THE JOURNAL OF
INTERACTIVE SOCIAL SCIENCES
2026 Vol. 2, No. 2, ISSN 3030-5322

Factors influencing Social Adaptation of Students in Chinese Higher Vocational Education: From Environment Factors and Cognitive Factors Perspectives

Yanyan Fan[1*]

[1] Chongqing Yongchuan District Teachers' Training School, Chongqing, 402160, China
Corresponding Author*: Yanyan Fan E-mail: 2337635948@qq.com

ARTICLE INFO

Keywords:
Students
Chinese higher vocation education
Environment
cognitive

Published
7 June 2026

ABSTRACT

This research delves into the pivotal elements that impact the ease with which students adjust socially within the ambit of China's higher vocational education framework, emphasizing environmental and cognitive dimensions. Amidst the rapid transformation of the Chinese economy and an increasing need for a skilled workforce, a discernible discrepancy between the outcomes of vocational education and the requisites of the job market becomes apparent. This discordance underscores the hurdles in student social integration, evidenced by psychological discomfort, reduced engagement in academic pursuits, and limited career prospects. Employing an exhaustive review of existing literature and a methodical quantitative analysis, the study seeks to assess the influence of instructional and experiential activities on the autonomy, skillset, connectivity, and creative awareness of students, alongside examining their collective effect on social integration. By applying structural equation modeling, the investigation reveals significant links between instructional and experiential activities and the aspects of autonomy, competence, connectivity, and creative awareness, which in turn positively affect social integration. These insights highlight the critical role of improving instructional quality, practical applications, and cultivating an environment that nurtures students' psychological needs and creativity in enhancing social integration outcomes.

1. Introduction

The Chinese administration has underscored the significance of vocational training, implementing various strategies and initiatives to hasten its progress. Ma and Yang (2023) states that there has been a notable enlargement in the domain of vocational training, evidencing continuous growth over recent times. Vocational higher education has emerged as a pivotal element in the widespread adoption of higher education within China, although its acceptance within society

Citation: Fan, Y. Factors influencing social adaptation of students in Chinese higher vocational education: From environment factors and cognitive factors perspectives. The Journal of Interactive Social Sciences, 2(2), 1-18.

https://doi.org/ 10.64744/tjiss.2026.137.

remains modest (Ling et al., 2023). Concurrently, the transformation within China's economic framework is anticipated to usher in a phase of adjustment in industrial structures (Bai et al., 2021). This adjustment is reflective of the necessity for higher education's infrastructure to evolve in response to changes in the methods of producing goods and services essential for societal wellbeing. Education bears a direct correlation to the quality of life, influencing individuals' rights and interests regarding their survival, standard of living, and opportunities for advancement (Ling et al., 2023).

At the end of the 20th century, emerging educational institutions in China surged, leading to a gradual increase in the demand for vocational colleges and the localization of vocational education (Ngok & Lee, 2009, Pan, 2016). Several educational reforms have clearly defined the characteristics of vocational education as "localism" and "vocationalism," which are evident in the professional structure of education and curriculum settings (Xiong, 2011; Zhou, 2022). China's vocational education programs are managed locally and maintain a dynamic relationship with society. Furthermore, it is believed that vocational training schools maintain a dynamic relationship with employers, which helps them adapt to the environment (Zhou, 2022), providing students with practical opportunities in addition to regular educational activities.

At present, higher vocational education constitutes a critical segment of China's educational hierarchy, marking a pinnacle in vocational training (Ling et al., 2023). The establishment of a robust vocational education framework is essential for enhancing the efficacy of vocational instruction, realizing educational objectives within this sphere, elevating the competencies and professional demeanor of the workforce, and facilitating the growth of both vocational education and societal economic output (Zhou, 2022). This segment of education is witnessing a period of accelerated expansion, positioning it as a pivotal area and focal point in the ongoing reform and evolution of higher education in China through various eras (Jiang & Zhang, 2012; Ma & Yang, 2023). Vocational training in the nation is offered across a diverse array of institutions, encompassing vocational high schools, secondary educational establishments, and institutions for adult learners. Additionally, these educational bodies vary widely, including specialized colleges for agricultural communities, administrative training colleges, and institutions offering distance learning programs. Recent data indicate that vocational colleges in China see an enrollment exceeding two million individuals (Ling et al., 2023).

2. Problem Statement

With the rapid development and structural transformation of China's economy, the demand for high-skilled labor has been increasing. However, the current vocational education system seems to have not fully adapted to this change, leading to a significant gap between the skills of graduates and market demands (Idris & Rajuddin, 2012; Ma & Yang, 2023). In other words, students' social adaptability is poor. This gap not only limits the socio-economic advancement opportunities for individual students but also, from a macro perspective, hinders the improvement of the overall economic efficiency and innovation capability of society (Darvas & Palmer, 2014; Pepper, 2000).

In the context of higher vocational education, the consequences of students' inadequate social adaptation manifest in educational, psychological, and socio-economic impacts. The core of these issues is the phenomenon of rising dropout rates (Yi et al., 2015), where students striving to integrate into society often experience diminished feelings of belonging and participation. This alienation not only undermines their academic engagement but can also lead to them leaving educational institutions prematurely (Yi et al., 2018). Poor social adaptation often triggers a harmful

cycle, making it difficult for China's higher vocational education and students' personal development.

The psychological consequences of poor social adaptability are profound, including increased levels of stress and anxiety, as well as susceptibility to loneliness and depression (Jia et al., 2023, Pan et al., 2021). Moreover, the impact on self-esteem and identity cannot be underestimated, as students facing adaptation barriers may struggle with negative self-perception (Houtte et al., 2012) and doubt their self-worth and capabilities (Qian, 2021). From a socio-economic perspective, the impacts extend to future employment prospects and the broader economy. Specifically, vocational students who drop out or perform poorly due to social adaptation difficulties may face limited employment opportunities, thereby affecting their economic viability and, in turn, impacting the quality of the entire workforce.

The uneven quality of teaching and practical activities in vocational education institutions has been an issue, due to the limited number of teachers engaged in vocational education training (Ling et al., 2023). The lack of skilled teachers significantly compromises the quality of education. These issues led to the introduction of a new Vocational Education Law, emphasizing the allocation of 20% of the annual education budget to vocational education institutions. Moreover, most of the teachers employed are recent graduates, lacking the experience to provide students with practical knowledge (Xiong, 2011). Employing unqualified teachers affects the expansion of China's national economic development. Regarding teacher employment, the Vocational Education Law allows institutions to hire part-time teachers, providing some relief, but this is not a permanent solution.

The current state of vocational education in China results in students having a low level of innovation consciousness (Sun, 2021). This issue stems from various educational and social structural factors. Firstly, vocational education often focuses on skills and practical operation training, relatively neglecting the cultivation of innovative thinking and creativity (Guowang, 2020). This educational model emphasizes mastering existing knowledge and skills, which is insufficient to inspire students' interest and ability to explore new knowledge, try new methods, and innovate in problem-solving. Secondly, the curriculum content in the vocational education system may be too outdated and rigid, not flexible enough to adapt to changes in technological development and market demands (Weili & Guangliang, 2016). A lack of projects, internships, and innovative practice opportunities closely linked to the actual work environment limits students' chances to apply learned knowledge to solve real problems and engage in innovative activities (Xie, 2021). Moreover, society and the educational system's perceptions and value judgments of vocational education can also impact students' innovative consciousness. If society generally views vocational education as a "second choice" inferior to general higher education, this perception might not favor building students' confidence and exploratory spirit, thereby affecting their motivation to pursue innovation and creative thinking.

Therefore, the reform of the vocational education system is urgently needed. It requires updating curriculum content, improving teaching methods, and more closely aligning with labor market demands (Chen et al., 2023) to enhance the quality of education and students' adaptability. Currently, the challenge of social integration difficulties faced by graduates from higher vocational colleges significantly affects the development of vocational education in China (Huang, 2023). Enhancing students' social adaptability after receiving vocational education and increasing their innovative consciousness are key obstacles facing China's vocational education framework.

3. Research Objective

This research is structured around the following guiding research objectives:

1. To examine the effects of teaching activities on practical activities within Chinese higher vocational education.

2. To examine the effects of teaching activities on student's autonomy within Chinese higher vocational education.

3. To examine the effects of teaching activities on student's competence within Chinese higher vocational education.

4. To examine the effects of teaching activities on student's relatedness within Chinese higher vocational education.

5. To examine the effects of teaching activities on student's innovation consciousness within Chinese higher vocational education.

6. To examine the effects of practical activities on student's autonomy within Chinese higher vocational education.

7. To examine the effects of practical activities on student's competence within Chinese higher vocational education.

8. To examine the effects of practical activities on student's relatedness within Chinese higher vocational education.

9. To examine the effects of practical activities on student's innovation consciousness within Chinese higher vocational education.

10. To examine the effects of student's autonomy on social adaptation within Chinese higher vocational education.

11. To examine the effects of student's competence on social adaptation within Chinese higher vocational education.

12. To examine the effects of student's relatedness on social adaptation within Chinese higher vocational education.

13. To examine the effects of student's innovation consciousness on social adaptation within Chinese higher vocational education.

4. Literature Review

4.1 The development of the higher vocational education in China

Higher vocational education in China occupies a crucial position within the national education framework, serving as a pivotal bridge between secondary education and the labor market(Xie, 2021). Characterized by its focus on practical skills and employment-oriented training, the Chinese higher vocational education system aims to prepare students for specific trades and professions,

responding adeptly to the evolving demands of the country's economy and labor market (Guowang, 2020). This system has seen exponential growth over recent decades, reflecting the government's commitment to enhancing vocational training and education as a means to foster economic development and address the skilled labor shortage (Ministry of Education of the People's Republic of China, 2020).

The significance of higher vocational education extends beyond mere skill acquisition; it plays a vital role in workforce development, contributing to the enhancement of the country's human capital (Hao & Pilz, 2021). By providing specialized training and education, higher vocational institutions equip students with the technical skills and practical experience necessary to meet the specific needs of industries, thereby facilitating a smoother transition from education to employment (Zhou, 2022). Moreover, the scale of higher vocational education in China is substantial, with millions of students enrolled in thousands of institutions across the country, underscoring its importance in the national education landscape (National Bureau of Statistics of China, 2019).

The purpose and importance of social adaptation within this educational context cannot be overstated. For students in vocational education, successful social adaptation is closely linked to academic success, personal development, and future employability. Social adaptation—the process by which individuals adjust to new social environments and norms—enables students to effectively navigate the challenges and opportunities of vocational education. It fosters a sense of belonging and engagement, which are critical for academic motivation and performance (AlZboon, 2013). Furthermore, the development of soft skills, such as communication, teamwork, and problem-solving, which are integral to social adaptation, enhances students' employability and readiness for the workforce (Idris & Rajuddin, 2012).

Therefore, higher vocational education in China is a cornerstone of the national strategy to develop a skilled workforce capable of meeting the demands of a dynamic and rapidly evolving economy. The emphasis on social adaptation within this educational framework highlights the recognition of its dual role in promoting academic and personal success, as well as in ensuring that graduates are well-prepared to contribute effectively to the workforce. As such, fostering social adaptation among vocational students is paramount, not only for their individual success but also for the broader goals of economic development and social cohesion.

4.2 A multi-lenses theoretical approach

4.2.1 Social cognitive theory

The Social Cognitive Theory (SCT), developed by the distinguished Stanford psychologist Albert Bandura and his colleague Cervone in 1986, represents an evolution from the earlier social learning theory introduced by Bandura in the 1960s (Bandura, 2001). Bandura's comprehensive work transitioned from a behaviorist and social learning framework to what he named social cognitive theory, marking significant progressions in psychological research and potentially in organizational behavior studies (Anderson et al., 2007). Notably, SCT extends beyond the foundational principles of behaviorism and social learning by incorporating cognitive constructs, such as self-regulatory mechanisms, thereby broadening the theory's applicability beyond mere learning or behavior modification processes (Kursan Milaković, 2021).

Initial investigations into social cognitive motivation primarily took place within clinical settings during the early stages of the theory's application (Merkebu et al., 2020). However, the

subsequent decades witnessed an expansion of SCT's application across diverse fields including education, health, and business, with research efforts extending on a global scale (Bandura, 2013; Cheng & Chu, 2014; Othman et al., 2011). This international body of research has consistently supported the theory's core principle of reciprocal interactions, particularly between self-efficacy and performance, across various nations.

The model proposed by SCT aligns with the dynamic interplay among internal self-factors and external influences on motivational processes (Bandura, 2001, 2013). It's important to note that the theory does not suggest an equal influence among the factors within these interactions. While three factors might coexist within a given scenario, their impact on behavior is not uniform or simultaneous (Anderson et al., 2007). The strength of these influences varies, underscoring the importance of context, including the type of activity, individual differences, and specific circumstances, in determining the relative impact of each factor. Given the breadth of social cognitive theoretical perspectives, this study uses this theory to explore higher vocational education student's social adaptation in China.

4.2.2 Self-determination theory

Self-determination theory (SDT) is a macro theory of human motivation and personality, concerning people's inherent growth tendencies and their innate psychological needs (Hsu et al., 2019). It was developed by psychologists Edward L. Deci and Richard M. Ryan, and is grounded in the belief that human nature shows persistent positive features, with individuals displaying a natural, proactive tendency towards growth and development (Deci & Ryan, 2012). This theory posits that the fulfillment of three basic psychological needs—autonomy, competence, and relatedness—is essential for psychological health and well-being (Ryan & Deci, 2017).

Autonomy refers to the need to feel in control of one's own behaviors and goals (Ryan & Deci, 2022). This need stresses the importance of self-regulation and the freedom to make choices. Competence involves understanding how to attain various external outcomes and being efficacious in performing the necessary actions (Ryan & Patrick, 2009). It underscores the necessity for individuals to gain mastery of tasks and learn different skills. Lastly, relatedness concerns the desire to feel connected to others, to love and care, and to be loved and cared for in return (Mylrea et al., 2017). This need highlights the significance of social interactions and relationships in fostering a sense of security and belonging.

SDT emphasizes the significance of these needs across all cultures and societies, suggesting that although the means of satisfying these needs might vary from one culture to another, the needs themselves are universal (Ryan & Deci, 2022). When these needs are met, SDT posits that individuals will function and grow optimally (Ryan & Deci, 2017). Conversely, when these needs are thwarted, people's motivation, performance, and well-being can suffer.

SDT also differentiates between types of motivation, categorized primarily as intrinsic and extrinsic (Ryan & Deci, 2022). Intrinsic motivation refers to doing something because it is inherently interesting or enjoyable, while extrinsic motivation involves doing something because it leads to a separable outcome. SDT argues that the quality of motivation is more significant than the quantity of motivation, with intrinsic motivation being associated with higher quality outcomes such as deeper engagement, better performance, and greater well-being (Mylrea et al., 2017).

This theory has been applied extensively across various domains, including education, work,

healthcare, parenting, and sport, demonstrating its broad applicability and relevance (Alessandri et al., 2020; Ryan & Patrick, 2009). In educational settings, for instance, SDT has informed practices that aim to foster intrinsic motivation among students by supporting their need for autonomy, competence, and relatedness. In the workplace, SDT principles have been used to design jobs and organizational climates that enhance employee motivation and satisfaction.

Self-determination theory provides a comprehensive framework for understanding human motivation and personality (Ryan & Deci, 2022). It emphasizes the importance of satisfying innate psychological needs for autonomy, competence, and relatedness in promoting optimal functioning and well-being. Through its applications across different fields, SDT offers valuable insights into how environments can be structured to support these needs, thereby enhancing motivation, performance, and personal growth.

4.3 Conceptual framework

The following figure shows the conceptual framework in this study. This is a structural equation model which contains independent variable teaching activities, practical activities. Autonomy, competence, relatedness, and innovation consciousness are acting as mediators. Social adaptation is the dependent variable as it is at the end of the causal chain and is influenced by other variables without influencing any variable within this model.

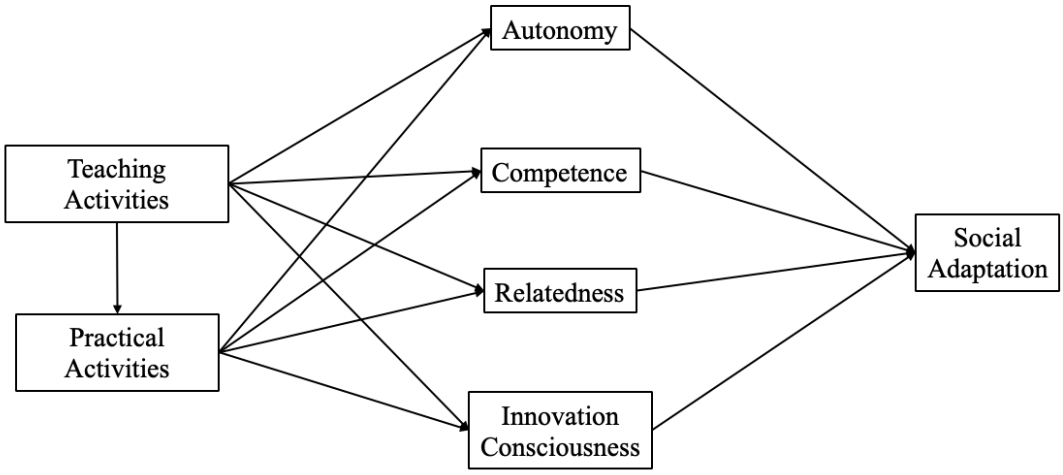

Figure 1 Conceptual Framework

4.4 Hypothesis

1. Teaching activities has a positive influence on practical activities within Chinese higher vocational education.

2. Teaching activities has a positive influence on student's autonomy within Chinese higher vocational education.

3. Teaching activities has a positive influence on student's competence within Chinese higher vocational education.

4. Teaching activities has a positive influence on student's relatedness within Chinese higher vocational education.

5. Teaching activities has a positive influence on student's innovation consciousness within Chinese higher vocational education.

6. Practical activities has a positive influence on student's autonomy within Chinese higher vocational education.

7. Practical activities has a positive influence on student's competence within Chinese higher vocational education.

8. Practical activities has a positive influence on student's relatedness within Chinese higher vocational education.

9. Practical activities has a positive influence on student's innovation consciousness within Chinese higher vocational education.

10. Student's autonomy has a positive influence on social adaptation within Chinese higher vocational education.

11. Student's competence has a positive influence on social adaptation within Chinese higher vocational education.

12. Student's relatedness has a positive influence on social adaptation within Chinese higher vocational education.

13. Student's innovation consciousness has a positive influence on social adaptation within Chinese higher vocational education.

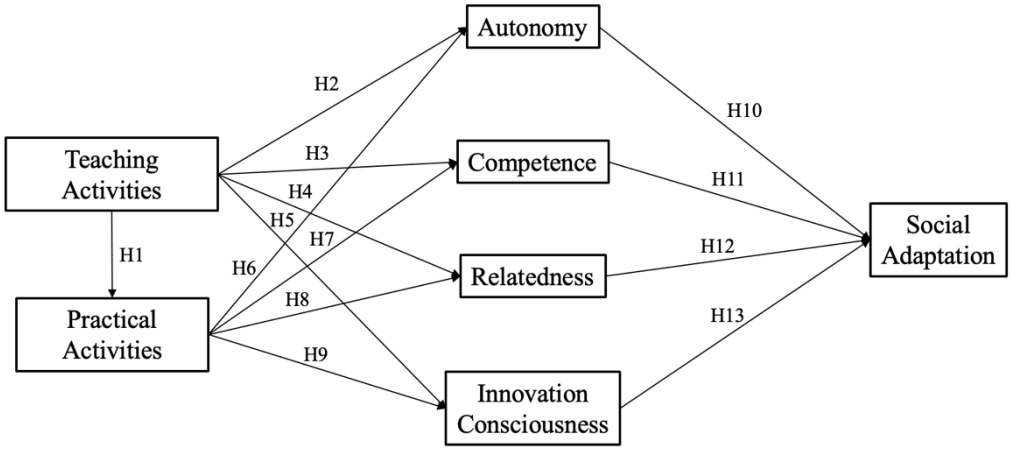

Figure 2 The hypothesis of the study

5. Research Methodology

5.1 Research design

The research design presents a method for selecting and defining the components of research that match the goals of the study (Jha, 2014). It acts as a detailed plan, especially useful in predictive research, guiding researchers during the stages of collecting and analyzing data.

The research design of this study is structured in four stages, starting with defining the research problem and culminating in data analysis. Due to the large dataset used, the focus was primarily on exploring predictive correlations. The study thoroughly assessed the predictive model using a quantitative approach. A statistical model was utilized to investigate the variable interactions and to test the research hypotheses. Ultimately, this approach effectively analyzed the seven variables under consideration. More specifically, the research developed a statistical model to predict outcomes related to independent (teaching activities), mediating (autonomy, competence, relatedness, and innovation consciousness), and dependent (social adaptation) variables.

5.2 Research sampling

This research utilized a non-probability sampling method, specifically focusing on purposive sampling. This technique, also referred to as judgmental, selective, or subjective sampling, is applicable to both quantitative and qualitative research methodologies (Tongco, 2007). It involves intentionally choosing participants for the study based on the researcher's judgment and the specific goals of the research (Campbell et al., 2020). Researchers exercise their discretion from the beginning to select their sample, emphasizing the importance of choosing appropriate samples in purposive sampling. The selection process can be based on convenience or recommendations from experts (Rai & Thapa, 2015). Purposive sampling is appreciated for its cost-effectiveness and efficiency in terms of time (Tongco, 2007). Consistent with previous studies (De Oliveira Silva et al., 2020), focusing on 18-20 year-olds enrolled in higher vocational colleges in China through targeted population screening facilitates the quick recruitment of participants who are expected to provide valuable insights into the research.

5.3 Research instrument

A measurement scale provides a systematic way to arrange data, making it easier to inspect, analyze, and comprehend. Essentially, a scale is a tool that allocates a series of values or scores to different elements (Mills & Gay, 2019). In this study, a 5-point Likert scale was utilized for evaluations, assigning scores from 1 to 5, where 1 signifies 'Strongly disagree', 2 'Disagree', 3 'Neutral', 4 'Agree', and 5 'Strongly agree'. The survey employed in this research is divided into several sections:

- Part A examines teaching activities aspects through 7 questions adapted from (Gora et al., 2019).

- Part B evaluates practical activities with 7 questions adapted from (Gora et al., 2019).

- Part C investigates autonomy via 3 questions adapted from (Sheldon et al., 2001).

- Part D explores competence through 3 questions, following the framework by (Sheldon et al., 2001).

- Part E explores relatedness through 3 questions, adapted from (Sheldon et al., 2001).

- Part F explores innovation consciousness through 2 questions, adapted from (Olugbara et al., 2020).

- Part G explores social adaptation through 3 questions, adapted from (Kim et al., 2021).

5.4 Data collection

The research will collect data using a survey questionnaire, a popular approach in survey studies. This process involves asking participants a set of questions to understand their levels of agreement or disagreement. After creating a uniform questionnaire format, it can be distributed online, face-to-face, or via paper (Bloomfield & Fisher, 2019).

The initial step in gathering data involves designing a customized online questionnaire on Wenjuanxing. This survey will be shared with potential respondents through Wenjuanxing, focusing particularly on higher vocational education students in China. The questions will evaluate different aspects such as teaching activities, practical activities, autonomy, competence, relatedness, innovation consciousness, social adaptation. Participants can access the survey through a web link on devices like computers, smartphones, or tablets. The data will be collected via this link, with Wenjuanxing alerting participants upon survey completion. The collected data will be available in Microsoft Excel format for easy access.

5.5 Data analysis

Quantitative data analysis will be conducted using the Statistical Package for the Social Sciences (SPSS) version 26.0 and SmartPLS version 3.3.7. A significance threshold of 0.05 (indicating a 95% confidence interval) has been set for hypothesis testing; the null hypothesis will be rejected if the p-value is 0.05 or lower.

The study's model was evaluated using the partial least squares (PLS) method, adhering to the guidelines proposed by Chin (2010) for presenting results of PLS analyses. SmartPLS version 3.3.7 was specifically used to test the hypotheses laid out earlier. The PLS method involves a dual-phase analysis, starting with the assessment of the measurement model and, upon its validation, proceeding to the structural model analysis (Ringle et al., 2012).

Following established scholarly practices, the reflective measurement model's validity is confirmed through tests of internal consistency, reliability of indicators, convergent validity, and discriminant validity (Hair et al., 2020). After confirming the measurement model's validity, the focus shifts to the structural model's analysis. In PLS analysis, the determination coefficient (R2) and path coefficients are key indicators for assessing the structural model's efficacy. This process allows for a methodical verification of the data's support for the hypothesized model assumptions (Hair et al., 2020).

Table 1 Direct Effect Hypotheses

Hypothesis					**Bootstrapped**		
					CI	**BC**	
Variable Relationship	**Path Coefficient Beta (β)**	**Standard Deviation (STDEV)**	**T Statistics (|O/STDEV|)**	***P* Values**	**1% LL**	**99% UL**	**Decision**
TA -> PA	0.351	0.025	2.789	0.000	0.016	0.278	Accept
TA -> AT	0.233	0.042	5.563	0.000	0.116	0.341	Accept
TA -> CP	0.181	0.014	2.123	0.000	0.022	0.341	Accept
TA -> RL	0.241	0.013	4.213	0.000	0.034	0.056	Accept
TA -> IC	0.361	0.045	5.251	0.002	0.013	0.023	Accept

PA -> AT	0.298	0.044	2.414	0.000	0.023	0.045	Accept
PA -> CP	0.276	0.105	3.521	0.000	0.025	0.034	Accept
PA -> RL	0.259	0.041	5.313	0.001	0.118	0.231	Accept
PA -> IC	0.198	0.032	4.131	0.000	0.104	0.201	Accept
AT -> SA	0.160	0.046	3.267	0.000	0.132	0.231	Accept
CP -> SA	0.189	0.078	3.765	0.000	0.155	0.189	Accept
RL -> SA	0.192	0.019	3.692	0.000	0.134	0.272	Accept
IC -> SA	0.185	0.018	2.572	0.001	0.023	0.045	Accept

***Notes**: Significant at p<0.01**, TA->Teaching Activities, PA->Practical Activities, AT->Autonomy, CP->Competence, RL-> Relatedness, IC -> Innovation Consciousness, SA -> Social Adaptation.*

6. Conclusion

This investigation illuminates the complex interplay between various educational and environmental factors and their collective impact on the social adaptation processes of students within the sphere of higher vocational education in China. Through rigorous analysis, it becomes evident that the quality of teaching and the depth of practical experience provided to students significantly influence their ability to adapt socially within and beyond the educational setting. The findings of this study underscore the importance of fostering an educational environment that not only equips students with the necessary technical skills but also supports their psychological needs, thereby enhancing their competence, autonomy, sense of relatedness, and innovative capabilities.

Moreover, the research highlights the critical need for vocational education systems to evolve in response to the changing demands of the labor market, emphasizing the role of educators and policymakers in crafting curricula and pedagogical strategies that bridge the gap between educational outcomes and market needs. This study's conclusions advocate for a holistic approach to vocational education, one that transcends the mere acquisition of vocational skills to include the development of students' social and innovative capacities, thereby preparing them for a successful transition into the workforce and society at large.

6.1 Theoretical Implications

The findings of this investigation offer significant contributions to the theoretical underpinnings of social adaptation within the context of vocational education. By elucidating the relationships between teaching quality, practical experiences, and the multifaceted aspects of student development—namely autonomy, competence, relatedness, and innovation consciousness—this study enriches existing theoretical models with empirical evidence from the Chinese vocational education system. Specifically, it extends the application of Self-Determination Theory (SDT) and Social Cognitive Theory (SCT) in educational settings by demonstrating how these theories' constructs are manifested in the vocational education domain.

The integration of SDT and SCT provides a nuanced understanding of how educational practices influence students' motivational dynamics and social adaptation processes. This study's findings suggest that vocational education's effectiveness is significantly enhanced when educational activities are designed to fulfill students' psychological needs for autonomy, competence, and relatedness, thereby promoting their motivation, engagement, and ultimately, their

social adaptation.

Moreover, the emphasis on innovation consciousness within this framework introduces a novel dimension to the theoretical discourse, highlighting the importance of cultivating creative and innovative thinking in vocational education students. This addition to the theoretical landscape suggests that the scope of vocational education should encompass not only the acquisition of specific skills but also the development of students' capacity to innovate and adapt to changing environments.

Therefore, this study's theoretical implications lie in its extension and application of established psychological theories to the context of vocational education, offering a comprehensive framework that underscores the importance of holistic educational practices that support both skill acquisition and personal development. Future research is encouraged to further explore these theoretical insights, examining their applicability and impact across diverse educational contexts and cultures.

6.2 Practical Implications

The practical implications of this study are manifold and bear significant relevance for educators, policymakers, and practitioners within the vocational education sector. The research provides concrete evidence that the integration of high-quality teaching and practical experiences that cater to the psychological needs and innovative capacities of students can markedly enhance their social adaptation and readiness for the workforce. This finding underscores the necessity for vocational education institutions to adopt a holistic approach to curriculum development, one that transcends traditional skill-based training to include elements designed to foster autonomy, competence, relatedness, and innovation consciousness among students.

For educators, this study advocates for the implementation of pedagogical strategies that are student-centered and which actively engage students in their learning process. Such strategies may include project-based learning, collaborative tasks, and real-world problem-solving activities that not only impart vocational skills but also encourage critical thinking, creativity, and social interaction. Additionally, educators are encouraged to create supportive learning environments that recognize and address individual student needs, thereby facilitating a sense of belonging and connectedness within the educational setting.

Policymakers are urged to consider the findings of this research in the formulation of educational policies and funding allocations. Policies that promote the development of innovative teaching methodologies, the integration of industry-relevant experiences, and the provision of resources to support the psychological well-being of students can significantly contribute to the enhancement of vocational education outcomes. Furthermore, policies that foster partnerships between vocational institutions and industries can provide valuable practical experiences for students, ensuring that their education is closely aligned with market demands.

For vocational education institutions, the practical implications of this study highlight the importance of continuous professional development for educators. Training programs that equip teachers with the skills to implement innovative teaching practices and to support the holistic development of their students are crucial. Additionally, institutions should strive to create a culture of innovation that encourages experimentation with new pedagogical approaches and curricular designs, thereby remaining responsive to the evolving needs of students and the labor market.

6.3 Limitation and Future Research

This study, while shedding light on the significant factors influencing social adaptation among students in Chinese higher vocational education, encounters several limitations that warrant consideration. Firstly, the research's geographic and cultural context, being confined to China, may limit the generalizability of its findings to vocational education systems in other countries with differing educational frameworks and cultural norms. Therefore, caution should be exercised when applying these insights beyond the Chinese context.

Secondly, the methodology primarily relies on quantitative data, which, although providing valuable statistical correlations, may not fully capture the depth and complexity of individual student experiences and perceptions. The reliance on self-reported measures also introduces the potential for response bias, which could affect the accuracy of the data collected.

Furthermore, the study's cross-sectional design offers a snapshot of the factors influencing social adaptation at a specific point in time but lacks the longitudinal perspective necessary to understand how these relationships evolve over the course of students' vocational education and subsequent entry into the workforce.

Future research should aim to address these limitations by incorporating qualitative methodologies, such as interviews or focus groups, to gain richer insights into students' experiences and perspectives. This approach would complement the quantitative findings and provide a more nuanced understanding of the social adaptation process.

Additionally, comparative studies involving vocational education systems in different cultural and geographical contexts would be valuable in assessing the universality and specificity of the identified factors influencing social adaptation. Such research could help delineate cultural and systemic variations in vocational education's impact on student development.

Longitudinal studies are also essential to track the evolution of social adaptation over time, examining how early educational experiences impact students' long-term career trajectories and integration into society. Investigating the enduring effects of teaching practices, practical experiences, and psychological support on students' career success and life satisfaction could offer critical insights for educators, policymakers, and practitioners.

Data Availability Statements

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

References

[1] Alessandri, E., Rose, D., & Wasley, D. (2020). Health and wellbeing in higher education: A comparison of music and sport students through the framework of self determination theory. Frontiers in Psychology, 11, 566307. https://www.frontiersin.org/articles/10.3389/fpsyg.2020.566307/full

[2] AlZboon, S. O. (2013). Social Adaptation and Its Relationship to Achievement Motivation among High School Students in Jordan. International Education Studies, 6(10), 63–69. https://eric.ed.gov/?id=EJ1068713

[3] Anderson, E. S., Winett, R. A., & Wojcik, J. R. (2007). Self-regulation, self-efficacy, outcome expectations, and social support: Social cognitive theory and nutrition behavior. Annals of Behavioral Medicine, 34(3), 304–312. https://doi.org/10.1007/BF02874555

[4] Bai, S., Zhang, B., Ning, Y., & Wang, Y. (2021). Comprehensive analysis of carbon emissions, economic growth, and employment from the perspective of industrial restructuring: A case study of China. Environmental Science and Pollution Research, 28(36), 50767–50789. https://doi.org/10.1007/s11356-021-14040-z

[5] Bandura, A. (2001). Social Cognitive Theory: An Agentic Perspective. Annual Review of Psychology, 52(1), 1–26. https://doi.org/10.1146/annurev.psych.52.1.1

[6] Bandura, A. (2013). Health promotion from the perspective of social cognitive theory. In Understanding and changing health behaviour (pp. 299–339). Psychology Press. https://www.taylorfrancis.com/chapters/edit/10.4324/9781315080055-18/health-promotion-perspective-social-cognitive-theory-albert-bandura

[7] Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. Journal of the Australasian Rehabilitation Nurses Association, 22(2), 27–30. https://search.informit.org/doi/abs/10.3316/INFORMIT.738299924514584

[8] Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? Research case examples. Journal of Research in Nursing, 25(8), 652–661.

[9] Chen, S., Jiang, Q., Jiang, S., & Li, M. (2023). An empirical study on the" three teachings" reform of the new generation information technology curriculum in higher vocational education. Advances in Vocational and Technical Education, 5(6), 87–95. http://www.clausiuspress.com/assets/default/article/2023/07/28/article_1690603101.pdf

[10] Cheng, P.-Y., & Chu, M.-C. (2014). Behavioral Factors Affecting Students' Intentions to Enroll in Business Ethics Courses: A Comparison of the Theory of Planned Behavior and Social Cognitive Theory Using Self-Identity as a Moderator. Journal of Business Ethics, 124(1), 35–46. https://doi.org/10.1007/s10551-013-1858-0

[11] Chin, W. W. (2010). Bootstrap Cross-Validation Indices for PLS Path Model Assessment. In V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), Handbook of Partial Least Squares (pp. 83–97). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-540-32827-8_4

[12] Darvas, P., & Palmer, R. (2014). Demand and supply of skills in Ghana: How can training programs improve employment and productivity? World Bank Publications. https://books.google.com/books?hl=zh-CN&lr=&id=EOboAwAAQBAJ&oi=fnd&pg=PP1&dq=Chinese+Higher+Vocational+Education+To+steer+students+with+lower+grades+into+lower-paying+occupations&ots=t0acXNPTn8&sig=zLL0GFQdOWt6JiilLplWohjL-D8

[13] De Oliveira Silva, J. H., De Sousa Mendes, G. H., Ganga, G. M. D., Mergulhão, R. C., & Lizarelli, F. L. (2020). Antecedents and consequents of student satisfaction in higher technical-

vocational education: Evidence from Brazil. International Journal for Educational and Vocational Guidance, 20(2), 351–373. https://doi.org/10.1007/s10775-019-09407-1

[14] Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. Handbook of Theories of Social Psychology, 1(20), 416–436. https://www.torrossa.com/gs/resourceProxy?an=4912667&publisher=FZ7200#page=438

[15] Gora, A., Ștefan, S., Popa, Ștefan, & Albu, C. (2019). Students' Perspective on Quality Assurance in Higher Education in the Context of Sustainability: A PLS-SEM Approach. Sustainability, 11(17), 4793. https://doi.org/10.3390/su11174793

[16] Guowang, L. I. U. (2020). Research on the Cultivation of Secondary Vocational Students' Innovation and Entrepreneurship Consciousness under the Background of. The Theory and Practice of Innovation and Enntrepreneurship, 3(21), 69. http://www.cxcybjb.com/EN/abstract/abstract1464.shtml

[17] Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. Journal of Business Research, 109, 101–110. https://doi.org/10.1016/j.jbusres.2019.11.069

[18] Hao, T., & Pilz, M. (2021). Attractiveness of VET in China: A study on secondary vocational students and their parents. Journal of Education and Work, 34(4), 472–487. https://doi.org/10.1080/13639080.2021.1946492

[19] Houtte, M. V., Demanet, J., & Stevens, P. A. (2012). Self-esteem of academic and vocational students: Does within-school tracking sharpen the difference? Acta Sociologica, 55(1), 73–89. https://doi.org/10.1177/0001699311431595

[20] Hsu, H.-C. K., Wang, C. V., & Levesque-Bristol, C. (2019). Reexamining the impact of self-determination theory on learning outcomes in the online learning environment. Education and Information Technologies, 24(3), 2159–2174. https://doi.org/10.1007/s10639-019-09863-w

[21] Huang, J. (2023). Current Employment Situation and Countermeasures of Students in Chinese Higher Colleges and Universities. Journal of Education and Educational Research, 4(3), 121–123. https://doi.org/10.54097/jeer.v4i3.11384

[22] Idris, A., & Rajuddin, M. R. (2012). An assessment of employability skills among technical and vocational education students in Nigeria. Archives Des Science, 65(7), 392–400. https://www.academia.edu/download/33834974/An_Assesssment_of_Employability_skills_in_Nigeria.pdf

[23] Jia, J., Ma, Y., Xu, S., Zheng, J., Ma, X., Zhang, Y., Sun, W., & Liu, L. (2023). Effect of Academic Self-Efficacy on Test Anxiety of Higher Vocational College Students: The Chain Mediating Effect. Psychology Research and Behavior Management, Volume 16, 2417–2424. https://doi.org/10.2147/PRBM.S413382

[24] Jiang, Z.-P., & Zhang, Z.-R. (2012). Using Social Cognitive Career Theory to Predict the Academic Interests and Goals of Chinese Middle Vocational-Technical School Students. Public Personnel Management, 41(5), 59–68. https://doi.org/10.1177/009102601204100506

[25] Kim, M. J., Oh, S. J., & Lee, Y. K. (2021). Development and Verification of Validity of Social Adaptation Scale for Adolescents. Asia-Pacific Journal of Convergent Research Interchange, 7(9), 23–34. https://doi.org/10.47116/apjcri.2021.09.03

[26] Kursan Milaković, I. (2021). Purchase experience during the COVID‐19 pandemic and social cognitive theory: The relevance of consumer vulnerability, resilience, and adaptability for purchase satisfaction and repurchase. International Journal of Consumer Studies, 45(6), 1425–1442. https://doi.org/10.1111/ijcs.12672

[27] Ling, Y., Chung, S. J., & Wang, L. (2023). Research on the reform of management system of higher vocational education in China based on personality standard. Current Psychology, 42(2), 1225–1237. https://doi.org/10.1007/s12144-021-01480-6

[28] Ma, Z., & Yang, S. (2023). A Study on the Factors Influencing the Employment Ability of Art Students in Vocational Colleges in Shanxi Province, China.

[29] Merkebu, J., Battistone, M., McMains, K., McOwen, K., Witkop, C., Konopasky, A., Torre, D., Holmboe, E., & Durning, S. J. (2020). Situativity: A family of social cognitive theories for understanding clinical reasoning and diagnostic error. Diagnosis, 7(3), 169–176. https://doi.org/10.1515/dx-2019-0100

[30] Mills, G. E., & Gay, L. R. (2019). Educational Research: Competencies for Analysis and Applications, 12th Edition. In Pearson. Pearson.

[31] Ministry of Education of the People's Republic of China. (2020). Educational Statistics. http://en.moe.gov.cn/documents/statistics/2022/national/

[32] Mylrea, M. F., Sen Gupta, T., & Glass, B. D. (2017). Developing Professional Identity in Undergraduate Pharmacy Students: A Role for Self-Determination Theory. Pharmacy, 5(2), Article 2. https://doi.org/10.3390/pharmacy5020016

[33] Ngok, K.-L., & Lee, M. H. (2009). Localization of higher education and its social consequences in China, 1993–2007. Journal of Asian Public Policy, 2(1), 57–73. https://doi.org/10.1080/17516230902763691

[34] Olugbara, C. T., Imenda, S. N., Olugbara, O. O., & Khuzwayo, H. B. (2020). Moderating effect of innovation consciousness and quality consciousness on intention-behaviour relationship in E-learning integration. Education and Information Technologies, 25(1), 329–350. https://doi.org/10.1007/s10639-019-09960-w

[35] Othman, M. N., Yap, S. F., & Wee, Y. G. (2011). Examining the relationship between gender, age, education level and social cognitive factors in a health setting. International Journal of Business and Management, 6(9), 79. https://www.researchgate.net/profile/Md-Nor-Othman/publication/265203996_Examining_the_Relationship_between_Gender_Age_Education_Level_and_Social_Cognitive_Factors_in_a_Health_Setting/links/5490f4c30cf2d1800d87c37e/Examining-the-Relationship-between-Gender-Age-Education-Level-and-Social-Cognitive-Factors-in-a-Health-Setting.pdf

[36] Pan, M. (2016). 15 On Localization of Chinese Higher Education. In Selected Academic Papers of Pan Maoyuan on Higher Education (pp. 177–188). Brill. https://brill.com/downloadpdf/book/9789004309227/B9789004309227_016.pdf

[37] Pan, Y., Yang, Z., Han, X., & Qi, S. (2021). Family functioning and mental health among secondary vocational students during the COVID-19 epidemic: A moderated mediation model. Personality and Individual Differences, 171, 110490. https://www.sciencedirect.com/science/article/pii/S0191886920306814

[38] Pepper, S. (2000). Radicalism and education reform in 20th-century China: The search for an ideal development model. Cambridge University Press. https://books.google.com/books?hl=zh-CN&lr=&id=SiffTChCmPoC&oi=fnd&pg=PR7&dq=Chinese+Higher+Vocational+Education+To+steer+students+with+lower+grades+into+lower-paying+occupations&ots=aQ0tO2t44e&sig=aiGfvrCKJ0MhTAjhqOCxHkT9l-o

[39] Qian, X. (2021). Dynamic capabilities of Chinese small private vocational education and training institutions: A case-based research. https://repositorio.iscte-iul.pt/handle/10071/24959

[40] Rai, N., & Thapa, B. (2015). A study on purposive sampling method in research. Kathmandu: Kathmandu School of Law, 5.

[41] Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's comments: A critical look at the use of PLS-SEM in" MIS Quarterly". MIS Quarterly, iii–xiv. https://www.jstor.org/stable/41410402

[42] Ryan, R. M., & Deci, E. L. (2017). Self-determination theory. Basic Psychological Needs in Motivation, Development, and Wellness. https://www.researchgate.net/profile/Jacqueline-Espinoza/post/Does_anyone_know_a_good_source_for_materials_related_to_motivational_aspects_of_learning_in_high-school_and_universities/attachment/59d628efc49f478072e9bf3f/AS%3A272444990918666%401441967356134/download/20120820173309330.pdf

[43] Ryan, R. M., & Deci, E. L. (2022). Self-Determination Theory. In F. Maggino (Ed.), Encyclopedia of Quality of Life and Well-Being Research (pp. 1–7). Springer International Publishing. https://doi.org/10.1007/978-3-319-69909-7_2630-2

[44] Ryan, R. M., & Patrick, H. (2009). Self-determination theory and physical. Hellenic Journal of Psychology, 6(2), 107–124. http://selfdeterminationtheory.org/SDT/documents/2009_RyanWilliamsPatrickDeci_HJOP.pdf

[45] Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What Is Satisfying About Satisfying Events? Testing 10 Candidate Psychological Needs.

[46] Sun, B. (2021). Analysis on the Construction of Innovation and Entrepreneurship Education Model of Computer Major in Higher Vocational College. 2021 International Conference on Computer Technology and Media Convergence Design (CTMCD), 71–75. https://ieeexplore.ieee.org/abstract/document/9463369/

[47] Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection.

[48] Weili, L., & Guangliang, G. U. O. (2016). Route Analysis of Realizing Higher Vocational Education Modernization in China Under Innovation and Enterprise Education Background. Higher Education of Social Science, 10(4), 13–18. https://core.ac.uk/download/pdf/236306363.pdf

[49] Xie, Q. (2021). Applying vocational education and training pedagogy in business English courses for China's English major undergraduates. Education+ Training, 63(2), 292–312. https://www.emerald.com/insight/content/doi/10.1108/ET-07-2020-0183/full/html

[50] Xiong, J. (2011). Understanding higher vocational education in China: Vocationalism vs Confucianism. Frontiers of Education in China, 6(4), 495–520. https://brill.com/view/journals/fedc/6/4/article-p495_2.xml

[51] Yi, H., Li, G., Li, L., Loyalka, P., Zhang, L., Xu, J., Kardanova, E., Shi, H., & Chu, J. (2018). Assessing the Quality of Upper-Secondary Vocational Education and Training: Evidence from China. Comparative Education Review, 62(2), 199–230. https://doi.org/10.1086/696920

[52] Yi, H., Zhang, L., Yao, Y., Wang, A., Ma, Y., Shi, Y., Chu, J., Loyalka, P., & Rozelle, S. (2015). Exploring the dropout rates and causes of dropout in upper-secondary technical and vocational education and training (TVET) schools in China. International Journal of Educational Development, 42, 115–123. https://www.sciencedirect.com/science/article/pii/S0738059315000504

[53] Zhou, Y. (2022). Chinese Higher Vocational Education Development and Reform. In Research Anthology on Vocational Education and Preparing Future Workers (pp. 101–114). IGI Global. https://www.igi-global.com/chapter/chinese-higher-vocational-education-development-and-reform/304478