

The Mediating Role of Communication Styles in the Relationship between Teachers' Instructional Strategies and Students' Learning Satisfaction: Evidence from Vocational Education in Jiangxi Province, China

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Abstract

This study investigates how teachers' instructional strategies influence students' learning satisfaction in vocational education, with communication styles serving as a mediating factor. Drawing on Social Cognitive Theory and Expectancy-Value Theory, the research adopts a quantitative, cross-sectional design using surveys and questionnaires administered to 376 students at Jiangxi College of Applied Technology. The study examines the effects of direct, indirect, independent, experiential, and interactive instructional strategies, alongside five communication styles—aggressive, passive, passive-aggressive, manipulative, and assertive—on students' perceptions of their educational experiences. Statistical analyses, including regression, correlation, and mediation tests, reveal that both instructional strategies ($\beta = .707$) and individual characteristics ($\beta = .668$) significantly predict learning satisfaction, but communication styles ($r = .838$) emerge as the strongest determinant. Findings indicate that assertive communication enhances satisfaction, while aggressive, manipulative, and passive-aggressive styles undermine it. Moreover, communication styles significantly mediate the relationship between instructional strategies and satisfaction, underscoring the centrality of effective teacher-student interaction. These insights highlight the need for teacher professional development programs focused not only on pedagogical techniques but also on communication effectiveness. The study contributes to the understanding of learner-centered pedagogy in vocational contexts and offers practical recommendations for improving student engagement, satisfaction, and readiness for the workforce.

Keywords: Instructional Strategies, Communication Styles, Learning Satisfaction, Vocational Education, Jiangxi Province

Introduction

Vocational education serves as a critical pathway for students to gain practical skills and specialized knowledge that prepare them for entry into the workforce. In Jiangxi Province, vocational institutions play a pivotal role in shaping the future workforce by offering students training in various technical and trade skills. However, several challenges impede the effectiveness of vocational education in this region, leading to concerns about the quality of education and students' preparedness for professional careers.

One of the major challenges faced by vocational students in Jiangxi Province is the lack of access to modern technology and resources, which are essential for acquiring hands-on experience in their chosen fields. This technological gap not only hinders the practical training that students receive but also reduces their competitiveness in the job market. As a result, students often feel ill-prepared for employment, leading to dissatisfaction with their learning experiences (Chen et al., 2022; Li & Sun, 2023).

Another significant issue is the disconnect between the skills taught in vocational schools and the actual demands of the job market. Employers have consistently reported a mismatch between the competencies of graduates and the requirements of their industries, highlighting the need for a more aligned and industry-relevant curriculum (Wang et al., 2022; Zhang & Liu, 2021). This misalignment raises concerns about the ability of vocational education programs to effectively prepare students for their future careers.

Furthermore, the quality of instruction in vocational schools is another area of concern. Many vocational educators may lack practical industry experience, which can limit the relevance and application of the knowledge they impart to students. This gap necessitates continuous professional development and stronger partnerships with industry professionals to ensure that teachers can provide up-to-date and practical training (Jiang & Zhao, 2020; Xie & Huang, 2023).

In this context, students' learning satisfaction becomes a crucial factor that influences their overall educational experience, engagement, and willingness to pursue vocational education. Learning satisfaction encompasses various aspects, such as students' perceptions of their teachers' instructional strategies, the relevance and quality of the course content, the learning environment, and the outcomes they achieve. Research has shown that when students experience high levels of satisfaction in their learning process, they are more likely to be motivated, engaged, and committed to their studies, which in turn enhances their academic performance and future career prospects (Keržič et al., 2021).

Given the importance of learning satisfaction, this study aims to explore how teachers' instructional strategies influence students' perceptions and experiences within vocational education. Instructional strategies such as direct, indirect, independent, experiential, and interactive approaches can significantly impact the way students engage with the learning material, comprehend complex concepts, and apply their knowledge in practical settings. However, despite the availability of these diverse teaching methods, there is a lack of

comprehensive understanding regarding which strategies are most effective in enhancing learning satisfaction among vocational students in Jiangxi Province.

In addition, communication styles play a crucial role in the teaching-learning process. Communication styles, ranging from aggressive to passive, passive-aggressive, manipulative, and assertive, can either facilitate or hinder the relationship between teachers and students. Effective communication fosters a positive learning environment, promotes student engagement, and enhances the clarity of instructional content, thereby contributing to higher learning satisfaction. However, there is limited research on how these communication styles mediate the relationship between teachers' instructional strategies and students' learning satisfaction in vocational education settings (Everson, 2022).

This study seeks to address this gap by investigating the mediating role of communication styles in the relationship between teachers' instructional strategies and students' learning satisfaction. By focusing on communication styles as a mediator, the research aims to uncover how different instructional strategies are perceived by students and how these perceptions, in turn, influence their satisfaction with the learning process.

The choice to focus on learning satisfaction as the key outcome variable, rather than other learning outcomes such as academic achievement or skill acquisition, is intentional. Learning satisfaction provides a comprehensive measure of students' overall experience and engagement with their education. It reflects how students feel about the quality of teaching, course content, learning environment, and interpersonal relationships, which are all essential factors in vocational education. Satisfied students are more likely to remain committed to their studies, develop a positive attitude towards learning, and pursue their vocational training with enthusiasm, thereby enhancing their readiness for the job market.

The benefit of this research lies in its potential to provide actionable insights for vocational schools, educators, and policymakers. By understanding how instructional strategies and communication styles influence learning satisfaction, vocational institutions can implement targeted interventions to improve teaching practices, foster better communication between teachers and students, and create a more engaging learning environment. This, in turn, can enhance students' motivation, self-esteem, and confidence, leading to improved educational outcomes and better preparation for their future careers.

Additionally, this study aims to bridge the gap between theoretical knowledge and practical application by highlighting the importance of aligning instructional strategies with students' needs and expectations. The findings of this research can inform curriculum development, teacher training programs, and policy initiatives that aim to improve the quality of vocational education in Jiangxi Province. By addressing the factors that contribute to learning satisfaction, vocational institutions can better prepare students to meet industry demands, thus enhancing their employability and ensuring a smoother transition into the workforce.

This study addresses the critical issue of how teachers' instructional strategies impact learning satisfaction among vocational students in Jiangxi Province, with communication styles serving as a mediating factor. By investigating these complex relationships, the research aims to contribute to the development of more effective teaching practices, improved

communication methods, and ultimately, a more responsive and student-centered vocational education system. This will not only enhance the learning experiences of vocational students but also ensure that they are well-equipped with the skills, knowledge, and confidence needed to succeed in their chosen careers.

Literature Review

Learning pleasure is an important part of a student's schooling since it encompasses multiple facets that influence the student's sense of well-being and interest in their coursework as a whole. How instructors present material has a significant impact on students' level of satisfaction with the learning process. Student happiness in school is directly tied to the quality of instruction they get. These strategies might range from more hands-on and experiential learning to more traditional forms of direct and structured education. How well these methods work and how well they fit students' individual learning styles can have a major impact on students' enthusiasm and satisfaction. Langedård et al. (2021) said the nature of the course material is also a major factor in the student's overall experience. It alludes to how current, thorough, and understandable the course material is. Content's direct relevance to students' intended fields is especially important in vocational colleges, where they are training for specific professional paths. Learner engagement and retention can be improved by providing content that is both personally meaningful and comprehensive.

Another factor that plays a role in determining how satisfied a learner ultimately is is the classroom setting. Facilities, resources, and students' general sense of well-being are all included in this facet of a school's pedagogical environment. It has been shown by Alam (2022) that students report better levels of satisfaction with their education when they have access to state-of-the-art, well-equipped facilities and a welcoming learning environment. Students' happiness outside the academic field is directly proportional to their success in the classroom. Students' happiness is elevated in tandem with their sense of accomplishment and self-efficacy when their learning efforts are successful. The practical experience students gain at vocational schools has a significant impact on how well they are prepared for the workforce after graduation.

The importance of social connections to students' happiness in the classroom cannot be overstated. The level of connection between students, faculty, and peers has a profound impact on students' learning environments. When kids feel safe, respected, and valued in their classroom, they are more likely to learn and enjoy their time there.

Recent educational research by Jones & Smith (2023) has highlighted the importance of personalised learning approaches in an effort to boost students' learning satisfaction. A sense of agency in one's own education can be nurtured through personalised learning, which adapts lessons to each student's unique strengths, interests, and weaknesses. Students typically express greater happiness when given the chance to choose their own learning paths, establish their own objectives, and participate in self-directed learning. To accommodate a wide range of student preferences and learning styles, personalised learning approaches are compatible with a number of methodologies for teaching, such as inquiry-based and experiential approaches.

Motivate students to think critically about the reliability and objectivity of the sources they use. Get your pupils talking about the issues and offering their ideas on how to solve them in class debates or discussions. As a result, they are more likely to question established beliefs and try to understand the world from other perspectives. Encourage students to consider the questions that remain unsolved, the information they have gained, and any changes to their opinions after the discussion or debate. Motivate them to put their thoughts together in a logical way so that they can grasp the political issue. Active learning, critical thinking, and a better understanding of the complexity of politics are all fostered by inquiry-based teaching in political science courses as shown by Pike (2019).

The term "teacher instructional strategies" refers to a broad category of methods used by teachers to promote student learning (Burt, 2022). Strategies like this play a significant influence in influencing students' educational experiences and preparedness for the workforce at vocational institutions in Ganzhou, Jiangxi. Explicit teaching and structured guiding are examples of direct instructional practises. Teachers who use this method lay out their objectives explicitly, disseminate content systematically, and generally adhere to a linear pedagogical structure. This strategy is commonly used while teaching kids fundamentals, and it helps guarantee that they learn what they need to know. Theoretical parts of vocational education can benefit greatly from its use.

Dekker (2020) mentioned indirect methods of teaching encourage independent learning and student initiative. Teachers that use these strategies frequently engage their students in group discussions, stress the importance of critical thinking, and build their lessons on students' questions. These methods are especially useful at vocational schools, which place a premium on the development of students' analytical and problem-solving skills, as well as their capacity for self-directed study. Strategies for independent learning encourage students to investigate and solve problems on their own. Through goal-setting, research, and time management, students are given the tools they need to become active participants in their own education. These methods can be especially useful at vocational schools, where students are preparing for jobs that need independence and flexibility. Experiential learning tactics put students in situations where they can put what they've learned in the classroom into practise. This method is especially useful in vocational training because it simulates real-world workplace conditions. Students are able to learn from real-world scenarios and apply what they've learned in class.

Individual characteristics of students play a significant role in shaping their academic engagement, satisfaction, and overall performance in educational settings. These characteristics encompass a wide range of factors, including demographic variables, cognitive preferences, personality traits, and psychological attributes, all of which interact with the learning environment and teaching strategies. Recent studies have emphasized that individual differences such as age, gender, and cultural background can influence how students perceive and respond to instructional practices, particularly in vocational and applied learning contexts. For instance, Li et al. (2022) found that demographic diversity among students in Chinese vocational colleges significantly shaped their learning expectations and satisfaction levels, suggesting that effective instructional design must account for these variations to maximize positive learning outcomes.

Cognitive preferences, including learning styles and approaches to information processing, are another vital aspect of individual student characteristics that affect learning satisfaction. Students with distinct cognitive styles may benefit differently from direct, indirect, experiential, or interactive teaching strategies. According to Zhang and Chen (2021), students' preferred learning styles moderated the relationship between teaching methods and perceived learning effectiveness in higher education, highlighting the need for adaptable instructional approaches that align with individual cognitive profiles. This suggests that failure to consider cognitive differences may result in instructional misalignment and reduced student satisfaction, especially in practice-oriented programs such as those offered by vocational colleges.

Personality traits and psychological factors such as self-efficacy, motivation, and resilience also contribute significantly to how students engage with their educational experience. Recent evidence indicates that students with higher self-efficacy and intrinsic motivation tend to report greater satisfaction with their learning, regardless of the instructional style employed by teachers. For example, Wang et al. (2023) demonstrated that individual self-efficacy was a strong predictor of learning satisfaction among vocational students in China, mediating the influence of external teaching factors and communication styles. This finding reinforces the importance of addressing students' psychological profiles when designing instructional strategies and communication methods in vocational education.

Different people have different ways of expressing themselves and interacting with others depending on the situation. These approaches have a significant role in shaping the dynamics between instructors and students and the overall climate at vocational colleges in Ganzhou, Jiangxi. Communicating aggressively is characterised by a dominant, confrontational, or hostile assertiveness as discussed by Winer et al. (2023). A hostile classroom environment is not conducive to learning, and it can have a negative impact on kids. To keep a classroom healthy and courteous, it's important to identify and address any hostile communication behaviours.

Instead of being direct and assertive, passive speakers tend to be more reserved. Passive students or educators may not speak out for themselves, fail to advocate for what they want, or cave in to peer pressure. This approach has the potential to lower the quality of communication in the classroom as a whole due to misconceptions, unmet needs, and missed opportunities for productive conversation. An oblique kind of animosity or resistance, passive-aggressive communication mixes passive and aggressive methods. Students and faculty at vocational schools may engage in passive-aggressive behaviour by venting their concerns in less obvious ways, which can aggravate already tense interpersonal interactions and disrupt the classroom (Ayers, 2023). To attain one's own ends, manipulative communicators employ a variety of strategies, including lying. Such ways of talking to one another might be harmful in the classroom since they can break down trust and cause discord. The integrity of the classroom depends on being able to recognise and correct manipulative behaviours. A well-rounded and productive communication style, assertiveness is worth emulating. People who are confident in themselves are able to communicate their wants, needs, and limits to others in a way that is both honest and considerate. Teachers and students at vocational schools can benefit from one another more from an assertive communication style that promotes cooperation and fosters a healthy learning environment.

Theoretical Framework

The theoretical framework for this study integrates Social Cognitive Theory and Expectancy-Value Theory to examine the effects of teacher instructional strategies on students' learning satisfaction, with communication styles serving as a mediating variable among students at Jiangxi College of Applied Technology. Social Cognitive Theory, developed by Albert Bandura, emphasizes the interplay between individuals, their behaviors, and their environment, highlighting how learning occurs through observation and imitation. This theory helps elucidate how students' perceptions of teaching methods are shaped by their observations of teachers' behaviors and communication styles. Expectancy-Value Theory, proposed by Eccles and Wigfield, posits that students' motivation and engagement are influenced by their expectations of success and the value they place on their educational tasks. This framework provides a structured approach to analyzing how different instructional strategies impact students' learning satisfaction and career aspirations. Together, these theories offer a comprehensive lens through which to explore the dynamic relationships between instructional practices, communication styles, and student outcomes in vocational education settings.

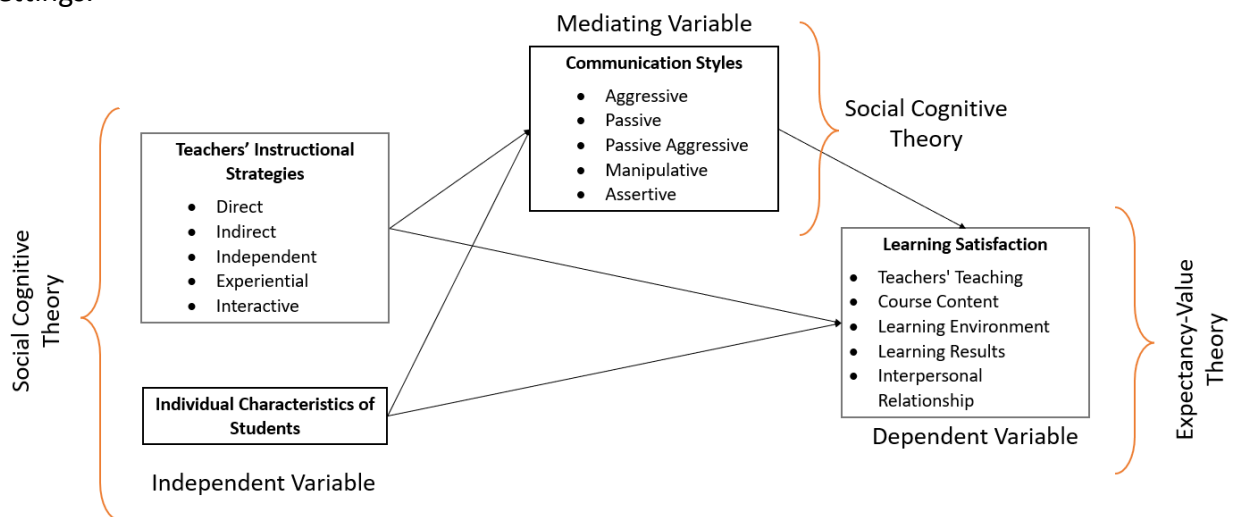


Figure 1: Theoretical Framework

Conceptual Framework

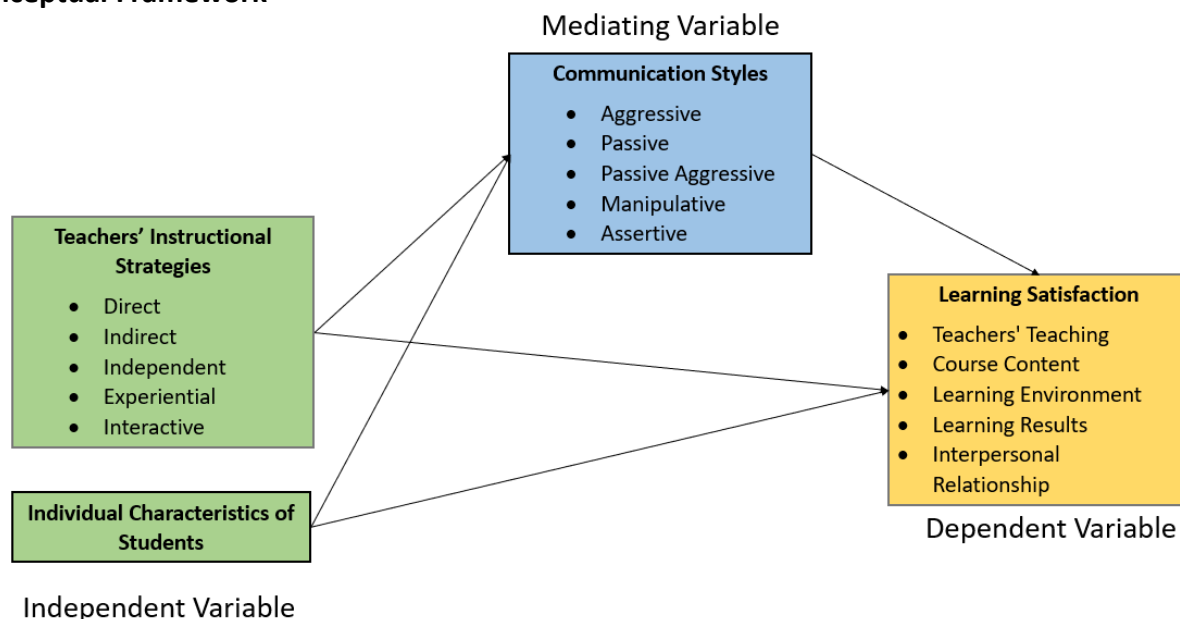


Figure 2: Conceptual Framework

Methodology

The methodology of this study applies a quantitative, cross-sectional design to explore the relationships between instructional strategies, communication styles, student satisfaction, and career decision-making among vocational college students in Ganzhou, Jiangxi. Surveys and questionnaires were chosen as the primary tools, as they provide measurable, objective data suitable for statistical analysis. This approach ensures generalizable findings, allowing the researcher to examine patterns and correlations within a specific timeframe, while maintaining rigor in testing hypotheses related to teaching effectiveness and communication methods.

The population and sampling strategy targets students from Jiangxi College of Applied Technology, which has a population of 17,300. Using Krejcie and Morgan's (1970) sampling table, 376 students were selected to represent the larger population through stratified random sampling, ensuring proportional representation across diverse academic disciplines. The study instruments focus on three constructs: instructional strategies (direct, indirect, independent, experiential, interactive), communication styles (aggressive, passive, passive-aggressive, manipulative, assertive), and learning satisfaction (teaching, course content, learning environment, results, and relationships). A total of 45 self-developed items are rated on a five-point Likert scale, with pilot testing confirming reliability (Cronbach's alpha > .84) and validity through factor analysis.

Data collection will be conducted online via WeChat and email, ensuring accessibility and anonymity for participants. Ethical safeguards include informed consent, privacy protection, and voluntary participation. Data analysis will use SPSS, beginning with descriptive statistics, followed by correlation and regression to test direct and mediating relationships. Communication styles will be examined as a mediating variable using correlation and structural equation modeling where relevant. Overall, this methodology ensures systematic,

valid, and reliable insights into how instructional strategies and communication approaches influence vocational students' learning satisfaction and career choices.

Results and Discussion

Summary Table of Findings

RQ	Focus	Key Results	Interpretation
RQ1	Effect of teachers' instructional strategies on learning satisfaction	$B = .750$, $Beta = .707$, $t = 19.335$, $p = .000$	Strong positive effect; better teaching strategies significantly raise student satisfaction.
RQ2	Influence of individual characteristics on learning satisfaction	$B = .645$, $Beta = .668$, $t = 15.732$, $p = .000$	Strong positive effect; traits like motivation, self-efficacy, and learning styles meaningfully shape satisfaction.
RQ3	Predominant communication styles in vocational education	Aggressive ($M = 3.94$), Passive ($M = 2.99$), Passive-Aggressive ($M = 3.89$), Manipulative ($M = 3.78$), Assertive ($M = 3.71$)	Aggressive, manipulative, and passive-aggressive styles hinder learning; assertive communication enhances satisfaction.
RQ4	Mediation: Individual characteristics → Communication styles → Learning satisfaction	$r(IC-CS) = .722^{**}$, $r(IC-LS) = .668^{**}$, $r(CS-LS) = .838^{**}$	Communication styles strongly mediate; effective teacher communication strengthens satisfaction outcomes.
RQ5	Mediation: Instructional strategies → Communication styles → Learning satisfaction	$r(TIS-CS) = .759^{**}$, $r(TIS-LS) = .707^{**}$, $r(CS-LS) = .838^{**}$	Communication styles enhance the effect of instructional strategies, showing intertwined influence on satisfaction.
RQ6	Most effective predictors when both are included	TIS: $B = .178$, $Beta = .168$, $p = .000$; CS: $B = .757$, $Beta = .710$, $p = .000$	Communication styles outweigh instructional strategies as the stronger determinant of satisfaction.
RQ7	Correlation of satisfaction with educational aspects	Teaching ($M = 3.18-3.52$), Course content ($M = 3.27-3.81$), Learning environment ($M = 3.50-3.77$), Results ($M = 3.64-3.77$), Relationships ($M = 3.42-3.69$)	Students most satisfied with course content and environment; less satisfied with teaching methods and interpersonal relationships.

The findings show that both instructional strategies and individual student characteristics play vital roles in shaping learning satisfaction. Regression results highlight strong and statistically significant effects, with teaching strategies ($Beta = .707$) and student traits ($Beta = .668$) being major predictors. Students respond positively when instructors employ diverse, effective strategies and when their own attributes, such as motivation and learning preferences, align with the learning environment. This demonstrates the dual responsibility of educators and learners in fostering satisfaction.

However, communication styles emerged as the strongest factor. Descriptive and correlational analyses revealed that aggressive, passive, and manipulative communication styles hinder student engagement, while assertive communication significantly enhances

learning satisfaction ($r = .838$). Moreover, mediation results confirm that communication serves as the bridge between both instructional strategies and individual characteristics with satisfaction, magnifying or diminishing their effects. This underscores that good pedagogy without effective communication may fail to produce the desired outcomes.

Finally, the analysis of educational aspects showed that course content and classroom environment were the highest-rated dimensions, suggesting that students value relevance, clarity, and a supportive setting. Teaching strategies and interpersonal relationships were weaker areas, highlighting room for improvement in teacher adaptability and relational dynamics. Collectively, these results stress the need for institutions to prioritize teacher professional development in both instructional techniques and communication skills, while also recognizing and supporting student individuality, to create a more engaging and fulfilling vocational learning experience.

Conclusion

The findings of this study highlight the multifaceted nature of student learning satisfaction and reinforce the importance of aligning instructional approaches with effective communication strategies. The evidence suggests that both individual characteristics and teaching methods play critical roles, but their influence is significantly shaped by how communication unfolds in the classroom. Assertive communication emerges as a key contributor to a positive educational experience, mediating relationships and enhancing satisfaction. These insights have significant implications for teaching practice, curriculum development, and policy formation in vocational education. The study contributes to the growing body of knowledge on learner-centered pedagogy and paves the way for future research to explore more inclusive, culturally responsive, and dynamic teaching frameworks.

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