Exploring the Level and Relationship of Instructional Leadership and Parental Involvement in Junior High Schools: A Case Study of Fujian Province, China

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Abstract: This study aims to explore the relationship between instructional leadership and parental involvement in middle schools. This paper mainly analyzes the relationship between the practice level of teaching leadership and parental participation in middle school (junior high schools), and the degree of influence of teaching leadership on parental participation. This study adopts quantitative research method, taking 10 cities in Fujian Province of China as the research scope, using SPSS version 27 for statistical analysis, and collecting data by sending questionnaires to teachers. It is found that the teaching leadership and parental participation of middle schools in Fujian Province are at a medium and high level. And the relationship between the two variables showed a strong positive correlation (r=. 764, p< 0.01). On the one hand, the findings point to the importance of teaching leadership behaviors of teaching leaders or principals and parent involvement behaviors, on the other hand, they also provide valuable insights and guidance for school administrators to promote student academic development and the overall quality of education in schools.

Keywords: Instructional leadership; Parental involvement; Promoting positive educational outcomes; Fujian Province; Establishing instructional objectives

1. Introduction

Against the backdrop of globalization, pedagogy, as a science that studies the phenomenon of education, the laws of education and educational methods, is receiving increasing attention. Education is not only a key factor in individual growth and social development, but also an important part of national competitiveness [1]. This paper examines current key issues in the field of education, including the relationship between instructional leadership and parental involvement, with the aim of providing theoretical support and empirical evidence for educational reform and practice.

Instructional leadership represents an educational strategy with the capacity to enhance curriculum quality and instructional practices [2]. Through active involvement in activities such as establishing instructional objectives, coordinating curriculum distribution, overseeing instructional practices, and monitoring student progress, instructional leaders play a crucial role in promoting, supporting, and facilitating effective teaching and learning [3].

Furthermore, parental participation in education may be influenced by various factors such as socio-economic status and negative experiences [4]. According to Abraha (2022), there may be differences in the level of parental participation in education due to differences in socio-economic status and cultural background, which may lead to inequalities among students and exacerbate social inequalities [5].

2. Problem Background

Although instructional leadership has many positive effects on parental involvement and academic achievement, it is important to recognize and consider the potential negative effects. Inadequate comprehension of instructional leadership theory among instructional leaders can hinder the effective implementation of instructional leadership practices [6]. For instance, leaders lacking confidence in effective teaching methodologies may struggle to observe teachers and provide meaningful feedback and support. Currently, there is limited research on the efficacy of instructional knowledge and its application by leaders to enhance their professional capabilities [7].

Despite the crucial role of instructional leadership, negative parental involvement can have an equally detrimental impact on students' academic and overall development [8]. Over-involvement by parents in their children's academics, such as completing assignments or projects for them, can undermine their independence and sense of responsibility [9]. Students require opportunities to face challenges, solve problems, and learn from mistakes; however, excessive parental involvement may impede these processes [10].

In addition, parents who overemphasize comparisons with other students. This can damage students' self-esteem. Such mutual comparisons come from academic performance, moral performance, or other overarching aspects among students, rather than focusing on students' individual differences and strengths [11]. According to Abebe et al. (2018), families who set high or unrealistic expectations for their children may make students feel frustrated and helpless [12]. Such an environment, where excessive parental expectations may be perceived as stressful, may weaken students' motivation to achieve and may also be a cause of mental health problems among students [13]. Therefore, it is essential for teaching leaders to effectively manage power dynamics within schools, strengthen the bond between schools and parents, and ensure that parent engagement remains supportive and constructive.

3. Literature Review

The purpose of this chapter is to review and evaluate the literature on instructional leadership and parental involvement.

3.1 Previous Studies about Instructional Leadership

This section presents a review of key findings from previous research, an updated understanding of instructional leadership, and an exploration of emerging trends in future research. Instructional leadership is recognized as a core element of school leadership, not only does it play a central role in the day-to-day running of a school, but it also interacts with other leadership frameworks [14]. For example, transformational leadership focuses on driving change through motivation and inspiration, while distributed leadership emphasizes co-leadership and the active participation of diverse participants. These ideas are supported by the findings of Bellibaş et al. (2021), who argue that instructional leadership is not limited to the role of a single leader, but is a multi-level, multi-dimensional, interactive process [15].

Grissom et al (2021) examined how instructional leaders manage the transition to distance learning during the COVID-19 pandemic [16]. Their case studies show that effective instructional leadership plays an important role in maintaining teaching continuity, supporting teachers, and addressing distance education challenges. Their findings highlight the resilience of teaching leaders in times of crisis and provide best practices for managing sudden and significant changes in the educational environment.

Hallinger (2023) revisited its mature instructional leadership framework, emphasizing a more dynamic and context-sensitive approach [17]. He emphasized that instructional leadership involves not only setting clear goals and managing instructional programs, but also adapting leadership practices to the changing needs of the school. This updated framework incorporates the concept of distributed leadership and the importance of collaboration among all school stakeholders. Hallinger (2023) book emphasizes the need for leaders to respond flexibly to the changing educational environment [17].

3.2 Previous Studies about Parental Involvement

This section presents a review of significant previous research on parental involvement, with a focus on the key findings, implications and importance of these studies for educational practice. Ren et al. (2024) explored the interaction between parental involvement and parenting styles in Chinese families, it identified four parenting styles: warm involvement, neglectful non-involvement, rejecting non-involvement and rejecting involvement [18]. The important implication of this study is that the effectiveness of parental involvement is highly dependent on the corresponding parenting style. Warm involvement is particularly beneficial, whereas rejecting involvement may be harmful. Therefore, the study suggests that educators should promote parental involvement characterized by emotional warmth and low rejection in order to improve psychological outcomes for adolescents.

Focusing on the impact of digital parental involvement tools on student achievement, Gonzalez-DeHass (2022) found that technology-mediated involvement can enhance communication between parents and schools and improve student achievement [19]. The study highlights the role of digital tools

in facilitating effective parental involvement, especially in the context of education's increasing reliance on technology. The findings of the study suggest that staff in schools should integrate digital tools to promote parental involvement and ensure that parents have easy access to information and channels of communication with teachers and administrators.

4. Research Objectives and Questions

4.1 Research Objectives

The purpose of this study is to examine the relationship between instructional leadership and parental involvement in secondary schools (junior high schools) in Fujian Province, China. Specifically, the study aims to examine the level and extent of the impact of instructional leadership on parental involvement in secondary schools in Fujian Province. The following are the research objectives related to instructional leadership and parental involvement:

1) To determine the level of instructional leadership in secondary schools in Fujian Province.

2) To determine the level of parental involvement in secondary schools in Fujian Province.

3) To study the relationship between instructional leadership and parental involvement in secondary schools in Fujian Province.

4.2 Research Questions

Instructional leadership and parental involvement are two key factors that have been shown to play a crucial role in promoting positive educational outcomes. In order to achieve this aim, the study will address the following three research questions:

1) What is the level of instructional leadership in secondary schools in Fujian Province?

2) What is the level of parental involvement in secondary schools in Fujian Province?

3) Is there a relationship between instructional leadership and parental involvement in secondary schools in Fujian Province?

5. Research Framework

The research framework of this paper includes a theoretical and conceptual framework.

5.1 Theoretical Framework

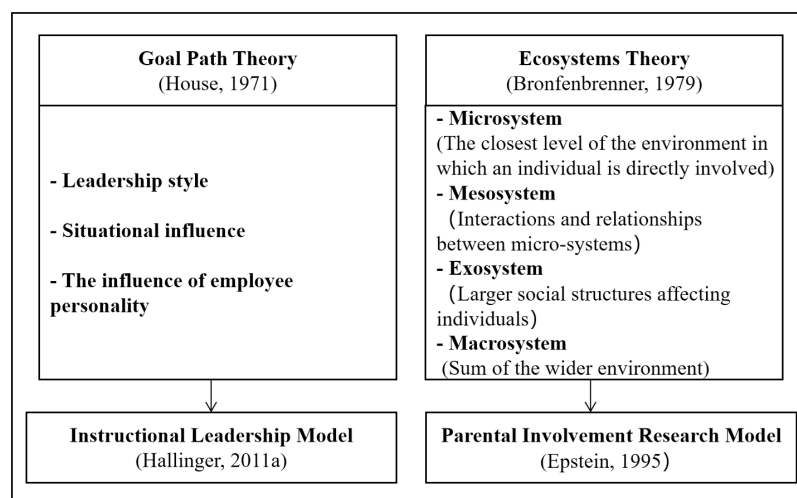| Goal Path Theory (House, 1971)	Ecosystems Theory (Bronfenbrenner, 1979)
- Leadership style - Situational influence - The influence of employee personality	- **Microsystem** (The closest level of the environment in which an individual is directly involved) - **Mesosystem** (Interactions and relationships between micro-systems) - **Exosystem** (Larger social structures affecting individuals) - **Macrosystem** (Sum of the wider environment)
Instructional Leadership Model (Hallinger, 2011a)	Parental Involvement Research Model (Epstein, 1995)

Figure 1: Theoretical Framework of the Study

The theoretical framework shown in Figure 1 is constructed based on two main theories: Goal Path Theory (House, 1971), which influenced Hallinger (2011a) model of instructional leadership [20] [21]. The

other theory is ecosystems theory (Bronfenbrenner, 1979), which influenced Epstein (1995) model of parental involvement. Based on these frameworks and models, the core of the study will be discussed [22] [23].

5.2 Conceptual Framework

A conceptual framework for the study, shown in Figure 2, is constructed based on the Instructional Leadership Model (Hallinger, 2011) and the Parental Involvement Research Model (Epstein, 1995) [21][23]. The framework is an integrated conceptual framework that combines two main theoretical constructs: firstly, the instructional leadership model proposed by Hallinger (2011), and secondly, the parental involvement research framework proposed by Epstein (1995) [21][23]. The framework aims to explore how school instructional leadership and parental involvement work together to influence educational outcomes in schools.
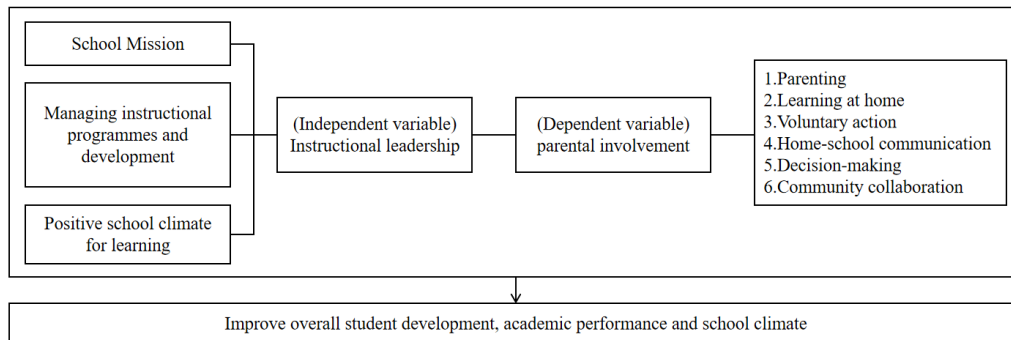

Figure 2: Conceptual Framework of the Study

6. Methdology

6.1 Research Introduction

This section details the research methodology, encompassing the theoretical underpinnings applied to construct a structured framework. It extensively covers the research population, sample characteristics, and methods employed for data collection. Furthermore, it outlines the research design, chosen study site, target demographic, sample selection criteria, instrumentation, along with validity and reliability assessments.

6.2 Research Design

After reviewing previous studies, the researcher determined that the use of quantitative methods and questionnaire surveys would be most effective in achieving the aim of this study, which is to examine the ways in which the independent variable (instructional leadership) is associated with the dependent variable (parental involvement). Show In the figure 3.
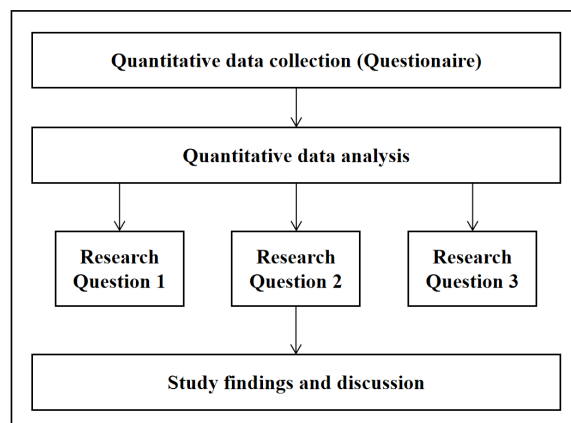

Figure 3: Research Design Flowchart

6.3 Sample Design

This study would examine the leadership practices and parent involvement strategies employed in ten cities in Fujian Province (Fuzhou, Putian, Quanzhou, Xiamen, Zhangzhou, Longyan, Sanming, Nanping, Ningde, and Pingtan Comprehensive Experimental Zone). Each city was then divided into east, west, south and north regions to ensure that all areas had equal access to the study. The cities selected in this sample have different teaching styles and characteristics, and urban schools and rural schools are considered at the same time, so the selection of samples is universal.

6.4 Research Population and Sample

The study focuses on secondary school teachers in Fujian Province, with statistical data sourced from the National Bureau of Statistics of China and the Huajing Industrial Research Institute for 2022/2023, as well as the Department of Education of Fujian Province for the same period. As of 2023, Fujian Province had 1,840 junior high schools and employed 116,146 junior high school teachers. Research indicates that gathering and analysing teachers' evaluations of principal leadership behaviours offers a more authentic assessment than direct evaluations of principals themselves [24]. Random sampling was chosen for this study to ensure the sample's representativeness, given the wide range of backgrounds, experiences, qualifications, teaching styles, and areas of expertise among secondary school teachers [25].

The first step in sampling was to determine the sample size. For this purpose, Krejcie and Morgan (1970) Sample Size Determination Form was used as detailed [26]. Based on the total number of 116,146 secondary school teachers and the required level of confidence, the sample size was calculated to be approximately 384. It is important to note that in questionnaire-based research, a larger sample size helps to reduce sampling error and increase the reliability of the data [27]. In order to ensure the reliability of the data, the researchers chose to conduct a questionnaire survey among 400 secondary school teachers. In order to increase the confidence of the data, the researcher further validated it by using Chua (2006) approach to sample testing, whereby the sample size for each district was obtained by dividing the number of teachers in the district by the total number of teachers in the location and multiplying it by the required sample size [28]. The result is 84.7, which becomes 85 after rounding. The formula for determining the number of sample teachers in each district is shown in Figure 4.

$$Sample\ size\ of\ teachers\ per\ municipality\ =\ \frac{Total\ number\ of\ teachers\ in\ the\ city}{Total\ number\ of\ teachers\ in\ the\ district} \times 384$$

Figure 4: The formula for determining the number of sample   (Chua, 2006)

6.5 Descriptive Statistical Analysis

According to Babbie (2014), descriptive statistics are instrumental in drawing conclusions from numerical data in demographic studies [29]. This study employed descriptive analyses such as frequencies and percentages to analyse the demographic data. The Mean Score Interpretation Table developed by Nunnally & Berstein (1994) was used to interpret these mean scores, as depicted in Table 1 [30].

Table 1: Mean Score Interpretation Scale (Nunnally & Berstein, 1994)

Level	Mean Scale
1.00 - 2.00	Low
2.01 - 3.00	Medium Low
3.01 - 4.00	Medium-high
4.01 - 5.00	High

6.6 Inferential Statistical Analysis

In this study, Spearman correlation analysis would specifically be employed to investigate the relationships between the variables under study. Spearman correlation analysis measures the strength and direction of linear relationships between two variables, assessing whether there is a statistically significant association between instructional leadership and parental involvement and determining the magnitude of this association. Spearman rank correlation coefficient has broader applicability, with only minimal loss of statistical power in cases where normality holds.

6.7 Reliability of Questionnaire Instrument

All questionnaire items were analysed using Statistical Package for Social Sciences (SPSS) version 27 to evaluate the reliability and internal validity of the collected data. During this procedure, researcher filtered out several erroneous questionnaires and codified the data gathered in an excel file. Tests for validity and reliability were carried out in the interim. The fact that the Cronbach coefficient employed was higher than 0.7 suggests that the questionnaire's internal consistency was strong.

6.8 Reasonableness of data collection steps

Following formal approval by the supervisor, the questionnaire has been administered to participants by the principal investigator of this study using an online method. This questionnaire has been accompanied by a brief statement describing the purpose of the study, the procedures and the methodology used to ensure that participants have a full understanding of the information required. Participants has been given one week to complete the questionnaire.

7. Discussion

7.1 Demography Analysis

A total of 400 online questionnaires were distributed to secondary schools (junior high schools) in Fujian province. The survey found that 180 (45%) male respondents and 220 (55%) female respondents participated in the study, most of whom had a master's degree or above 112 (28%), and 141 (35.30%) had 16 to 20 years of teaching experience. In addition, a total of 264 respondents (66%) are teaching in rural secondary schools, compared with 224 contract teachers (56%), indicating that there are more contract teachers than regular teachers in the region. Show in Table 2.

Table 2: Respondents Profile

Profile	Options	Frequency (400)	Percent (100%)
Gender	Male	180	45.00%
	Female	220	55.00%
Highest Level of Education	High School/Secondary School and Below	93	23.20%
	Three-Year College	92	23.00%
	Undergraduate	103	25.80%
	Master's Degree or Above	112	28.00%
Teaching Years	Less than 5 years	37	9.20%
	6-10 years	108	27.00%
	11-15 years	42	10.50%
	16-20 years	141	35.30%
	21 years and above	72	18.00%
Schools Type	Rural schools	264	66.00%
	Urban Schools	136	34.00%
Type of Teachers in Schools	Regularly Established Teachers	176	44.00%
	Contract teachers	224	56.00%

7.2 Findings of Research Question 1: What is the level of instructional leadership in secondary schools in Fujian Province?

Table 3 analyses the distribution of respondents according to the three main dimensions of instructional leadership. The analysis shows that the mean of the three dimensions and ten functions of instructional leadership in secondary schools in Fujian Province as a whole was 3.22, and the Std. Deviation was .72, which was at a medium-high level, indicating that the instructional leaders or principals in the schools had only the basic instructional leadership skills.

Table 3: Stage analysis of instructional leadership levels

Dimension and function	Mean	Std. Deviation	Level
I. School Mission	3.27		Medium-High
Setting school goals	3.32	0.78	Medium-High
Explain the objectives of the school	3.22		Medium-High
II. Managing instructional programs and development	3.19		Medium-High
Monitoring and conducting teaching evaluations	3.18	0.75	Medium-High
Coordination of courses	3.19		Medium-High
Monitoring Student Progress	3.19		Medium-High
III. Positive school climate for learning	3.22		Medium-High
Protection of teaching time	3.28		Medium-High
Always looking	3.28	0.64	Medium-High
Providing incentives for teachers	3.10		Medium-High
Encouraging professional development	3.20		Medium-High
Providing incentives for student learning	3.24		Medium-High
Overall Mean	3.22	0.72	Medium-High

7.3 Findings of Research Question 2: What is the level of parental involvement in secondary schools in Fujian Province?

Table 4 shows the distribution of respondents across the six main dimensions of parental involvement. The results of the analyses show that the overall mean of the variable is 3.24 and the Std. Deviation is .84. Overall, the level of parental involvement in secondary schools in Fujian Province is in the medium high range, again indicating only basic level of parental involvement.

Table 4: Stage analysis of parental involvement levels

Dimension	Mean	Std. Deviation	Level
I. Parenting	3.43	0.88	Medium-High
II. Learning at home	3.26	0.84	Medium-High
III. Voluntary action	3.18	0.84	Medium-High
IV. Home-School communication	3.21	0.83	Medium-High
V. Decision-making	3.18	0.83	Medium-High
VI. Community collaboration	3.15	0.82	Medium-High
Overall Mean	3.24	0.84	Medium-High

7.4 Findings of Research Question 3: Is there a relationship between instructional leadership and parental involvement in secondary schools in Fujian Province?

According to the results in Table 5, the Spearman correlation coefficient (r_s) in this set of data is 0.764. And this numerical result indicates a strong degree of relationship between the variables of instructional leadership and parental involvement, and the analysis shows a positive and significant relationship between the variables.

Table 5: Spearman correlation coefficient values between instructional leadership dimensions and parental involvement in secondary schools (junior high schools) in Fujian Province

		Instructional leadership
Parental Involvement	Correlation Coefficient, r_s	.764
	Sig. (2-tailed)	.00
	N	400

8. Conclusion

The study's findings provide a comprehensive insight into the relationship between instructional leadership and parental involvement in secondary schools across Fujian Province, China. This research investigated instructional leadership across three dimensions and ten function and delved into parental involvement through six dimensions, highlighting their widespread implementation in schools. The study

revealed a robust correlation between instructional leadership and parental involvement, demonstrating that effective instructional leadership positively influences parental involvement. By examining instructional leadership and parental involvement across multiple dimensions, the study enhanced understanding of their roles in the development of school leaders, teachers, parents, and students. These findings offer insights that can guide efforts to prioritize dimensions of instructional leadership and parental involvement most conducive to enhancing student achievement.

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