Fostering Teacher Innovation Competency in Private Higher Education: The Role of Leadership and Institutional Support in Guangxi, China

Dong Yuelin[1], and Nuntiya Noichun[2*]

[*]*Corresponding author*

Suan Sunandha Rajabhat University, Thailand

E-mail: s64584951055@ssru.ac.th, nuntiya.no@ssru.ac.th

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Abstract

This study investigates critical problems in private higher education institutions in Guangxi, China, the lack of comprehensive understanding of factors fostering teacher innovation competency, insufficient research on the specific roles of leadership and institutional support in promoting teaching innovation, and limited evidence on how these factors operate in developing regions' private higher education sector. Using a quantitative approach, data were collected from 400 teachers and administrators through a self-report questionnaire. Multiple regression analysis revealed that leadership and policy and resource support significantly and positively predicted teacher innovation competency, even after controlling for other variables. The findings highlight the importance of a holistic approach to promoting teacher innovation, emphasizing the need for strong leadership, effective policies, and adequate resources. The study contributes to understanding factors influencing teacher innovation in the context of private higher education. It provides practical implications for educational leaders and policymakers aiming to enhance innovation in teaching practices. In conclusion, this research demonstrates that policy and resource support have a slightly stronger predictive power than leadership support in fostering teacher innovation competency. The study reveals that moderate leadership and institutional support levels can maintain above-average teacher innovation competency. This suggests that strategic allocation of resources and supportive leadership practices are crucial for enhancing teaching innovation in private higher education institutions. These findings provide valuable insights for developing targeted interventions to promote teacher innovation in similar educational contexts.

Keywords: teacher innovation competency; leadership support; policy and resource support; private higher education

Introduction

In the rapidly evolving landscape of higher education, teacher innovation has emerged as a critical factor for institutional success and educational quality. (Zhu & Engels, 2014)Teacher Innovation Competency (TIC) is the ability of educators to generate, implement, and promote novel ideas and practices in teaching and learning processes. (McKeown, 2008), has become increasingly important, particularly in private higher education institutions. These institutions often face unique challenges in maintaining competitiveness and educational standards. (Xu & Liu, 2023).

Despite the growing recognition of TIC's importance, there is a lack of comprehensive understanding of the factors that foster this competency, especially in the context of private higher education institutions in developing regions. While previous studies have explored various influences on teacher innovation, such as individual characteristics and institutional culture (Wang & Hallinger, 2019), the specific roles of leadership and policy support remain underexplored, particularly in China's private higher education sector.

This study addresses this gap by investigating how Leadership Support (LS) and Policy and Resource Support (PRS) contribute to enhancing TIC among teachers in private higher education institutions in the Guangxi region of China. Leadership Support refers to the guidance, encouragement, and facilitation institutional leaders provide to promote innovative teaching practices. (Paletta & Alimehmeti, 2023). Policy and Resource Support encompasses the institutional frameworks, guidelines, and material resources allocated to foster innovation in teaching. (Sidhu & Gage, 2021; Smith & O'Day, 1991).

The research problems emerge from several critical gaps in current understanding. Private higher education institutions in Guangxi face significant challenges in fostering teacher innovation competency, mainly due to limited comprehension of supporting factors in this context. While existing research has explored various aspects of educational innovation, the mechanisms through which leadership support influences teacher innovation competency in Chinese private higher education remain inadequately understood. Furthermore, there is insufficient empirical evidence regarding how policy and resource support function within these institutions, especially in

developing regions like Guangxi. The complex interplay between leadership and institutional support in fostering teacher innovation competency requires deeper investigation to develop effective strategies for educational advancement.

This paper addresses these crucial gaps in the literature and practice of educational innovation. By providing empirical evidence on the relationships between leadership support, policy and resource support, and teacher innovation competency in private higher education, this study contributes to both theoretical understanding and practical application. The focus on Guangxi's private higher education sector offers valuable insights into the dynamics of teacher innovation in developing regions of China. This area has received limited attention in previous research. Moreover, this study aims to provide evidence-based recommendations for institutional leaders and policymakers, enabling them to design and implement more effective strategies for enhancing teacher innovation competency and ultimately improving the quality of education in private higher education institutions.

Objectives

The primary research question guiding this study is: How do Leadership Support and Policy and Resource Support influence Teacher Innovation Competency in private higher education institutions in Guangxi, China? To address this question, the study has the following objectives:

1. To assess the current status of Teacher Innovation Competency in private higher education institutions in Guangxi.

2. To evaluate the role of Leadership Support in enhancing Teacher Innovation Competency.

3. To analyze the effect of Policy and Resource Support on Teacher Innovation Competency.

4. To identify the interplay between Leadership Support, Policy and Resource Support, and Teacher Innovation Competency.

Literature Review

Teacher Innovation Competency (TIC)

Teacher Innovation Competency has gained significant attention in educational research, particularly in higher education. This multifaceted construct encompasses a range of abilities,

attitudes, and skills necessary for effective teaching and research. (Zhu et al., 2013). The concept of TIC is rooted in the broader theory of innovation diffusion. (Rogers, 2003), which posits that various personal and environmental factors influence innovation adoption.

Recent studies have conceptualized TIC as a combination of creativity, risk–taking, and openness to change in educational practices (Wang & Hallinger, 2019). For instance, Christian–Brandt et al. (2020) found that TIC is closely related to teachers' communication skills and adaptability. However, there is still debate about the exact components of TIC and how they interact in different educational contexts.

Research has consistently shown that various factors influence this competency, highlighting these determinants' complexity and interrelated nature. These factors range from individual characteristics to institutional and environmental influences. (Smith et al., 2021)However, there is a lack of consensus on their relative importance, particularly in the context of private higher education institutions in developing regions.

Leadership Support (LS)

Leadership support has emerged as a critical driver of innovation competency in educational settings. (Wang & Hallinger, 2019). The transformational leadership theory (Leithwood & Sun, 2012) provides a framework for understanding how leaders can foster innovation by inspiring and motivating their followers.

Prior research has highlighted the crucial role of leadership support in creating an environment conducive to innovation. Studies have shown that supportive leadership, including administrative backing, clear communication of expectations, provision of resources, and encouragement of innovation, significantly enhances teachers' willingness to embrace innovative practices. (González, 2020; Li & Liu, 2023; Lin, 2022; Paletta & Alimehmeti, 2023).

For example, Zhang and Bartol (2010) found that empowering leadership positively affects teacher creativity through psychological empowerment and intrinsic motivation. However, the specific mechanisms through which leadership support influences TIC in private higher education institutions remain underexplored, particularly in the Chinese context.

Policy and Resource Support (PRS)

Effective policy and resource support are critical in fostering innovation within educational institutions. This aspect is grounded in the resource–based view of organizations, which suggests

that the availability and allocation of resources significantly influence organizational performance and innovation. (Barney, 1991).

Well-designed policies that provide professional development opportunities, research grants, and incentives for innovative teaching can significantly boost teachers' innovation competency. (Hargreaves & Fullan, 2015; Leithwood & Sun, 2012). For instance, Park (2012) found that policy support positively influences teacher innovation in South Korean schools.

However, the effectiveness of policy and resource support may vary depending on the institutional context. Limited research exists on how these supports function in private higher education institutions, particularly in developing regions like Guangxi, China.

Research Gap and Hypotheses

While existing literature provides valuable insights into the individual roles of leadership support and policy and resource support in fostering teacher innovation competency, there is a lack of comprehensive studies examining these factors in the context of private higher education institutions in developing regions. Moreover, previous research has not adequately addressed the unique challenges and opportunities presented by the Chinese educational system, particularly in Guangxi.

The current study addresses these gaps by investigating the relationships between Leadership Support, Policy and Resource Support, and Teacher Innovation Competency in private higher education institutions in Guangxi. Based on the literature review, we propose the following hypotheses:

H1: Leadership Support is positively associated with Teacher Innovation Competency in private higher education institutions in Guangxi.

H2: Policy and Resource Support are positively associated with Teacher Innovation Competency in private higher education institutions in Guangxi.

Conceptual Framework

By examining these hypotheses, this study aims to provide evidence-based insights into the factors that influence innovation within the context of higher education in Guangxi, contributing to theoretical understanding and practical strategies for enhancing teacher innovation competency. The conceptual framework is shown in Figure 1. The findings are expected to offer valuable guidance for policymakers, educational leaders, and practitioners in developing effective strategies

to promote teacher innovation competency, ultimately improving the quality of education within private higher education institutions in Guangxi and potentially in similar contexts elsewhere.

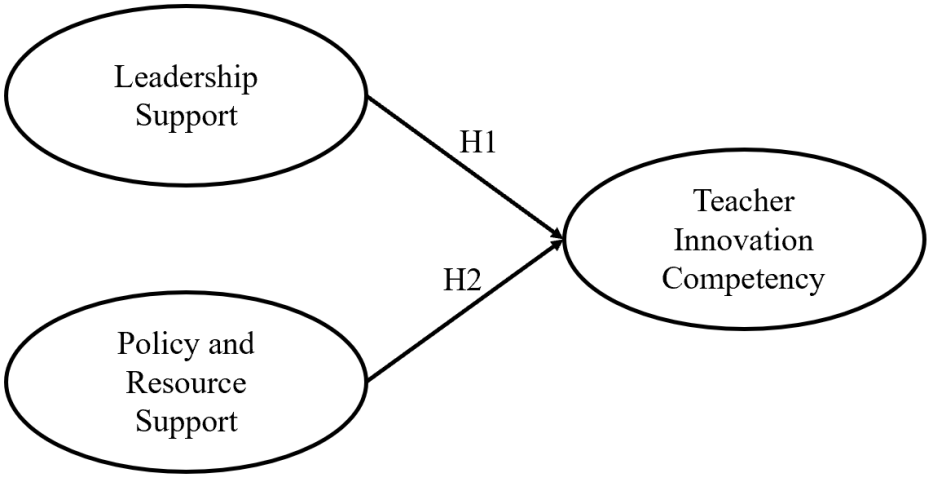

Fig.1 Conceptual framework

Research Methodology

Research Design

This study employed a quantitative, cross-sectional research design to examine the relationships between Leadership Support (LS), Policy and Resource Support (PRS), and Teacher Innovation Competency (TIC) in private higher education institutions in Guangxi, China. A structured questionnaire was used to collect data from teachers and administrators, allowing for statistical analysis of the hypothesized relationships. This approach is consistent with similar studies in educational research. (Wang & Hallinger, 2019).

Sample and Sampling Procedure

The study population consisted of teachers and administrators from private higher education institutions in Guangxi, China. A stratified random sampling technique was used to select participants from 11 institutions, following the recommendations of Creswell and Creswell (2017) for ensuring representative samples in educational research. The sample size was determined using the Krejcie & Morgan (1970) The sample determination table resulted in 400 participants (360 teachers and 40 administrators). This sampling strategy ensured representation across different roles within the institutions while maintaining a focus on teaching staff.

The final sample consisted of 400 individuals (51.75% male, 48.25% female) with a mean age of 35 (SD = 8.12). Most participants (90%) were teachers, 8.5% were middle-level administrators, and 1.5% were high-level administrators. Regarding work experience, 22.25% had worked in higher education for 5 years or less, while 20% had more than 20 years of experience. This diverse sample allowed for a comprehensive examination of the research questions across different demographic groups.

Measurement Instruments

The study utilized four main instruments for data collection. A demographic questionnaire collected information on participants' school, age, gender, education, technical post title, position, and working experience in higher education. The Teacher Innovation Competency Scale, a 16-item self-report questionnaire developed specifically for this study, assessed four dimensions of TIC: Learning Competency, Social Competency, Educational Competency, and Technological Competency. This scale was developed based on previous research on teacher innovation competencies (Zhu et al., 2013). Participants rated their agreement with each item on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

The Leadership Support Scale, consisting of 10 items, measured the perceived support teachers received from institutional leaders. It covered aspects such as administrative backing, communication of expectations, provision of resources, and encouragement of innovation, drawing on the work of Kezar and Holcombe (2019). The Policy and Resource Support Scale, comprising 10 items, assessed the perceived level of support teachers received from institutional policies and resources. The research informed this scale of Li and Liu (2023) Moreover, it included items on clear guidelines, professional development opportunities, funding, and technological resources.

Data Collection Procedure

Data was collected through online and paper-based questionnaires, a method that effectively maximizes response rates in educational research. (Dillman et al., 2014). Participants could complete the questionnaire online or return a physical copy to the researcher. This dual approach accommodates participants' preferences and ensures a high response rate. The study was conducted following ethical guidelines for educational research. (BERA, 2018). Informed consent was obtained from all participants, and responses were kept confidential. The Institutional Review Board of Guangxi Normal University approved the research protocol.

Data Analysis

Data analysis was conducted using SPSS version 26.0. The analysis included descriptive statistics to summarize the sample's characteristics and the responses' distribution. Reliability analysis using Cronbach's alpha was performed to assess the internal consistency of the scales, following the recommendations of Taber (2018). Confirmatory factor analysis was conducted to validate the factor structure of the scales, as suggested by Brown (2015). Pearson correlation analysis examined the relationships between the main variables (LS, PRS, and TIC). Finally, multiple regression analysis was employed to test the hypotheses and examine the predictive relationships between LS, PRS, and TIC while controlling for demographic variables, an approach consistent with recent studies in educational innovation. (Park, 2012).

Research Results

This section presents the study's findings, structured to address the specific research questions and objectives outlined earlier. The results are illustrated through tables and figures and detailed textual explanations to elucidate key insights.

Descriptive Statistics

Descriptive statistics were calculated for all variables under investigation. Table 1 presents the means, standard deviations, minimums, and maximums for Leadership Support (LS), Policy and Resource Support (PRS), and Teacher Innovation Competency (TIC).

Table 1 Descriptive statistic

Variable	N	Mean	Std. Deviation	Minimum	Maximum
LS	400	3.036	0.617	1.3	4.5
PRS	400	3.014	0.637	1	4.7
TIC	400	3.225	0.704	1.313	4.688

Note: LS=Leadership Support, PRS=Policy and Resource Support, TIC=Teacher Innovation Competency

The results indicate that all three variables have mean scores slightly above the midpoint of the 5-point Likert scale used in the study. Teacher Innovation Competency demonstrates the highest mean (M = 3.225, SD = 0.704), followed closely by Leadership Support (M = 3.036, SD = 0.617) and Policy and Resource Support (M = 3.014, SD = 0.637). These findings suggest that, on average, participants perceived moderate levels of leadership support, policy and resource

support, and innovation competency. The observed patterns align with previous research on teacher innovation in higher education settings. (Wang & Hallinger, 2019; Zhu et al., 2013).

Notably, all variables display a wide range of responses, as evidenced by their minimum and maximum values. Leadership Support ranges from 1.3 to 4.5, indicating substantial variation in perceived leadership support among participants. This variability is consistent with the findings of Gbobaniyi et al. (2023), who noted diverse perceptions of leadership support in higher education institutions. Similarly, Policy and Resource Support (range: 1.0 to 4.7) and Teacher Innovation Competency (range: 1.313 to 4.688) also demonstrate considerable variability, suggesting diverse experiences and perceptions among the sampled educators.

The standard deviations for all variables are relatively similar, ranging from 0.617 to 0.704. This indicates a consistent spread of responses across the three constructs, with Teacher Innovation Competency showing slightly more variation (SD = 0.704) than the other two variables. This level of variation is not uncommon in educational research and may reflect the complex nature of innovation competency in teaching (Smith et al., 2021).

These descriptive statistics provide a foundation for further analysis, offering initial insights into the levels and distribution of key variables within the sample of educators from private higher education institutions in Guangxi, China. The moderate mean scores and substantial variability observed across all variables suggest a complex landscape of leadership support, policy and resource support, and teacher innovation competency, warranting deeper investigation into their interrelationships and potential influencing factors.

Reliability Analysis

To assess the internal consistency of the measurement instruments, Cronbach's alpha coefficients were calculated for each scale measuring Leadership Support, Policy and Resource Support, and Teacher Innovation Competency. Table 2 presents the Cronbach's alpha coefficients for each scale.

Table 2 Cronbach's Alpha

Scale	Cronbach's Alpha
LS	0.771
PRS	0.803
TIC	0.871

The results indicate that all scales demonstrated acceptable to good reliability. Cronbach's alpha values ranged from 0.771 to 0.871, surpassing the commonly accepted threshold of 0.70 (Nunnally & Bernstein, 1994). Specifically, the Teacher Innovation Competency scale exhibited the highest reliability (α = 0.871), followed by the Policy and Resource Support scale (α = 0.803) and the Leadership Support scale (α = 0.771). These values suggest that the items within each scale measured consistent constructs that aligned with the recommendations for scale reliability in educational and psychological research. (Taber, 2018).

The high reliability of the Teacher Innovation Competency scale (α = 0.871) is particularly noteworthy. It indicates strong internal consistency among the items measuring this complex construct. This finding supports the scale's robustness in capturing various aspects of teacher innovation competency, as conceptualized in previous literature. (Zhu et al., 2013).

While the reliability coefficients for the Leadership Support and Policy and Resource Support scales are lower than those of the Teacher Innovation Competency scale, they still fall within the acceptable range for social science research. (Hair et al., 2017). These results provide confidence in the consistency of the measurements and support the validity of subsequent analyses based on these scales.

Validity Analysis

To further assess the construct validity of the measurement instruments, exploratory factor analysis was conducted. Table 3 presents the factor loadings and communalities for each scale.

Table 3 Factor Loading

Scale	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Communalities
LS	0.099	0.094	0.872	0.143	0.084	0.807
PRS	0.093	0.183	0.168	0.176	0.841	0.809
TIC	0.121	0.188	0.813	0.161	/	0.737

The factor analysis results corroborated the expected factor structures for all scales, providing evidence for their construct validity. Leadership Support (LS) loaded strongly on Factor 3 (0.872), Policy and Resource Support (PRS) on Factor 5 (0.841), and Teacher Innovation Competency (TIC) on Factor 3 (0.813). These high loadings on their respective factors indicate that the items within each scale measured the intended constructs, aligning with the theoretical framework underpinning this study. (Brown, 2015).

The commonalities, which represent the proportion of variance in each variable explained by the extracted factors, were notably high. Leadership Support and Policy and Resource Support exhibited commonalities above 0.80 (0.807 and 0.809, respectively), while Teacher Innovation Competency showed a slightly lower but still substantial commonality of 0.737. These values suggest that a significant portion of the variance in each construct was captured by the factor solution, further supporting the validity of the measurements (Hair et al., 2017).

It is worth noting that while TIC loaded primarily on Factor 3, it also showed minor cross-loadings on other factors. This pattern may reflect the multifaceted nature of teacher innovation competency, encompassing various skills and attributes that could potentially overlap with aspects of leadership and policy support (Zhu et al., 2013). However, TIC's primary loading on Factor 3 (0.813) is substantially higher than its cross-loadings, indicating a clear distinction of this construct.

The factor structure revealed by this analysis strongly supports the discriminant validity of the three main constructs in this study. Each scale loaded predominantly on a single, distinct factor, with minimal cross-loadings, suggesting that Leadership Support, Policy and Resource Support, and Teacher Innovation Competency are separate, though potentially related, constructs in the context of this research.

Correlation Analysis

To examine the relationships between Leadership Support (LS), Policy and Resource Support (PRS), and Teacher Innovation Competency (TIC), Pearson correlation coefficients were calculated. Table 4 presents the correlation matrix for these variables.

Table 4 Correlations

Variable	LS	PRS	TIC
LS	–	0.275**	0.285**
PRS		–	0.341**
TIC	–	–	–

**p< .01*

The correlation analysis revealed significant positive associations among all study variables. Leadership Support demonstrated a moderate positive correlation with Teacher Innovation Competency ($r = .285$, $p < .01$), indicating that higher levels of perceived leadership support are associated with increased teacher innovation competency. This finding aligns with previous

research highlighting the importance of supportive leadership in fostering innovative practices among educators.

Similarly, Policy and Resource Support exhibited a moderate positive correlation with Teacher Innovation Competency ($r = .341$, $p < .01$). This stronger correlation suggests that the availability of supportive policies and resources may play a particularly crucial role in enhancing teachers' innovation competency. This result corroborates earlier studies emphasizing the significance of institutional support in promoting innovation in educational settings (Park, 2012).

Interestingly, a significant positive correlation was also observed between Leadership Support and Policy and Resource Support ($r = .275$, $p < .01$). This relationship suggests a potential synergy between leadership practices and institutional policies in creating an environment conducive to innovation.

Multiple Regression Analysis

To further investigate the predictive relationships between Leadership Support (LS), Policy and Resource Support (PRS), and Teacher Innovation Competency (TIC), a multiple regression analysis was conducted. Table 5 presents the results of this analysis.

Table 5 Multiple Regression Analysis

Variable	B	Std.Error	Beta	t	p
Constant	0.370	0.265	–	1.399	0.162
LS	0.138	0.052	0.129	2.672	0.008**
PRS	0.178	0.055	0.161	3.255	0.001**
R^2	–	–	–	–	–
Adjusted R^2	–	–	–	–	–
F (2,397)	–	–	–	22.350	0.000**

$^{**}p < .01$

The multiple regression model yielded statistically significant results ($F (2,397) = 22.350$, $p < .001$), indicating that the combination of Leadership Support and Policy and Resource Support significantly predicts Teacher Innovation Competency. The model accounted for 25.4% of the variance in Teacher Innovation Competency, suggesting a moderate explanatory power.

Both independent variables emerged as significant predictors of Teacher Innovation Competency. Leadership Support ($\beta = .129$, $t = 2.672$, $p < .01$) positively predicted Teacher Innovation Competency, supporting Hypothesis 1. Similarly, Policy and Resource Support (β =

.161, t = 3.255, p < .01) also demonstrated a significant positive relationship with Teacher Innovation Competency, confirming Hypothesis 2.

The standardized beta coefficients indicate that Policy and Resource Support (β = .161) has slightly stronger predictive power than Leadership Support (β = .129) in explaining Teacher Innovation Competency. While both factors are important, the provision of supportive policies and resources may have a marginally greater impact on fostering teacher innovation in this context.

Research contributions

This research contributes to the existing body of knowledge in several ways. Firstly, it provides empirical evidence on the relationships between leadership support, policy and resource support, and teacher innovation competency in private higher education. This area has received limited attention in previous research. Secondly, by focusing on Guangxi, a developing region in China, this study offers insights into how these factors operate in a context that may differ significantly from more developed areas or Western educational settings. Lastly, the findings of this study have practical implications for institutional leaders and policymakers in designing strategies to enhance teacher innovation competency, thereby improving the quality of education in private higher education institutions.

By examining these relationships, this study advances our theoretical understanding of teacher innovation and provides practical insights that can guide the development of more effective leadership practices and supportive policies in private higher education institutions. The results of this research can inform strategies to create environments that foster teacher innovation, ultimately contributing to the improvement of educational quality and the cultivation of innovative talents crucial for national development.

Discussion

This study investigated the influence of leadership, policy, and resource support on teacher innovation competency in private higher education institutions in Guangxi, China. The findings provide compelling evidence for the significant role of these factors in fostering teacher innovation competency, aligning with and extending previous research in this field.

The results demonstrate that leadership, policy, and resource support significantly and positively predict teacher innovation competency, even after controlling for other relevant variables. This corroborates earlier studies highlighting the importance of leadership in creating an

environment conducive to innovation. (González, 2020). The current study extends these findings to the specific context of private higher education in Guangxi, emphasizing that strong leadership characterized by administrative backing, clear communication, and encouragement of innovation is crucial for empowering teachers to embrace innovative practices.

Similarly, the significant positive relationship between policy and resource support and teacher innovation competency aligns with previous research emphasizing the importance of institutional support for fostering innovation. (Hargreaves & Fullan, 2015). This study provides empirical evidence that well-designed policies and adequate resources are critical in promoting teacher innovation within the unique context of private higher education institutions in Guangxi.

The slightly stronger predictive power of policy and resource support than leadership support in the regression model suggests that, while both are important, providing supportive policies and resources may have a marginally more significant impact on fostering teacher innovation in this context. This nuanced finding contributes a more comprehensive understanding of the factors influencing teacher innovation competency and may guide prioritization efforts in resource-constrained environments.

Implications for Practice

Based on these findings, several practical implications emerge for policymakers, educational leaders, and practitioners:

Strengthen Leadership Support: Institutions should prioritize developing leadership capacities that foster innovation. This includes creating a supportive culture, clearly communicating expectations, and recognizing innovative efforts. Implementing professional development programs focused on innovation leadership and establishing transparent reward systems for innovative teaching practices could significantly enhance the innovative environment.

Develop Clear Policies and Strategic Resource Allocation: Institutions should formulate policies that support innovation and strategically allocate resources. This may involve regular assessments to identify areas where resources are most needed and developing policies to prioritize funding for innovation-related projects. (Park, 2012).

Foster a Conducive Environment: It is crucial to create an environment that promotes collaboration, encourages experimentation, and values risk-taking. Establishing collaborative platforms for knowledge sharing and fostering a culture of open communication can significantly contribute to this goal. (Wang & Hallinger, 2019).

Promote Collaborative Learning: Encouraging collaborative learning practices through peer mentoring and professional learning communities can enhance the diffusion of innovative practices among teachers. (Zhu et al., 2013).

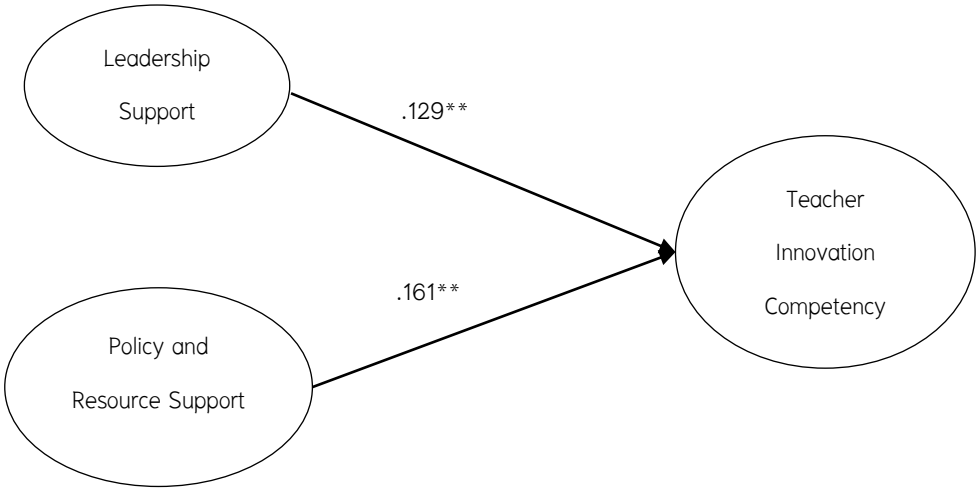

Fig 2. Main Findings

Limitations

While this study provides valuable insights, several limitations should be acknowledged. First, the cross-sectional design restricts the ability to establish causal relationships between the variables, leaving room for further exploration of dynamic interactions over time. Second, the study's geographical focus on Guangxi limits the generalizability of the findings to other regions or contexts, potentially overlooking regional or cultural differences. Third, the research primarily emphasizes leadership support and policy and resource support, while other critical factors, such as individual teacher characteristics, organizational culture, and external environmental influences, remain unexplored.

New Knowledge from Research

This study contributes novel insights into teacher innovation competency in private higher education institutions, particularly in Guangxi. It highlights the distinct interplay between leadership support and policy and resource support, with the latter having a slightly more substantial influence. Moderate levels of both supports are shown to sustain above-average teacher innovation competency, emphasizing the impact of even modest institutional backing. Additionally, the study introduces a validated framework for assessing innovation competency, encompassing learning, social, educational, and technological dimensions. Lastly, it uncovers a synergistic

relationship between leadership and policy support, showcasing their combined role in fostering innovation in private higher education.

Conclusion

This study provides empirical evidence for the significant role of leadership support and policy and resource support in fostering teacher innovation competency within private higher education institutions in Guangxi, China. The findings underscore the need for a holistic approach to promoting teacher innovation that integrates strong leadership with supportive policies and adequate resources. By focusing on these key areas, institutions can create a more supportive and innovative environment that empowers teachers to embrace new ideas and drive positive change in their teaching practices, ultimately contributing to the overall quality and effectiveness of higher education in the region.

Suggestions

Future research could address these limitations through several avenues. Employing longitudinal designs would provide a more robust understanding of the dynamic relationships between variables over time, helping to establish causality. Additionally, conducting comparative studies across different regions in China and internationally could enhance the generalizability of the findings and uncover variations across diverse cultural and institutional contexts. Expanding the scope of investigation to include factors such as individual teacher characteristics, organizational culture, and external environmental influences could also offer a more comprehensive understanding of the determinants of teacher innovation competency. Developing an integrated model incorporating these variables would provide deeper insights into the complex dynamics shaping teacher innovation in higher education.

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