



Article Exploring the Influence of Personality Traits, Self-Efficacy, and Creativity on Employability for Hospitality and Tourism College Students

Chia-Fang Tsai^{1,*}, Cheng-Ping Chang², Tsai-Lun Chen³ and Ming-Lung Hsu¹

- ¹ Department of Business Administration, Shu-Te University, No. 59, Hengshan Rd., Kaohsiung City 82445, Taiwan; mlhsu@stu.edu.tw
- ² Department of Education, National University of Tainan, No. 33, Sec. 2, Shu-Lin St., Tainan City 700301, Taiwan; justin23@mail.nutn.edu.tw
- ³ Gradute Institute of Educational Administration, National Pingtung University, No. 4-18, Minsheng Rd., Pingtung City 90003, Taiwan; stephen19770305@gmail.com
- * Correspondence: amina6433@stu.edu.tw; Tel.: +886-7-615-8000 (ext. 2138 or 3115)

Abstract: With the widespread establishment of universities and technical colleges in Taiwan, having a university degree is no longer a privilege of the few. However, it has also led to the emergence of many socially inexperienced people with higher education degrees who need more workplace competitiveness. Therefore, students' employability is a topic worth exploring. Equally, the number of students in hospitality-related departments is still very high in the current conditions, while the employment situation in the tourism and hospitality industry is relatively challenging and unstable, making students' employability even more critical. This study examines the relationship between self-efficacy, creativity, employability, and personality traits in the hospitality and tourism industry. Descriptive statistics and factor analysis confirm the previous research findings. In addition, testing of the scale reliability and validity is needed. A structural equation modeling (SEM) approach and mediation analysis are adopted to test the research hypotheses and explore gender differences. The study aims to understand how individual characteristics contribute to career success and identify any unique challenges or advantages based on gender. The research results show that personality traits can affect and influence employability in terms of self-efficacy. Furthermore, personality traits can affect self-efficacy, and self-efficacy can enhance creativity and improve employability.

Keywords: employability; personality traits; self-efficacy; creativity; SEM

1. Introduction

Due to technological advances and rapid changes in the industry landscape, enterprises and organizations face various uncertain challenges and impacts. Consequently, industry professionals must have domain-specific knowledge and skills and self-learning and problem-solving abilities to maintain workplace competitiveness and ensure sustainable growth and development for companies and organizations. They are cultivating students' abilities to learn and solve problems autonomously, acquire essential knowledge and skills in their fields, and nurture their self-efficacy, which helps them maintain continuous learning and strive for excellence. In addition, students with creativity and open minds can break the boundaries of the current world, identify industry opportunities, and suggest innovative solutions through creative ideas and thinking. Thus, self-efficacy and creativity strengthen university students' proactive attitude and enthusiasm to learn new ideas, enabling them to continuously learn, grow, and become professionals who can lead organizations to success.

Therefore, this study explores the role of self-efficacy, creativity, and employability in the hospitality and tourism industry and the impact of the external environment on



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Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). self-efficacy, creativity, and employability. This study explores the intricate relationship between personality traits, self-efficacy, creativity, and employability among students in the hospitality and tourism field. By delving into the interconnections among these variables, this study sheds light on the factors contributing to students' success and career prospects in this industry. One of the primary objectives of this research is to investigate whether students in the hospitality and tourism field can enhance their employability by

whether students in the hospitality and tourism field can enhance their employability by harnessing their self-efficacy. Self-efficacy encompasses self-confidence, positive thinking, perseverance, and determination toward goals. By examining how these qualities influence employability, this study aims to provide insights into the importance of self-belief and resilience in the professional growth of students.

A study conducted in Taiwan found a mismatch between university education and employment and that higher education policy and talent training need to meet the changing expectations of employers and society. The study explored the relationships between problem-based learning, teachers' transformational leadership, and students' selfefficacy and employability, using the SEM (structural equation modeling) approach on 619 undergraduate students from 12 higher education institutions in Taiwan. The results showed significant positive correlations between students' self-efficacy, problem-based learning, employability, and teachers' transformational leadership. The study also found that problem-based learning and self-efficacy mediate the relationship between teachers' transformational leadership and students' employability. The study concludes by discussing the implications for related issues and future research involving models of students' employability [1]. A comparative study explores the learning methods of Taiwanese and Malaysian university students and examines the relationship between teacher knowledge transfer and student employability. The aim is to address the gap between university education and employment, which has resulted from the changing expectations of employers and societies worldwide. The study collected 619 Taiwanese and 443 Malaysian questionnaires to compare the two sample groups regarding students' employability development. The results show that teacher knowledge transfer was significantly correlated with self-efficacy, a deep approach to learning, and student employability in the Taiwanese sample. In Malaysia, all the paths except for the relationship between teacher knowledge transfer and student employability were significant and positively related. Based on the results and findings, the study proposes practical and theoretical insights for future studies [2].

Career management skills become more critical for current university graduates. This study examines the factors influencing academic students' career management skills, particularly the role of self-efficacy in career decision-making and in influencing the relationship between career social support and care management skills. The study collected data from 577 Chinese college students and found a significant positive correlation between social support and career prospects, self-efficacy, decision-making, and professional management. The results also show that career social support and decision-making self-efficacy positively impact career management skills. In addition, the study found that self-efficacy in career decision-making mediated the relationship between career social support and career management competence. The study suggests that more social support and higher self-efficacy in career decision-making can promote students' career management skills [3]. A study explored how precarious employment during the transition from school to work affects the subjective sense of success in college students' careers. The study was conducted in Harbin, China, and surveyed 967 high school graduates from five universities. The study found that precarious employment increases financial stress, decreases occupational self-efficacy, and hurts students' career success. Financial stress also diminishes students' self-efficacy. Employment prospects positively facilitate a smooth transition from school to work and subjective career success in university students. The study emphasizes the importance of understanding this transitional period and providing resources for a seamless transition from school to work for university students [4].

This study used descriptive statistics to understand the sample structure and confirmed the consistency of previous research on self-efficacy, creativity, and employability using factor analysis. Since the questionnaire items were derived from previous studies, further testing of the scale reliability and validity is required. In addition, before conducting the structural equation model (SEM), it is necessary to evaluate the model's fit. Path analysis using SEM was used to verify the research hypotheses, and multiple group analysis was conducted to examine gender differences. As this study proposed a dual-factor mediation model, mediation analysis was performed to verify the dual-factor path's feasibility. In addition to self-efficacy and creativity, this study also explores the influence of various personality traits on employability. Specifically, the study focuses on three personality traits: emotional stability, extraversion, and conscientiousness. By examining how these traits interact with self-efficacy, creativity, and employability, researchers aim to comprehensively understand how individual characteristics contribute to career success in hospitality and tourism. Moreover, this study delves into the impact of and differences in gender on the relationship between personality traits, self-efficacy, creativity, and employability. By examining potential gender disparities in these variables, researchers aim to shed light on any unique challenges or advantages that individuals of different genders may face in pursuing their career development in the hospitality and tourism industry.

This study includes five parts. Section 2 consists of a literature review to explore the critical driving factors affecting the competence development employability of tourism and hospitality students. This study establishes an employability evaluation framework for tourism and hospitality students in Section 3. Section 4 uses the SEM (structural equation modeling) approach to validate the employability assessment system for tourism and hospitality students and explore the model's differences for students of different genders. Finally, Section 5 provides some suggestions.

2. Literature Review

2.1. Driving Forces of Employability

2.1.1. Personality Traits

By shedding light on the intricate relationship between personality traits and career success, this study offers valuable insights for professionals and organizations. It underscores the importance of understanding and harnessing the power of personality traits in fostering career development and achieving organizational excellence. This study examines the role of personality traits in predicting intrinsic career success, specifically in terms of perceived employability and work-family conflict. The findings demonstrate that Big Five traits have significant predictive roles for both outcomes, even when controlling for other factors. The research has practical implications for career development and organizational performance, emphasizing the importance of understanding the relationship between personality traits and career success [5]. A study explored the relationship between personality traits and career decision-making self-efficacy (CDMSE) among university students from underprivileged rural areas in China. The study observed that female students had higher neuroticism levels than male students. Additionally, senior students exhibited higher levels of agreeableness than younger students, and social science students had higher neuroticism levels than students in other disciplines. The study also noted gender differences in accurate self-appraisal and differences in information gathering based on the survey year. However, there was no significant difference in the overall CDMSE scores. The results revealed a positive correlation between conscientiousness, agreeableness, openness, extraversion, and CDMSE, while a negative correlation was found between neuroticism and CDMSE. The study concluded that personality traits, except friendliness, played a significant role in predicting CDMSE. These findings emphasize the importance of collaboration among governments, universities, and industries to foster proactive personality traits among students from underprivileged rural areas, enhance their CDMSE, and support them in achieving their employment goals, thus promoting educational equity [6].

A study on career awareness explores the emphasis on employability skills in higher education to meet the evolving demands of the workforce. It also delves into the role of personalized learning in addressing these needs. The study examines the impact of stable personality traits on students' career adaptability and adaptation after participating in a synchronous career course during the COVID-19 pandemic. It involved 162 participants and positively affected students' identity formation. The research also highlights the significant influence of personality traits on the middle stage of identity formation and career adaptability. This study emphasizes considering individual attributes and cultural backgrounds in career development programs [7]. Another study on 528 Chinese graduating students investigated the link between personality traits and job search strategies (JSSs) and their impact on job search outcomes. The results indicated conscientiousness was positively associated with focused and exploratory job search strategies. In contrast, neuroticism was connected to a haphazard job search strategy and negatively correlated with focused and experimental methods. The study revealed that adopting a focused and exploratory approach resulted in more job offers and higher satisfaction. Additionally, conscientiousness was positively related to job search intensity and significantly correlated with job offer number and satisfaction level. The study also found that focused and exploratory job search strategies mediated the relationship between personality traits and job offers. In contrast, the job search intensity mediated the connection between conscientiousness and job offers. This research contributes to the existing literature on job searching by examining how personality traits influence the use of JSSs among fresh job seekers [8].

A study conducted in Hong Kong explored the connection between the traits of emotional intelligence and career adaptability among Chinese youths. The study involved 500 participants and collected cross-sectional data. The results indicated that all aspects of emotional intelligence were positively correlated with career adaptability. Specifically, self-emotion appraisal and appraisal of others' emotions are identified as the most influential factors in predicting career adaptability. The study suggests that incorporating emotional intelligence into the student curriculum could enhance the career adaptability of young individuals. This information is beneficial for educators and teachers involved in student development [9].

2.1.2. Self-Efficacy

A study conducted in Hong Kong in 2014 examined the relationship between volition, self-efficacy, perceived employability, work engagement, and job satisfaction. The researchers involved 414 employed individuals and found that volition and self-efficacy were positively correlated with perceived employability, work engagement, and job satisfaction. The study also suggests that job insecurity moderates the relationship between perceived employability and these outcomes. The study introduced a conceptual model that explores the factors influencing perceived employability and identifies job insecurity as a significant moderator [10]. Some research explores the driving factors of social entrepreneurial intentions (SEI) using Social Cognitive Career Theory (SCCT) as a research framework. The findings highlight the significant roles of perceived support and internal outcome expectations in forming SEI, while self-efficacy and agreeableness have indirect effects. The study provides some practical implications for policymakers and entrepreneurs, emphasizing the importance of support measures and personal traits in promoting social entrepreneurship. The research results contribute to our understanding of SEI and suggest avenues for future research on the factors influencing social entrepreneurial intentions in different contexts [11].

The Occupational Self-Efficacy Scale (OSS-6) was translated into Chinese and evaluated for its reliability and validity among Chinese employees. A study with 433 participants revealed that the Chinese version of the OSS-6 demonstrated strong reliability and validity. Researchers indicate that the scale can effectively assess occupational self-efficacy in future studies. Furthermore, the study discovered that occupational self-efficacy partially mediated the connection between career calling, job satisfaction, and in-role performance [12]. Improvements in student employability become more and more important for higher education. A study assessed the impact of life design, a student experience program, on undergraduate students' personal and professional development. The initiative included a two-hour workshop that promoted self-reflection, self-efficacy, and career optimism. The analysis revealed a notable and lasting boost in self-esteem immediately after the workshop. However, there was no significant effect on self-efficacy or career optimism. Nevertheless, a later follow-up indicated increased certainty in taking career-developing actions. Another research paper addresses the advantages and difficulties of implementing initiatives that enhance student employability [13]. The COVID-19 pandemic has caused significant changes in the labor market, resulting in increased unemployment. The study examined the link between employability beliefs and career exploration self-efficacy among 1585 unemployed adult workers in Portugal who experienced job loss due to COVID-19. The participants evaluated various employability beliefs, including striving, proactivity, flexibility, acceptance of challenges, optimism, autonomy, and career exploration self-efficacy. The findings indicated a positive association between dispositional beliefs on employability, particularly independence, striving, optimism, and career exploration self-efficacy. The study suggests that these results can inform future research and practical implementations [14].

2.1.3. Creativity

Individual innovation already becomes a critical skill for university graduates. One study examines the significance of personal innovation as an employability skill for university graduates. It suggests inquiry-based learning (IBL) as a practical teaching approach to better equip students for innovative work. The authors created a conceptual model connecting IBL and student innovativeness and identified three design elements that can influence this association: (1) the nature of the inquiry (open or closed), (2) the focus of the question (discovery or information), and (3) the mode of investigation (individual or team-based). The authors argue that an honest, discovery-focused, and team-based examination can enhance students' innovation skills. This article has implications for both research and practice in higher education [15]. Differences in student creativity and the potential differences caused by gender, age, and academic choices are among the factors influencing creativity among college students. One study explored the creativity of college students and the impact of positive emotion-based interventions on creativity. The study considered those students' creativity increases after the intervention program. There are significant differences in creativity levels based on gender, age, and academic choices. Females demonstrated higher creativity than males, younger students exhibited higher creativity, and students in education had higher creativity scores. These research findings are significant for higher education reform and skill development [16].

Creativity and life satisfaction are positively correlated with academic performance and productivity. A study conducted in Madrid with 300 university students found a positive correlation between creativity, life satisfaction, and academic performance. The study used a quasi-experimental design with both experimental and control groups. The study showed that women achieved significantly higher scores in creativity and life satisfaction, which remained high even after the intervention. The findings highlight the importance of emotional and creative education in universities, as it can enhance employability and ensure equal opportunities for all students [17].

Strengthening creative self-efficacy can enhance the confidence of undergraduates to innovate. One study explored the significance of creativity in biochemistry and the challenges involved in measuring it. It introduced the concept of creative self-efficacy (CSE) and its role in promoting creativity. The researchers conducted a laboratory experiment in an innovative module to examine the interaction between students' CSE and the learning environment. The study compared this to a control module that did not involve explicit creative activities. The innovative module significantly improved students' perception of their creativity, confidence in achieving the learning objectives, motivation to study, and the extent to which their studies contributed to their imagination. The grades received from the creative exercise were found to be correlated with the students' CSE. However, the expected effects of the stages were negatively associated with their CSE, indicating a need for more understanding regarding the connection between creativity and success. These findings

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suggest that the learning environment can support students' CSE, leading to academic accomplishments, motivation, and confidence in pursuing a biochemistry career [18]. Multidimensional soft skills can lead toward career intentions and career development for university students. Another study examined the influence of soft skills on the career development and intentions of students in higher educational institutes in Pakistan. It used a quantitative approach and collected data from 392 participants via a questionnaire. The results revealed that soft skills such as creative self-efficacy, problem-solving confidence, and teamwork positively and significantly impacted career development and intentions. However, critical thinking and creativity positively influenced career development but did not affect career intentions. These findings have practical implications for policymakers and university administrators in understanding the importance of soft skills in promoting career development and purpose among students and preparing them for the job market. The study's original and valuable findings contribute specifically to the context of Pakistan [19].

2.1.4. Employability

The perception gap in employability skills will influence the employment performance and employment rate for university graduates. A Pakistan study explored the perception gap between fresh engineering graduates and employers regarding essential skills for employment. The findings showed employers prioritize soft skills like creativity, communication, interpersonal abilities, decision-making, and problem-solving, while graduates focus more on technical expertise. This gap contributes to prolonged unemployment, particularly in a developing country like Pakistan, with high unemployment rates. The study suggests aligning the university curricula with employer needs and raising awareness among students about the importance of developing soft skills for their careers [20]. Students' learning intentions can be enhanced by authentic learning with international tourism partners. One particular study examines how authentic, problem-based learning in a postgraduate tourism course can enhance graduate employability. It focuses on a consultancy project with an international partner, which offers students practical education and helps them acquire skills essential to their careers, such as problem-solving, decisionmaking, communication, collaboration, and creativity. The paper evaluates the effects of this learning method on student learning and employability [21].

Is self-efficacy a way to strengthen undergraduate employability? One study examines the relationship between factors related to undergraduate employability and the mediation effect of self-efficacy. It utilizes the CareerEDGE model as a theoretical framework and analyzes data from 264 students from six universities in northeast Nigeria. The findings suggest that various factors within the CareerEDGE model, such as career development learning, work experience, degree subject knowledge, skills and understanding, generic skills, and emotional intelligence, are positively correlated with undergraduate employability. Additionally, self-efficacy mediates this relationship. The research results have significant implications for higher education institutions and career practitioners in enhancing career planning strategies for undergraduates in a competitive job market [22]. Recently, there has been significant interest in emotional intelligence and its role in helping individuals deal with career challenges. One study conducted a systematic review and meta-analysis on emotional intelligence and its impact on career-related outcomes. The meta-analysis included 150 independent samples with over 50,000 participants. The findings demonstrated significant correlations between emotional intelligence and career outcomes, such as career adaptability, career decision-making self-efficacy, entrepreneurial self-efficacy, salary, career commitment, career decision-making difficulties, career satisfaction, entrepreneurial intentions, and turnover intentions. However, no significant correlations were found between job searching self-efficacy and self-perceived employability. The study offers theoretical contributions, recommendations, and suggestions for future research [23].

This study determines the evaluation framework using expert review and a literature review. The evaluation framework comprises four aspects: personality, self-efficacy, creativity, and employability. The personality aspect has three criteria: emotional stability,

extraversion, and conscientiousness. The study ensures the professionalism and reliability of the evaluation framework according to expert review and obtains its theoretical foundations and empirical support through the literature review. Such an evaluation framework will contribute to a deeper understanding of the subjects' personality traits, self-efficacy, creativity levels, and employability, providing strong evidence and guidance to promote personal growth and career development.

3. Materials and Methods

3.1. Research Process

The analysis process is illustrated in Figure 1. Descriptive statistics are used to understand the sample structure. Factor analysis confirms the consistency of the self-efficacy, creativity, employability, and scholar identity dimensions. Since the questionnaire items were adapted from scholars' questionnaires, the reliability and validity of the scale need to be confirmed. Before conducting structural equation modeling (SEM), the model fit needs to be assessed against the recommended standards. Path analysis using SEM is used to test the research hypotheses. A multi-group analysis is conducted to investigate the gender differences. As this study proposes a dual-factor mediation model, a mediation analysis is conducted to verify the feasibility of the dual-factor paths, as shown in Figure 1.



Figure 1. The research process and analytic technique.

3.2. Research Framework

The study establishes the evaluation framework using an expert review and a literature review. The evaluation framework consists of four aspects (personality, PT; self-efficacy, SELF; creativity, CREA; and employability, EMPL), and PT (personality) includes three criteria (emotion stability, PTES; extraversion, PTEX; and conscientiousness, PTCO). Furthermore, there are 12 hypotheses, as shown in Figure 2 and Table 1.



Figure 2. The hypotheses and evaluation framework.

Table 1. The six hypotheses of evaluation framework	e 1. The six hypotheses of evaluation fra	meworł
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	Hypotheses	Descriptions
H1	PTES→SELF	Emotional stability of personality traits positively affects self-efficacy
H2	PTEX→SELF	Extraversion of personality traits positively affects self-efficacy
H3	PTCO→SELF	Conscientiousness of personality traits positively affects self-efficacy
H4	PTES→CREA	Emotional stability of personality traits positively affects creativity
H5	PTEX→CREA	Extraversion of personality traits positively affects creativity
H6	PTCO→CREA	Conscientiousness of personality traits positively affects creativity
H7	PTES→EMPL	Emotional stability of personality traits positively affects employability
H8	PTEX→EMPL	Extraversion of personality traits positively affects employability
H9	PTCO→EMPL	Conscientiousness of personality traits positively affects employability
H10	SELF→CREA	Self-efficacy positively affects creativity
H11	SELF→EMPL	Self-efficacy positively affects employability
H12	CREA→EMPL	Creativity positively affects employability

3.3. Research Questionnaire Design

The study adopted self-reported questionnaires and established the competency development and employability questionnaire using expert review and a literature reviews. Furthermore, the study conducted content validation for complete and precise descriptions and to avoid respondents being misunderstood by field experts and college educators. The study gained the field experts' and college educators' consent and completely reviewed and revised each question regarding its wording, correctness, and appropriateness based on the outlook of the three field experts and three college educators. The researchers collected all the opinions of the field experts and college educators and integrated these suggestions to modify these questions and finish the pre-test questionnaire. Therefore, the study also distributed 110 pre-test questionnaires, collected 102 valid responses, and adopted item and reliability analysis to confirm the reliability of each dimension and item and finish the formal questionnaire design. A score of 1 represents the weakest level of agreement, corresponding to "strongly disagree", while 7 represents the most substantial group of agreement, corresponding to "strongly agree".

3.4. Sample and Data Collection

This study focuses on students from catering and tourism clusters in domestic colleges and universities. It investigates various factors, including the school area, attributes, gender, admission channels, personal information, and performance status. The study employed convenience sampling and online questionnaires, with 650 questionnaires distributed and 588 valid questionnaires recovered (a recovery rate of 90.46%). According to the sampling statistics, the southern region accounted for the highest proportion with 256 students (43.537%), followed by the northern region with 192 students (32.653%) and the central region with the least at 140 students (23.810%).

Among the sample responses, only 94 (15.986%) were from national universities, while the remaining 494 (84.014%) were from private universities. Regarding gender, the response sample included 190 males (32.313%) and 398 females (67.687%). Regarding student admission channels, 199 (33.844%) were recommended for admission, which was the highest proportion. This research results demonstrated 135 students (22.959%) who applied for admission, 123 students (20.918%) who went through unified enrollment and distribution, 56 students (9.524%) who enrolled independently, and 44 students (7.483%) who were admitted based on technical excellence, as shown in Table 2.

Items	Number of Persons (<i>n</i>)	Percentage (%)
School Location		
Northern region	192	32.653
Central region	140	23.810
Southern region	256	43.537
School Attributes		
National universities	94	15.986
Private universities	494	84.014
Gender		
Male	190	32.313
Female	398	67.687
Entrance Pathways		
Application for admission	135	22.959
Recommended for admission	199	33.844
Technical excellence admission	44	7.483
Unified enrollment and distribution	123	20.918
Independent enrollment	56	9.524
Other	31	5.272

Table 2. Description of narrative statistics and sample information (n = 588).

4. Results

4.1. The Reliability Testing of the Proposed Evaluation Framework

A three-stage analysis is adapted for this study. In the first stage, principal components analysis (PCA) is adopted to reduce the criteria and determine the principal components, as shown in Table 3. Then, confirmatory factor analysis (CFA) is utilized for scale measurement. In contrast, the SEM (structural equation modeling) approach is adopted in the third stage for the proposed evaluation model. Before conducting CFA, the normality of the data analysis and the relationship between the observed variables and latent factors were tested [24]. CFA is generally used to evaluate the validity and reliability of unobserved hidden factors. Since this study used questionnaires developed by other researchers, the CFA was used to evaluate the effectiveness of the measuring tool for the target population. The assessment of the Cronbach alpha, factor load, composite reliability (CR), average variance extraction (AVE), and discriminatory validity values was carried out according to the guidelines [24,25].

As	pect	1	2	3	Eigenvalue	% of Variance	Cumulative			
	Competence orien	tation (SELF-CO)								
Self-efficacy (SELF)	SELF-CO1 SELF-CO2			0.879 0.844	3.185	35.392				
	Effort and persiste	nce (SELF-EP)								
	SELF-CO3 SELF-CO4 SELF-CO5		0.741 0.827 0.796		2.428	26.977	83.532			
	Work self-efficacy	(SELF-WO)								
	SELF-CO6 SELF-CO7 SELF-CO8 SELF-CO9	0.775 0.851 0.853 0.855			1.905	21.162				
	Learning activities	(CREA-LA)								
	CRLE-LA1 CRLE-LA2 CRLE-LA3 CRLE-LA4 CRLE-LA5	0.777 0.853 0.858 0.854 0.710			4.325	43.245				
(CREA)	Workplace (CREA	-WP)					79.723			
	CRLE-WP1 CRLE-WP2 CRLE-WP3 CRLE-WP4 CRLE-WP5		0.682 0.755 0.725 0.822 0.782		3.648	36.478				
	General work abil	ity (EMPL-GW)								
	EMPL-GW01 EMPL-GW02 EMPL-GW03 EMPL-GW04 EMPL-GW05 EMPL-GW06		0.701 0.820 0.669 0.737 0.767 0.760		4.142	29.588				
Employability	Professional work	ability (EMPL-PV	V)				68 946			
(EMPL)	EMPL-PW01 EMPL-PW02 EMPL-PW03 EMPL-PW04 EMPL-PW05 EMPL-PW06 EMPL-PW07 EMPL-PW08	0.711 0.682 0.856 0.833 0.862 0.839 0.801 0.740			5.510	39.359	00.70			

Table 3. The PCA analysis of the proposed evaluation frameworks.

The factor loadings calculated for each dimension ranged from 0.599 to 0.939, as shown in Table 4. These values were consistent with the standard of 0.5 recommended by previous studies. Moreover, the Cronbach's alpha values ranged from 0.879 to 0.956, and the composite reliability (CR) ranged from 0.833 to 0.929. All of these values exceeded the recommended standard of 0.7, indicating a high level of internal consistency in the model. The average variance extracted (AVE) values for each aspect ranged from 0.594 to 0.791, surpassing the recommended threshold of 0.5. The research suggests that all aspects of the research demonstrated strong convergent validity. Based on the results mentioned above, the content in Table 4 confirms that the questionnaire fulfilled the requirements of convergent validity and composite reliability, indicating a robust measurement model [24,25].

Aspects	Item	Factor Loadings	Cronbach's α	CR	AVE
	Emotion stability (PTES)				
	 I do not feel jealous of others. I am not overly sensitive. I do not get anxious when faced with problems. I usually do not have many worries. I do not envy others. I am not emotional. 	0.728 0.825 0.803 0.772 0.812 0.797	0.908	0.909	0.624
	Extraversion (PTES)				
Personality (PT)	 I am talkative. I am energetic. I am outgoing. I am lively. I love talking. I am full of ideas. I am intelligent. I am imaginative. 	$\begin{array}{c} 0.777\\ 0.869\\ 0.887\\ 0.886\\ 0.774\\ 0.774\\ 0.714\\ 0.599\\ 0.608\end{array}$	0.920	0.920	0.596
	Conscientiousness (PTCO)				
	 I am efficient. I can focus. I am tidy. I follow a systematic approach to tasks. I organize my work. 	0.789 0.766 0.707 0.765 0.822	0.879	0.879	0.594
	Competence orientation (SELF-CO)				
	 I perform very well in school grades. I have an excellent academic performance. 	0.882 0.939	0.906	0.907	.830
	Effort and persistence (SELF-EP)				
Self-efficacy (SELF)	 3. I can complete the assigned tasks within the deadline. 4. I won't give up easily, even under tremendous academic pressure. 5. I can persist until the last moment, even when the academic pressure is high. 	0.693 0.922 0.895	0.870	0.879	0.710
	Work self-efficacy (SELF-WO)				
	6. I am capable of succeeding in future work.7. I possess the skills necessary for smooth work in the future.8. I will be an expert in my relevant field in future work.9. I am very confident in my future work abilities.	0.861 0.895 0.852 0.865	0.924	0.925	0.754
	Learning activities (CREA-LA)				
	 I often propose solutions to problems. I often come up with innovative and practical ideas. I am often the best source of creative ideas. I often have many new and innovative ideas. I usually take the opportunity to showcase creativity in learning activities. 	0.803 0.912 0.924 0.929 0.840	0.945	0.946	0.780
(CREA)	Workplace (CREA-WP)				
	6. I often propose new methods for completing work.7. I often suggest using new methods to achieve goals or objectives.	0.899 0.894			
	8. I usually showcase creativity in my work9. I usually set plans and schedules to complete new ideas.10. I usually promote my new ideas to others.	0.888 0.724 0.778	0.920	0.922	0.705

Table 4. The reliability test of the proposed evaluation frameworks.

Aspects	Item	Factor Loadings	Cronbach's α	CR	AVE
	General work ability (EMPL-GW)				
	1. I have leadership ability.	0.789			
	2. I have communication skills.	0.869			
	3. I have time management skills.	0.730	0.000	0.000	0.556
	4. I have team collaboration ability.	0.718	0.880	0.882	
	5. I have proficiency in my native language.	0.699			
Encolorado ilita	6. I have proficiency in foreign languages.	0.648			
	Professional work ability (EMPL-PW)				
	7. I understand customer needs.	0.793			
(EMDI)	8. I have communication skills with customers.	0.802			
(ENIT L)	9. I understand the standard operating procedures of the hospitality industry.	0.866			
	10. I understand the process of serving customers and ensuring their safety.	0.885	0.044	0.045	0 (92
	11. I have relevant knowledge in the hospitality industry.	0.843	0.944	0.945	0.683
	12. I have skills in customer reception.	0.871			
	13. I can plan hospitality industry events.	0.824			
	14. I understand cost analysis and budget preparation in the hospitality industry.	0.714			

Table 4. Cont.

To determine the difference between the hidden variables in this study, we measured the discriminating validity of the hidden variables using the Fornell–Larcker test and the heterotrait–monotrait correlation ratio (HTMT) [26]. The correlation coefficient between two different constructions in the Fornell–Larcker test should be smaller than the square root of the AVE of the construction. Table 5 compares the correlation coefficient of all the variables studied with the square roots of the AVE. The square root of the AVE for each variable is greater than the correlation coefficient between the two variables [24,25].

Table 5. Discriminant validity.

Aspects/Criteria	AVE	PTES	PTEX	РТСО	SELF	CREA	SMPL
Emotional stability (PTES)	0.624	0.790					
Extraversion (PTEX)	0.596	0.476	0.772				
Conscientiousness (PTCO)	0.594	0.462	0.512	0.771			
Self-efficacy (SELF)	0.676	0.466	0.572	0.664	0.822		
Creativity (CREA)	0.867	0.489	0.681	0.590	0.670	0.931	
Employability (EMPL)	0.716	0.485	0.633	0.684	0.659	0.718	0.846

The HTMT (heterotrait–monotrait ratio) proposed by Henseler et al. was used in this study to assess the discriminant validity. Table 6 presents the HTMT values in this study, indicating that all values are below the recommended threshold of 0.85 [26], suggesting a good discriminant validity among the latent variables. Therefore, based on the measured model test results, it can be seen that the model works well.

Table 6. Discriminant validity (HTMT).

PTES	PTEX	РТСО	SELF	CREA	EMPL
0.499					
0.467	0.562				
0.466	0.602	0.665			
0.497	0.765	0.604	0.667		
0.474	0.656	0.679	0.676	0.744	
	PTES 0.499 0.467 0.466 0.497 0.474	PTES PTEX 0.499 0.467 0.562 0.466 0.602 0.497 0.765 0.474 0.656 0.656	PTES PTEX PTCO 0.499	PTES PTEX PTCO SELF 0.499	PTES PTEX PTCO SELF CREA 0.499

4.2. TheAnalysis of Structure Equation Modeling

The analysis results of the measurement model showed that the model was reliable and valid. Then, we used the structural equation modeling (SEM) method to analyze the structural model and obtain the path coefficients and determination coefficients (R^2) for each model dimension. We also analyzed the significance of the structural model. Bootstrapping is a method used to measure structural models according to factor loading, examining the importance of variables, parameter estimation, and model measurement intervals [24,25] to determine whether the causal relationships between variables are maintained. The path coefficients and hypothesis validation are presented in Table 4.

Personality traits, including emotional stability, extraversion, and conscientiousness, positively affect self-efficacy (SELF), with standardized coefficient values ranging from 0.118 to 0.469 and p-values of 0.000 and 0.009, respectively. Therefore, H1, H2, and H3 are supported. Additionally, personality traits (emotion stability, extraversion, and conscientiousness) positively influence creativity (CREA), with standardized coefficient values ranging from 0.095 to 0.386 and p-values of 0.000 and 0.017, respectively. Hence, H4, H5, and H6 are also supported. However, emotional stability (PTES) does not significantly affect employability (EMPL), with a standardized coefficient value of 0.053 and a *p*-value of 0.201, indicating that H7 is not supported. On the other hand, extraversion (PTEX) and conscientiousness (PTCO) have a positive impact on employability (EMPL), with standardized coefficient values ranging from 0.166 to 0.304 and *p*-values of 0.000 and 0.000, respectively, supporting H8 and H9. Furthermore, self-efficacy (SELF) has a positive influence on both creativity (CREA) and employability (EMPL), with standardized coefficient values of 0.309 and 0.127 and p-values of 0.000 and 0.036, respectively, supporting H10 and H11. Moreover, creativity (CREA) positively affects employability (EMPL), with a standardized coefficient value of 0.314 and a *p*-value of 0.000, thus supporting H12, as shown in Table 7. Please note that these findings are preliminary.

Hy	potheses	Standardized Coefficient	Standard Deviation	<i>t</i> -Value	<i>p</i> -Value	Result
H1	PTES→SELF	0.118	0.033	2.619	0.009 **	Supported
H2	PTEX→SELF	0.276	0.035	5.745	0.000 ***	Supported
H3	PTCO→SELF	0.469	0.045	8.741	0.000 ***	Supported
H4	PTES→CREA	0.095	0.029	2.398	0.017 *	Supported
H5	PTEX→CREA	0.386	0.034	8.368	0.000	Supported
H6	PTCO→CREA	A 0.143	0.042	2.873	0.004 **	Supported
H7	PTES→EMPL	0.053	0.037	1.278	0.201	Unsupported
H8	PTEX→EMPL	0.166	0.045	3.307	0.000 ***	Supported
H9	PTCO→EMPI	L 0.304	0.055	5.643	0.000 ***	Supported
H10	SELF→CREA	0.309	0.057	5.448	0.000 ***	Supported
H11	SELF→EMPL	0.127	0.073	2.100	0.036 *	Supported
H12	CREA→EMP	L 0.314	0.074	5.177	0.000 ***	Supported

Table 7. The 12 hypotheses of the evaluation framework.

Note: * *p* < 0.05, ** *p* < 0.01, *** *p* < 0.001.

The purpose of testing the research hypothesis is to understand the significance of the independent variables on the estimated values of the dependent variables in the research model. In SEM, the measure of the explanatory power of variation in endogenous variables is referred to as R^2 . The larger the R^2 value, the better. If $R^2 > 0.670$, this indicates a good level of explanatory ability. If $0.670 > R^2 > 0.330$, this indicates an acceptable explanatory ability. If $R^2 < 0.190$, this indicates a lack of explanatory ability, not ideal [27]. The R^2 value for self-efficacy (SELF) is 0.524 and 0.521 after adjustment, indicating that the effective prediction accuracy of emotional stability (PTES), extraversion (PTEX), and conscientiousness (PTCO) for self-efficacy (SELF) is 52.1–52.4%. The R^2 value for attitude is 0.601 and 0.598 after adjustment, revealing that the effective prediction accuracy of

emotional stability (PTES), extraversion (PTEX), conscientiousness (PTCO), and self-efficacy (SELF) for creativity (CREA) is 59.8–60.1%. The R^2 value for purchase intention is 0.648 and 0.646 after adjustment, indicating that the effective prediction accuracy of emotional stability (PTES), extraversion (PTEX), and conscientiousness (PTCO), self-efficacy (SELF), and creativity (CREA) for employability (SMPL) is 64.6–64.8%, as shown in Table 8.

Table 8. Coefficient of determination for proposed model.

	<i>R</i> ²	Adjusted R ²
Self-efficacy (SELF)	0.524	0.521
Creativity (CREA)	0.601	0.598
Employability (SMPL)	0.648	0.646

In structural equation modeling, each construct should have at least three items [28]. The model fit indices should meet the recommended thresholds [29], where a lower χ^2 is preferred. However, χ^2 is sensitive to large samples, so it should be evaluated along with the chi-square value/degrees of freedom ratio. A good model fit should have a chi-square value/degrees of freedom ratio below 3. It was suggested that each fit index should be evaluated independently and controlled for type I errors using more stringent model fit indices, such as a CFI > 0.90, standardized RMR < 0.08, and RMSEA < 0.08 [30]. The results of the SEM analysis in this study are as follows: $\chi^2 = 4623.259$, $\chi^2/df = 3.693$, RMSEA = 0.068, SRMR = 0.074, TLI = 0.867, CFI = 0.875, GFI = 0.738, AGFI = 0.712. These results indicate an acceptable model fit, as shown in Table 9.

Table 9. Goodness-of-fit measurement of the proposed model.

Model Fit	Criteria	Model Fit of Research Model	Bollen–Stine Model Fit
χ^2	The smaller, the better	4623.259	1662.371
DF	The larger, the better	1252	1252
Normalized chi-sqr (χ^2/DF)	$1 < \chi^2 / DF < 3$	3.693	1.328
RMSEA	< 0.08	0.068	0.024
SRMR	< 0.08	0.074	0.074
TLI (NNFI)	>0.9	0.867	0.984
CFI	>0.9	0.875	0.985
GFI	>0.9	0.738	0.941
AGFI	>0.9	0.712	0.938

4.3. Analysis of Gender for the Proposed Model

According to Table 10, in comparing the differences in the path coefficients between gender and personality traits (emotional stability, extraversion, and conscientiousness), self-efficacy, creativity, and employability in the study, there is only a significant gender difference in emotional stability within the personality traits. The study showed that male samples performed better than female samples regarding emotional stability. This result suggests that there may be gender differences in emotional stability within personality traits, with males potentially exhibiting a better performance, as shown in Table 10. This study conducted a chi-square comparison of the gender path coefficients using coefficients from males and females to examine the differences. The model constrains the coefficients to be the same across genders, and the chi-square difference value is calculated with one degree of freedom. If the chi-square difference value exceeds 3.84, this indicates a significant difference between the two paths. From the last two columns of the table, we can see that there are four paths with chi-square values greater than 3.84 and p-values less than 0.05, namely PECO \rightarrow CREA, SELF \rightarrow CREA, SELF \rightarrow EMPL, and CREA \rightarrow EMPL. The third and fifth columns represent the path coefficients for males and females, respectively, and we can observe their respective magnitudes in Table 11.

Gender		Ν	Mean	Standard Deviation	<i>t</i> -Value	<i>p</i> -Value
Emotional stability	Male	190	4.477	1.378	4.805	0.000 ***
-	Female	398	3.916	1.201		
Extraversion	Male	190	4.907	1.185	1.177	0.240
	Female	398	4.789	1.046		
Conscientiousness	Male	190	5.140	1.053	0.640	0.522
	Female	398	5.085	0.937		
Self-efficacy	Male	190	5.187	0.980	0.094	0.925
	Female	398	5.179	0.934		
Creativity	Male	190	4.936	1.056	2.485	0.013 *
	Female	398	4.720	0.952		
Employability	Male	190	5.118	1.006	0.012	0.990
	Female	398	5.117	0.903		

Table 10. Comparison of gender differences.

Note: * *p* < 0.05; *** *p* < 0.001.

Table 11. Comparison of gender path coefficient differences.

IV	DV	Male		Female		Test of Path Coefficient Comparison		
		Estimate	S.E.	Estimate	S.E.	ΔDF	$\Delta\chi^2$	<i>p</i> -Value
PTES	SELF	0.098	0.065	0.100	0.039	1	0.001	0.978
PTES	EMPL	0.069	0.054	0.067	0.051	1	0.000	0.983
PTES	CREA	0.018	0.051	0.079	0.036	1	0.918	0.338
PTEX	SELF	0.244	0.090	0.222	0.037	1	0.051	0.821
PTEX	EMPL	0.069	0.083	0.170	0.053	1	0.991	0.319
PTEX	CREA	0.271	0.074	0.230	0.037	1	0.231	0.630
PTCO	SELF	0.313	0.100	0.361	0.049	1	0.182	0.669
PTCO	EMPL	0.140	0.104	0.290	0.068	1	1.423	0.233
PTCO	CREA	0.401	0.086	0.008	0.047	1	16.554	0.000 ***
SELF	CREA	0.091	0.072	0.499	0.083	1	13.543	0.000 ***
SELF	EMPL	0.015	0.077	0.311	0.118	1	4.189	0.041 *
CREA	EMPL	0.813	0.144	0.201	0.093	1	14.673	0.000 ***

Note: PTES: personality traits of emotional stability; PTEX: personality traits of extraversion; PTCO: personality traits of conscientiousness; SELF: self-efficacy; CREA: creativity; EMPL: employability; * p < 0.05; *** p < 0.001.

4.4. Analysis of Mediation and Interference Effects

If a variable (M) serves as both an independent variable (X) and a dependent variable (Y), meaning that (X) influences (Y) through (M), then (M) is referred to as a mediating variable in the research model. The indirect effect of the mediating variable is the effect of the independent variable on the dependent variable according to the mediating variable. A commonly used approach to test the indirect effect of the mediating is the bootstrapping method. Bootstrapping is a statistical method that repeatedly samples the original dataset with replacement—the product of an a and b ($a \times b$) estimate for each sampling. Ref. [31] suggests performing at least 1000 bootstrap samples, although 5000 samples would be ideal. If a researcher performs 1000 repeated samples, there will be 1000 estimates of the indirect effect ($a \times b$), which can then be used to calculate the standard error and confidence interval of the indirect effect (bias-corrected bootstrapping), as shown in Table 12 [13,32].

t	Product of			Bootstrap 1000 Times		
ate	Coefficients		Bias-Corrected 95%			
S.E.	Z-Value	<i>p</i> -Value	Lower Bound	Upper Bound		
8 0.079	1.239	0.215	-0.041	0.279		
1 0.026	1.914	0.056	0.010	0.115		
3 0.016	0.835	0.404	-0.007	0.062		
7 0.018	1.473	0.141	0.004	0.086		
0.008	1.352	0.176	0.000	0.035		
8 0.080	0.594	0.553	-0.085	0.233		
2 0.058	5.357	0.000 ***	0.193	0.423		
4 0.048	3.445	0.001 **	0.075	0.257		
1 0.034	0.925	0.355	-0.028	0.105		
8 0.043	2.540	0.011 *	0.042	0.220		
4 0.013	1.814	0.070	0.007	0.063		
8 0.065	2.274	0.023 *	0.003	0.270		
1 0.079	5.821	0.000 ***	0.292	0.609		
2 0.067	2.268	0.023 *	0.041	0.294		
0.070	0.870	0.384	-0.043	0.211		
6 0.032	1.415	0.157	-0.001	0.129		
6 0.022	2.054	0.040 *	0.017	0.118		
9 0.100	3.088	0.002 *	0.096	0.486		
	t S.E. 3 0.079 1 0.026 3 0.016 7 0.018 0 0.008 3 0.016 7 0.018 0 0.008 3 0.048 1 0.034 8 0.043 4 0.013 8 0.065 1 0.079 2 0.067 0 0.070 6 0.032 9 0.100	t ateProduct Coefficie 3 0.0791.23910.0261.91430.0160.83570.0181.47300.0081.35280.0800.59420.0585.35740.0483.44510.0340.92580.0432.54040.0131.81480.0652.27410.0795.82120.0672.26800.0700.87060.0321.41560.0222.05490.1003.088	t ateProduct of CoefficientsS.E.Z-Value p -Value3 0.079 1.239 0.215 1 0.026 1.914 0.056 3 0.016 0.835 0.404 7 0.018 1.473 0.141 0 0.008 1.352 0.176 8 0.080 0.594 0.553 2 0.058 5.357 0.000 ***4 0.048 3.445 0.001 **1 0.034 0.925 0.355 8 0.043 2.540 0.011 *4 0.013 1.814 0.070 8 0.065 2.274 0.023 *1 0.079 5.821 0.000 ***2 0.067 2.268 0.023 *0 0.070 0.870 0.384 6 0.032 1.415 0.157 6 0.022 2.054 0.002 *	t Product of Coefficients Bootstra s.e. Z-Value p -Value Lower Bound 3 0.079 1.239 0.215 -0.041 1 0.026 1.914 0.056 0.010 3 0.016 0.835 0.404 -0.007 7 0.018 1.473 0.141 0.004 0 0.008 1.352 0.176 0.000 3 0.080 0.594 0.553 -0.085 2 0.058 5.357 0.000 *** 0.193 4 0.048 3.445 0.001 ** 0.075 1 0.034 0.925 0.355 -0.028 8 0.043 2.540 0.011 * 0.042 4 0.013 1.814 0.070 0.007 8 0.065 2.274 0.023 * 0.003 1 0.079 5.821 0.000 **** 0.292 2 0.067 2.268 0.023 *		

Table 12. Analysis of indirect effects.

Note: PEST: personality traits of emotional stability; PEEX: personality traits of extraversion; PERE: personality traits of responsibility; SELF: self-efficacy; CREA: creativity; EMPL: employability; * p < 0.05; ** p < 0.01; *** p < 0.001.

5. Discussion

5.1. Exploring the Relationships between Personality Traits (Emotional Stability, Extraversion, and Conscientiousness) and Self-Efficacy

Some researchers have explored the influence of the Big Five personality traits on the job exploration process of Latino undergraduate business students. The research results reveal that extraversion and conscientiousness positively impact career self-efficacy and engagement in job exploration activities, while agreeableness and neuroticism negatively influence these outcomes. These findings have important implications for career development, allowing students to understand how their personality traits affect their career exploration and to make targeted choices to enhance their career confidence and interests [33]. The research results show that emotional stability, extraversion, and conscientiousness are crucial in enhancing self-efficacy as personality traits. These three traits have consistently positively impacted individuals' belief in their abilities to accomplish tasks and overcome challenges. In simpler terms, possessing favorable personality traits such as emotional stability, extraversion, and conscientiousness can significantly improve self-efficacy. Students who exhibit high levels of emotional stability are more likely to remain calm and composed in the face of adversity, enabling them to approach their studies and work confidently. Furthermore, individuals who possess extraversion traits tend to be outgoing, friendly, and assertive. These characteristics can enhance their ability to communicate and collaborate, boosting their self-efficacy effectively. By actively engaging in team discussions, seeking feedback, and building positive relationships, tourism and hospitality professional college students with high levels of extraversion can enhance their belief in their capabilities.

Moreover, conscientiousness, characterized by being organized, responsible, and diligent, plays a vital role in strengthening self-efficacy. Conscientious students are more likely to set clear goals, create effective study plans, and follow through on their commitments. Conscientiousness and discipline enhance their self-efficacy by providing a sense of control and accomplishment. Furthermore, the positive influence of emotional stability, extraversion, and conscientiousness on self-efficacy enables students to establish self-motivating routines in their work and learning. They can quickly recover from setbacks, regain confidence, and persist in pursuing their learning and career goals. In summary, possessing favorable personality traits such as emotional stability, extraversion, and conscientiousness can profoundly impact self-efficacy. By recognizing and nurturing these traits, students can cultivate a strong belief in their abilities, ultimately enabling them to excel in their academic and professional endeavors.

5.2. Exploring the Relationship between Personality Traits (Emotion Stability, Extraversion, and Conscientiousness) and Creativity

There is a demand for university students to demonstrate competitive skills for workplace success. The research suggests a positive correlation between creativity, life satisfaction, academic performance, and productivity in university students. However, there is room for improvement in cultivating creativity and emotional intelligence in Spanish university curricula. The research results found that a positive emotional and creative intervention had a more significant impact on women, highlighting the need for emotional and creative education to enhance employability and ensure equal opportunities. University students should prioritize enhancing their creativity and emotional intelligence to improve their academic and work performance, and curricula should implement interventions to unleash students' potential [17]. The research findings have revealed that certain personality traits, such as emotional stability, extraversion, and conscientiousness, play a crucial role in enhancing creativity. In simpler terms, possessing favorable personality traits can significantly boost one's creative abilities. In the case of students, their levels of emotional stability, extraversion, and conscientiousness can strengthen their creativity and innovative thinking. Having high emotional stability allows individuals to approach challenges and difficulties with a calm and composed mindset. It enables them to think critically and analytically, seeking viable solutions by utilizing internal and external resources.

Moreover, individuals with extraversion traits are more likely to engage in effective communication and meaningful discussions. By actively exchanging ideas and perspectives, they can broaden their horizons and explore new approaches to problem-solving. Lastly, conscientious individuals exhibit a strong sense of responsibility in and dedication to accomplishing tasks and goals their organization or company assigns to them. In summary, cultivating and nurturing the personality traits of emotional stability, extraversion, and conscientiousness can profoundly enhance creativity. These traits empower individuals to tackle challenges head on, foster effective collaboration, and ensure the achievement of objectives and aspirations.

5.3. Exploring the Relationship between Personality Traits (Emotional Stability, Extraversion, and Conscientiousness) and Employability

Some researchers have explored the relationship between personality traits and career decision-making self-efficacy (CDMSE) among university students in impoverished areas

of China. The research results revealed gender differences in neuroticism, age differences in agreeableness, and discipline differences in neuroticism. While there were no significant differences in the overall CDMSE, gender differences can be found in accurate self-evaluation, and grade-level differences are observed in information-gathering. Honesty, agreeableness, openness, and extraversion were positively correlated with CDMSE, while neuroticism was negatively correlated. The study considers fostering positive personality traits through collaborative efforts to enhance CDMSE and promote educational equity among students in impoverished areas of China [6]. The research result considers that consistently observed personality traits, specifically extraversion and conscientiousness, play a significant and influential role in determining an individual's employability. When present at higher levels, these two traits have been found to positively impact employability prospects and increase the likelihood of career success. To delve deeper into these findings, let us first explore the concept of extraversion. Extraversion refers to the degree to which individuals are outgoing, friendly, and energized by social interactions. It encompasses qualities such as assertiveness, enthusiasm, and the ability to communicate with others effectively. Individuals with higher levels of extraversion tend to excel in roles that require frequent interaction with colleagues, clients, and stakeholders. Their natural inclination toward collaboration and open communication fosters solid interpersonal relationships and facilitates teamwork, making them valuable organizational assets.

Conscientiousness, on the other hand, encompasses traits such as diligence, responsibility, and organizational skills. Individuals who exhibit high conscientiousness are known for their strong work ethic, attention to detail, and ability to meet deadlines. They take their tasks and responsibilities seriously, striving for excellence in all their endeavors. Employers value conscientious individuals' reliability, efficiency, and ability to deliver high-quality work consistently. When it comes to students, those who display extraversion and conscientiousness have an added advantage in the job market. Their ability to effectively communicate, collaborate, and work well with others translates into increased employability. These students are recognized in academic settings for their active participation in group projects, leadership roles, and proactive learning approach. Such experiences enhance their interpersonal and teamwork skills, making them highly sought after by employers, who value effective teamwork and collaboration.

However, the trait of emotional stability does not appear to have a significant impact on employability. Emotional stability refers to an individual's ability to remain calm, composed, and resilient in facing challenges or stressful situations. While emotional stability is undoubtedly desirable in specific contexts, such as leadership positions during organizational turbulence, it may not be a crucial factor in the hiring process for entry-level positions. Employers prioritize other traits, such as extraversion and conscientiousness, which directly and visibly impact job performance and team dynamics. In summary, the research findings strongly support the notion that extraversion and conscientiousness are critical determinants of employability. Students and individuals who possess these traits are more likely to excel in their careers, as they have the necessary qualities for effective communication, collaboration, and task fulfillment. While emotional stability may not be a significant factor in employability, it remains essential in specific leadership roles and contexts. Ultimately, understanding the role of personality traits in employability can assist individuals in enhancing their professional prospects and achieving long-term career success.

5.4. Exploring the Relationship of Self-Efficacy and Creativity with Employability

Researchers have explored the impact of career decision-making self-efficacy, neuroticism, extroversion, and conscientiousness on career decisions and the difficulty of making them. The research findings revealed that personality traits influenced self-efficacy, predicting choice/commitment anxiety and resolve. Moreover, conscientiousness and extroversion played a moderating role in the relationship between self-efficacy and decision-related factors. These results hold significance for future research and intervention measures in career decisions [34]. The research results find that self-efficacy and creativity are crucial in positively impacting employability. In simpler terms, possessing self-efficacy and creativity can significantly enhance students' chances of securing employment. When students have self-efficacy, it empowers them to maintain a positive belief even when faced with challenging situations. Moreover, it enables them to actively seek out internal and external resources within organizations to solve problems effectively. On the other hand, students who possess creativity can consistently demonstrate their innovative thinking and creativity in ever-evolving internal and external environments. Additionally, they can break free from conventional ways of thinking, which allows them to identify new opportunities for organizations.

5.5. Exploring the Relationship between Self-Efficacy and Creativity

Some studies have examined the impact of various extracurricular activities on college graduates' evaluations of their employability skills. The research results showed that being a core member of student government, participating in service organizations, and engaging in sports, music, and arts clubs positively influenced communication, leadership, creativity, and self-promotion skills. Sports clubs had the greatest impact on leadership skills, while music clubs had the greatest impact on creativity skills. However, time management skills did not significantly benefit from extracurricular activities [35]. Based on the research findings, it has been demonstrated that self-efficacy has a significant and positive influence on creativity. Self-efficacy can effectively enhance students' creative abilities. The impetus for change and innovation often arises from dissatisfaction with the existing state of affairs. However, the process of organizational change and creation is frequently confronted with the challenges posed by the uncertainty of both internal and external environments and resistance from established corporate forces. Consequently, individuals driving change must possess the ability to carefully assess the obstacles faced by organizations and engage in continuous communication and coordination with internal and external stakeholders. This proactive approach is necessary to facilitate the seamless integration of internal and external resources into organizations, ultimately enabling them to navigate and overcome prevailing difficulties and successfully transition toward new and improved states. Therefore, students with the inherent traits and capabilities associated with self-efficacy are better equipped to maintain a positive belief system and sustain unwavering self-motivation when confronted with challenges. Through this steadfast self-belief and motivation, they can effectively lead their organizations in identifying and capitalizing on new development opportunities, thereby embarking on the transformative path of change and innovation.

6. Conclusions

6.1. Management Implications

This study explored the complex relationships between personality traits, self-efficacy, creativity, and employability among hotel and tourism industry students. Through an in-depth examination of these interconnected factors, we aim to provide valuable insights to promote professional success and personal growth in this industry. We hope this research can contribute to the industry's continued development and enhance the sustainable employability of professionals in the job market. Through this study, we hope to provide valuable guidance and recommendations for students' professional development and employability in the hotel and tourism industry. This study will contribute to their success in this highly competitive industry and positively impact its development. The research findings of this study will provide vital information for educational institutions, employers, and policymakers to support the professional development and employability of students in the hotel and tourism field better. By understanding the interrelationships between personality traits, self-efficacy, creativity, and employability, we can provide students with better training and educational resources, enhancing their success and achievements in this industry.

Extroversion, emotional stability, and conscientiousness are personality traits that significantly impact the employability of hospitality and tourism students. This study adopted dual mediation to evaluate the proposed model. The study gained a deeper understanding of how hospitality and tourism students' confidence in their abilities affects their employability through the dual mediation model. Second, the mediation of creativity can demonstrate how personality traits influence self-efficacy when students face challenges and develop innovative solutions. Third, individuals with high self-efficacy believe in their ability to overcome challenges and have a strong motivation for achievement, which can stimulate creative thinking and encourage individuals to take more risks. Combining these two mediating variables can provide a more in-depth understanding of employability and tourism students according to multi-level mediation processes.

6.2. Research Limitations and Future Research Directions

In addition to the personality traits of emotional stability, extraversion, conscientiousness, self-efficacy, and creativity, which have been explored in this study, it is essential to acknowledge that numerous other factors can significantly influence the employability of college graduates. These factors include professional attributes, internship participation, and the employment market environment. Furthermore, it is worth noting that the scope of this study was limited to collecting questionnaire data, specifically from students in the field of tourism and hospitality. As a result, to obtain a more comprehensive and generalized understanding of employability, future researchers should consider incorporating a broader range of factors that can impact employability. This can be achieved by analyzing students or graduates from various professional backgrounds. It is evident that with the rapid rise of artificial intelligence, there has been an increasing emphasis on developing professional competence and the challenges surrounding employability.

The digitalization of industries and the integration of AI systems have led to the potential disappearance of traditional occupations and jobs. Conversely, this technological advancement has also given rise to new jobs and competencies, influenced by the everevolving landscape of technology and societal changes. Given these circumstances, a crucial aspect of future employability research will be identifying capabilities and skills that artificial intelligence cannot replace. This focus on identifying the unique human attributes that are irreplaceable by AI will undoubtedly shape the next wave of employability research, enabling individuals to thrive in an increasingly automated world.

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