical education, enhancing the evidence chain of the CSM theory through an integrated examination of employability, self-efficacy, job search behavior, and employment performance. This expansion further diversified the application scenarios and applicability of the theory within higher education and the human resources market. On the other hand, the study results indicated a direct positive impact of employability on the employment quality of higher education graduates majoring in physical education. This finding underscores the significance of employability factors such as professional knowledge and skills, generic skills, and emotional intelligence, laying the groundwork for students' success in their professional careers. Finally, the research identified the mediating role of job search behavior between employability and employment quality, thereby deepening the understanding of individual career decision-making processes.

Practice Implications

Higher education institutions should proactively embrace new challenges in the post-COVID-19 era. For physical education students, focusing on knowledge acquisition and skill mastery and emphasizing the development of general abilities such as communication and expression is essential. By understanding the evolving market demands for student capabilities, institutions can adjust their talent cultivation strategies to align the skills students acquire with societal needs.

Secondly, although self-efficacy does not mediate the relationship between employability and employment performance, it found that self-efficacy plays a crucial role in job-search behavior. Higher education should enhance the psychological training of sports students to boost their self-efficacy. This can be achieved by offering psychology courses or counseling services to help students build confidence and problem-solving abilities.

Thirdly, job search behavior mediated the relationship between employability and employment performance. Higher education should promote innovative entrepreneurial education and career counseling to guide sports graduates in adopting proactive and appropriate job-seeking behaviors. Specialized job-seeking skills courses, including resume writing, interview techniques, and career planning, can help students better prepare for the job search process.

Finally, the study further demonstrated that self-efficacy and job search behavior mediate between employability and employment performance. Graduates should develop clear career development plans and

manage their careers effectively at every stage. They can achieve their career development objectives by setting short-term and long-term goals, engaging in continuous learning, and self-improvement.

Conclusions

The results of this study indicated that the employability of physical education majors had a significant positive impact on their employment performance. Simultaneously, the study found no evidence of self-efficacy mediating the relationship between employability and employment performance. In other words, self-efficacy did not directly influence employment performance. However, job search behavior was confirmed as a mediator between employability and employment performance. The results imply that individuals can enhance their employment performance by actively engaging in job-search behaviors, which can serve as a bridge in the employment process. Furthermore, the study identified a chain-mediated relationship between self-efficacy and job search behavior, suggesting that self-efficacy indirectly influences employment performance by shaping individuals' job search behaviors. Self-efficacy may be crucial in inspiring individuals to engage in proactive job-search behaviors, thereby affecting the ultimate employment performance.

Limitations and Future Research Direction

Although the current study has made some contributions, several limitations should be acknowledged. Firstly, the model only includes four variables from CSM: ability, efficacy, behavior, and outcomes. The assessment of the impact of effectiveness on outcomes in this study yielded negative results, indicating that certain factors, such as environmental influences and changes in stress, might have been overlooked. Therefore, future research could incorporate additional variables to enhance the applicability of the CSM model to real-world situations. Secondly, the data were collected cross-sectionally, limiting the interpretability over time. Future studies might consider longitudinal data collection to explain the study results in a causal relationship context. Finally, the study sample was drawn from one province in China. Hence, future research might explore physical education graduates from various regions, encouraging a broader and more diverse sample for further investigations.

Conflict of Interest

There is no conflict of interest.

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