

*Examining the Relationship Between School Climate and Job Satisfaction With  
Teacher's Autonomy as a Mediator*

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**Abstract**

The research on teachers' job satisfaction has always been a critical issue in the development of the educational environment. In this study, it adopts a perspective focusing on the working environment of teachers to investigate the mediating factors influencing job satisfaction among 3,855 middle school teachers in Taiwan, with a primary focus on teacher autonomy. This research method was adopted secondary data analysis. The data source is the 2018 Teaching and Learning International Survey (TALIS), which includes regression-related variables for discipline and innovation in the working environment, as well as teacher job satisfaction. The study uses simple mediation model and regression analysis contributes to the main thread of this study in several dimensions. First, there is a correlation between job satisfaction when the working environment is disciplinary and the performance of teacher job satisfaction when the working environment is innovative, providing support for the theory. When teachers have more autonomy, both the disciplinary and innovation in the working environment influence teacher job satisfaction. Second, the Sobel (goodman) test to determine whether the effect of the independent variable: climate-disciplinary, climate-innovation, after including the mediator: teacher autonomy in the model. Finally, the findings emphasize the critical role of teacher autonomy in shaping teachers' job satisfaction, which can be of significance to policymakers.

Keywords: School Climate, Job Satisfaction, Teacher Autonomy, Middle School Teachers, TALIS (Teaching and Learning International Survey)

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## **Introduction**

This study explores the complex relationship between school climate and teacher job satisfaction in Taiwan, emphasizing the mediating role of teacher autonomy. Using data from the 2018 Teaching and Learning International Survey (TALIS), it examines how various aspects of school environments affect teacher satisfaction. An initial interest was sparked by observing a colleague's shift from a highly regulated to a more autonomous teaching environment, leading to a broader investigation of how autonomy impacts job satisfaction.

Global studies, such as those by Skaalvik and Skaalvik (2011), show that reduced autonomy and restrictive school climates are linked to teacher dissatisfaction, adversely affecting retention and student outcomes. This issue is particularly relevant in Taiwan, where educational reforms to enhance teacher autonomy and promote innovation have lagged. This research aims to determine how increased autonomy within a supportive school climate can improve teacher job satisfaction and address widespread teacher dissatisfaction affecting educational systems worldwide.

## **Literature Review**

### ***Introduction to Teacher Job Satisfaction***

Teacher job satisfaction is a critical component in the educational ecosystem, influencing teacher retention, student performance, and the overall quality of education (Skaalvik and Skaalvik, 2011). Various factors contribute to job satisfaction among teachers, including but not limited to work environment, professional relationships, autonomy, and recognition (Collie et al., 2012).

### ***School Climate and Its Impact***

School climate, defined as the quality and character of school life, encompasses norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures (Cohen et al., 2009). A positive school climate is associated with higher teacher satisfaction, improved student achievement, and reduced teacher turnover (Thapa et al., 2013). However, the aspects of school climate, such as disciplinary practices and innovative environments, can have differing impacts on teacher satisfaction.

### ***The Role of Teacher Autonomy***

Teacher autonomy, the extent to which teachers can make independent decisions about their teaching practices and classroom management, is another significant factor affecting job satisfaction (Pearson and Moomaw, 2005). Autonomy is linked to higher levels of job satisfaction, as it empowers teachers and fosters a sense of professional efficacy and ownership over their work (Friedman, 2000).

### ***Mediating Effects of Autonomy***

Recent studies have begun to explore the mediating role of autonomy in the relationship between school climate and job satisfaction (Skaalvik and Skaalvik, 2009). These studies suggest that the impact of school climate on job satisfaction might be partially mediated by

the level of autonomy teachers' experience, implying that even in less favorable climates, high autonomy can sustain or enhance job satisfaction.

### ***Empirical Gaps and the Current Study***

Despite the acknowledged importance of these factors, gaps remain in our understanding of how they interact, particularly in diverse educational settings. The current study addresses these gaps by employing a comprehensive analytical approach, including regression analysis and Sobel-Goodman mediation tests, to elucidate the direct and mediated relationships between school climate, autonomy, and job satisfaction.

In reviewing the literature related to this study, it's crucial to synthesize the key findings from different sources and elucidate how they inform and enrich the theoretical and methodological foundation of the current research:

### **Integration and Analysis of Literature Review**

#### ***Importance of Teacher Job Satisfaction***

Skaalvik and Skaalvik (2011) highlighted the impact of teacher job satisfaction on teacher retention, student performance, and overall educational quality. This viewpoint provides a foundation for the current study, positing job satisfaction as an indispensable component of the educational ecosystem.

#### ***Impact of School Climate on Job Satisfaction***

According to Cohen et al. (2009), school climate encompasses teaching and learning practices, norms, goals, among others. Thapa et al. (2013) showed that a positive school climate correlates with higher teacher satisfaction. These insights help understand how school climate affects teacher job satisfaction and support the study's exploration of how disciplinary and innovative climates distinctly impact satisfaction.

#### ***The Role of Teacher Autonomy***

Pearson and Moomaw (2005) examined how teacher autonomy affects job satisfaction, emphasizing the empowerment and professional pride it brings to teachers. This bolsters the theoretical groundwork for the current study, which examines autonomy as a mediating variable affecting satisfaction.

#### ***The Mediating Role of Autonomy***

Recent studies, such as those by Skaalvik and Skaalvik (2009), have begun to examine autonomy's mediating role in the relationship between school climate and job satisfaction. These studies indicate that even in less favorable climates, high autonomy can maintain or increase job satisfaction. This provides theoretical support for the mediation analysis in the current study and grounds for considering autonomy as a regulatory variable in decision-making.

### ***Relevance to the Current Study***

The current study applies the theories and findings from the literature to the context of middle school teachers in Taiwan using data from the 2018 TALIS. Specifically, it applies the concept of autonomy to the analysis of mediating effects, exploring how it modulates the influence of disciplinary and innovative school climates on teacher job satisfaction.

By integrating different research outcomes and applying them to the teacher population in Taiwan, the current study enriches the understanding of the interplay between school climate, autonomy, and job satisfaction.

An innovation of this study is the empirical confirmation of these relationships in the Taiwanese educational context, which has direct implications for designing targeted policies and management strategies to improve teacher satisfaction.

The findings of the current study are consistent with the conclusions of prior literature and further underscore the importance of teacher autonomy in enhancing job satisfaction, suggesting broader management and policy implications. These insights are invaluable for education policymakers and school administrators.

### **Methodology**

This study employs a holistic analytical framework, utilizing regression analysis to probe the relationship between school climate—encompassing disciplinary and innovative aspects—and teacher job satisfaction, with a lens on teacher autonomy as a mediator. The dataset includes 3,855 middle school teachers in Taiwan, ensuring a diverse representation.

The research design employed in this dissertation is a cross-sectional study that hinges on the analysis of secondary data to unravel the determinants of job satisfaction amongst educators. The empirical investigation, helmed by the research team Sobel-Goodman, delves into a comprehensive dataset harvested from the 2018 Teaching and Learning International Survey (TALIS). This rich dataset encompasses responses from 3,855 middle school teachers based in Taiwan, offering a panoramic view of the professional milieu that shapes their job satisfaction. The study meticulously dissects various facets of the teachers' working environment, with a concentrated lens on disciplinary and innovative variables within the school's ambit and their correlated effects on job satisfaction. A suite of variables pertinent to the study—teacher job satisfaction, autonomy, workload, self-efficacy, and the climates of discipline and innovation—were meticulously extracted from the TALIS dataset, underpinning the analytical framework of this research. In the analytical landscape of this dissertation, regression analysis serves as the primary tool to dissect the interplay between the meticulously chosen variables, casting a light on the nuanced interdependencies that shape the educational environment. Central to this methodological voyage is the examination of teacher autonomy's mediating role—a construct representing the teachers' latitude in decision-making and their independence in pedagogical choices—navigating through the dynamics of school climate and its consequent effect on job satisfaction.

Operationalization of variables has been executed with precise definitions to ensure clarity and measurement fidelity. The independent variables encompass various dimensions of school climate, specifically the disciplinary climate and the climate of innovation, pivotal in sculpting the educational milieu. Teacher autonomy, the mediator variable in this study, is

quantified by the degree of decision-making capacity and independence as reported by the teachers themselves. The dependent variable, teacher job satisfaction, is quantified through a composite score that encapsulates the overall satisfaction and contentment with the multitude of facets associated with their professional roles. This structural equation of variables forms the backbone of the study's quest to uncover the layers of influence within the educational domain.

Variables	N	Mean (%)	Std	Min	Max
Gender	3,835				
Female	2,606	64.62			
Male	1,229	35.38			
Educational level	3,835				
Bachelor and below	2,478	67.95			
Master and above	1,357	32.05			
Teacher's Job Satisfaction	3,804	12.02	1.83	4.85	12.18
Teacher's Autonomy	3,421	12.69	2.21	2.52	11.35
Teacher's Work loading	3,819	9.18	1.61	6.46	9.22
Teacher's Self-efficacy	3,813	12.65	2.12	3.22	12.33
Climate-Disciplinary	3,407	8.81	1.74	5.94	8.83
Climate-Innovation	3,809	2.88	0.62	1.00	3.00

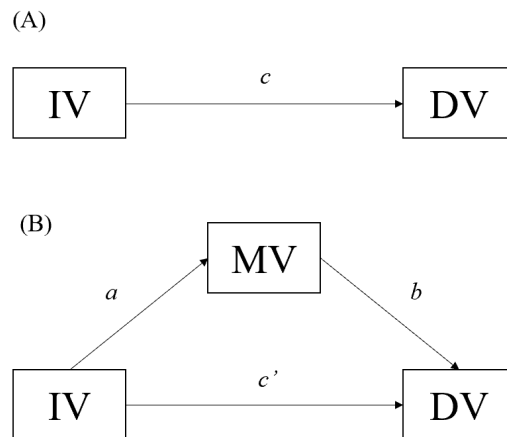
Table 1: Descriptive Statistics

### ***Data Analysis***

The study used a simple mediation model to understand the direct and indirect effects of the independent variables on the dependent variable through the mediator. The Sobel-Goodman test was applied to confirm the significance of the mediation effect.

By integrating a holistic framework for analysis, the study aims to illuminate not just the direct impact of the school climate on job satisfaction, but also how autonomy as a mediator might shape these relationships. This approach is anticipated to yield insights with significant implications for educational policy and practice, particularly in the context of the Taiwanese middle school environment.

## ***Mediator***



Note: IV denotes independent variable; MV denotes mediator variable, DV denotes dependent variable

Figure 1: The Illustration of Effect With the Mediator

## **Results and Discussion**

### ***Descriptive Statistics***

The descriptive statistics reveal a diverse sample of teachers with respect to gender, educational level, and various perceived aspects of their job. A majority of the sample comprises female teachers (64.62%) and those with a Bachelor's degree or below (67.95%). The measures of job satisfaction, autonomy, work loading, self-efficacy, and school climate (disciplinary and innovation) show a wide range of values, suggesting variability in teachers' experiences and perceptions.

### ***Regression Analysis Without Mediator***

The regression analysis without the mediator variable (Table 2) indicates significant relationships between school climate (disciplinary and innovation), gender, work loading, self-efficacy, and job satisfaction. Notably, climate innovation has a positive effect on job satisfaction, whereas climate disciplinary has a negative effect. Work loading negatively impacts job satisfaction, while self-efficacy positively correlates with it. Gender and educational level also play roles, albeit to a lesser extent.

DV: Job Satisfaction	(1)	(2)	(3)	(4)
Climate disciplinary	-0.186 <sup>***</sup> (0.0177)	-0.112 <sup>***</sup> (0.0177)		
Climate innovation			0.879 <sup>***</sup> (0.0454)	0.738 <sup>***</sup> (0.0444)
Gender (Ref: female)				
Male		0.185 <sup>**</sup> (0.0640)		0.0931 (0.0586)
Educational level (Ref: bachelor and below)				
Master and above		-0.0518 (0.0622)		-0.0868 (0.0569)
Work loading		-0.230 <sup>***</sup> (0.0189)		-0.218 <sup>***</sup> (0.0171)
Self-efficacy		0.167 <sup>***</sup> (0.0147)		0.173 <sup>***</sup> (0.0130)
Constant	13.64 <sup>***</sup> (0.159)	12.95 <sup>***</sup> (0.305)	9.487 <sup>***</sup> (0.134)	9.707 <sup>***</sup> (0.259)
<i>N</i>	3,392	3,384	3,793	3,785
adj. <i>R</i> <sup>2</sup>	0.031	0.105	0.090	0.164

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 2: Regression Without Mediator

### ***Mediation Analysis***

The Sobel-Goodman mediation tests (Table 3) and the regression analysis with the mediator variable (Table 4) demonstrate that teachers' autonomy mediates the relationship between school climate and job satisfaction. The mediation analysis reveals that both the direct and indirect effects of school climate (disciplinary and innovation) on job satisfaction are significant. The proportion of the total effect mediated by autonomy varies, indicating that autonomy is an important factor in how school climate influences job satisfaction, but it is not the sole mediator.

### ***Implications of School Climate***

The findings underscore the importance of school climate in influencing teacher job satisfaction. A supportive and innovative climate fosters higher satisfaction, possibly due to enhanced motivation and engagement. Conversely, a disciplinary climate might contribute to stress and lower satisfaction, underscoring the need for balanced and supportive management practices.

### ***Role of Autonomy***

Teacher autonomy emerges as a crucial factor in mediating the effects of school climate on job satisfaction. Autonomy not only directly contributes to satisfaction but also moderates the impact of environmental factors. This suggests that policies and practices empowering teachers with greater decision-making and independence could enhance their job satisfaction, even in less favorable climates.

### ***Work Loading and Self-Efficacy***

The negative impact of work loading on job satisfaction highlights the stress and potential burnout associated with high workload. On the other hand, self-efficacy's positive relationship with job satisfaction points to the beneficial effects of teachers' confidence in their abilities. Efforts to manage workload and support teacher development can thus contribute to higher satisfaction levels.

### ***Gender and Educational Level***

While gender and educational level have less pronounced effects, they nonetheless contribute to the complexity of job satisfaction dynamics. These factors may interact with other variables, such as school climate and autonomy, in nuanced ways that warrant further investigation.

DV: Job Satisfaction	(1)	(2)	(3)	(4)
Focal Independent Variable	Climate disciplinary	Climate disciplinary	Climate innovation	Climate innovation
Mediator Variable	Autonomy	Autonomy	Autonomy	Autonomy
Control Variable	No	Yes	No	Yes
Sobel	-0.028 <sup>***</sup> (0.004)	-0.013 <sup>***</sup> (0.003)	0.036 <sup>***</sup> (0.008)	0.013 <sup>***</sup> (0.005)
Aroian	-0.028 <sup>***</sup> (0.004)	-0.013 <sup>***</sup> (0.003)	0.036 <sup>***</sup> (0.008)	0.013 <sup>***</sup> (0.005)
Goodman	-0.028 <sup>***</sup> (0.004)	-0.013 <sup>***</sup> (0.003)	0.036 <sup>***</sup> (0.008)	0.013 <sup>***</sup> (0.005)

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 3: Sobel-Goodman Mediation Tests



DV: Job Satisfaction	(1)	(2)	(3)	(4)
Focal Independent Variable	Climate disciplinary	Climate disciplinary	Climate innovation	Climate innovation
Mediator Variable	Autonomy	Autonomy	Autonomy	Autonomy
Control Variables	No	Yes	No	Yes
a coefficient	-0.268*** (0.21)	-0.193*** (0.022)	0.340*** (0.061)	0.204** (0.060)
b coefficient	0.103*** (0.014)	0.067*** (0.014)	0.105*** (0.013)	0.064*** (0.013)
Indirect effect a*b	-0.028*** (0.004)	-0.013*** (0.003)	0.036*** (0.008)	0.013** (0.005)
direct effect c'	-0.157*** (0.018)	-0.098*** (0.018)	0.843*** (0.048)	0.731*** (0.047)
Total effect c	-0.185*** (0.018)	-0.111*** (0.018)	0.879*** (0.048)	0.744*** (0.047)
% of total effect that is mediated	0.140	0.116	0.041	0.018
Ratio of indirect to direct effect	0.175	0.132	0.042	0.018
Ratio of total to direct effect	1.175	1.132	1.042	1.018

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 4: Regression Result With Mediator

## Conclusion

This research underscores the profound influence of school climate and teacher autonomy on the job satisfaction of middle school teachers in Taiwan, highlighting the necessity of a supportive and innovative educational environment. Mediation analysis reveals that teacher autonomy not only amplifies the benefits of an innovative climate but also mitigates the detrimental effects of a disciplinary climate on job satisfaction. These significant relationships have been substantiated by regression analyses and Sobel-Goodman mediation tests, emphasizing the pivotal role of autonomy.

To translate these insights into practice, it is recommended that educational policymakers focus on implementing policies that enhance teacher autonomy. This can be achieved by decentralizing decision-making, which allows teachers greater control over curriculum, teaching methods, and assessment, alongside introducing tailored professional development programs that empower teachers and foster a sense of ownership and responsibility. Additionally, schools should cultivate an environment that values innovation and creativity, requiring shifts in infrastructure and school culture. Enhancing open communication, collaboration among teachers, and their active involvement in school governance can significantly improve the school climate.

Furthermore, establishing a robust monitoring and evaluation framework is crucial to ensure the effectiveness of these policies. Regular feedback mechanisms and impact assessments should be implemented to fine-tune approaches and verify the realization of intended benefits

on teacher job satisfaction. Future research should explore the long-term effects of enhanced teacher autonomy and improved school climates in various educational settings and cultural contexts to fully understand their impact on educational outcomes.

These strategic recommendations aim to assist policymakers and educators in leveraging the findings of this study to create more engaging and fulfilling teaching environments. Empowering teachers through increased autonomy and a supportive school climate not only boosts job satisfaction but also holds the potential to elevate educational standards and student achievement worldwide.

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