The moderating role of reward on the impact of academic supervision and multitasking in enhancing teachers's job satisfaction

El papel moderador de la recompensa en el impacto de la supervisión académica y la multitarea en la mejora de la satisfacción laboral de los profesores

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Abstract

Introduction: Rewards can enhance job satisfaction among teachers by addressing their individual needs and preferences. Factors like degree levels, self-motivation, and support for students influence teachers' competency and job satisfaction.
Objective: This research aimed to investigate the role of rewards in moderating the contribution of academic supervision and multitasking to teacher job satisfaction. In the complex context of education, various elements, including supervision effectiveness and multitasking pressure, affect teacher job satisfaction.
Methodology: The methodological framework applied in this investigation is quantitative, using an ex post facto design involving 212 public high school teachers selected through a multistage cluster sampling technique. Data were collected through questionnaires adapted from the Minnesota Satisfaction Questionnaire (MSQ) and Supervisory Behavior Description Questionnaire (SBDQ), distributed through Google Forms, and then analyzed using the Structural Equation Modeling Partial Least Squares (SEM-PLS) technique.
Results and Discussion: A comprehensive analysis of the findings revealed that academic supervision substantially impacted teacher job satisfaction, while multitasking showed no significant effect. Rewards were shown to serve as a moderator that strengthens the relationship between academic supervision and multitasking on teacher job satisfaction.
Conclusions: The findings highlight the importance of an appropriate reward system to improve educators' motivation and job satisfaction, which can advance the overall quality of education. This study recommends that policymakers formulate more effective strategies to improve teachers' job satisfaction through a structured reward system.

Keywords

Job satisfaction; multitasking; reward; supervision

Resumen

Introducción: Las recompensas pueden aumentar la satisfacción laboral de los profesores atendiendo a sus necesidades y preferencias individuales. Factores como el nivel de titulación, la automotivación y el apoyo a los alumnos influyen en la competencia y la satisfacción laboral de los profesores. Objetivo: El objetivo de este estudio es investigar el papel de las recompensas como moderadoras de la contribución de la supervisión académica y la multitarea a la satisfacción laboral de los profesores. En el complejo contexto de la educación, varios elementos, entre ellos la eficacia de la supervisión y la presión de la multitarea, afectan a la satisfacción laboral de los profesores. Metodología: El marco metodológico aplicado en esta investigación es cuantitativo, utilizando un diseño ex post facto en el que participaron 212 profesores de institutos públicos seleccionados mediante una técnica de muestreo por conglomerados multietapa. Los datos se recogieron mediante cuestionarios adaptados del Minnesota Satisfaction Questionnaire (MSQ) y Supervisory Behavior Description Questionnaire (SBDQ), distribuidos a través de Google Forms, y posteriormente se analizaron mediante la técnica Structural Equation Modeling Partial Least Squares (SEM-PLS). Resultados y discusión: Un análisis exhaustivo de los resultados reveló que la supervisión académica tuvo un impacto sustancial en la satisfacción laboral de los docentes, mientras que la multitarea no mostró un efecto significativo. Se demostró que las recompensas sirven como moderador que refuerza la relación entre la supervisión académica y la multitarea en la satisfacción laboral de los profesores de educación física. Conclusiones: Los resultados destacan la importancia de un sistema de recompensas adecuado para mejorar la motivación y la satisfacción laboral de los educadores, lo que puede hacer avanzar la calidad general de la educación. Este estudio recomienda que los responsables políticos formulen estrategias más eficaces para mejorar la satisfacción laboral de los profesores mediante un sistema de recompensas estructurado.
satisfacción laboral; recompensa; supervisión

Palabras clave

Satisfacción laboral; multitarea; recompensa; supervisión

Introduction

Teacher job satisfaction represents a critical dimension in education, directly influencing pedagogical quality and student achievement outcomes. Empirical investigations show that individual attributes and organizational and workplace environments shape teacher job satisfaction (Toropova et al., 2021a). In the Indonesian context, characterized by systemic challenges such as excessive workload and inadequate managerial support, it is essential to shed light on the determinants that impact teacher job satisfaction (Chen, 2023). Teacher job satisfaction is influenced by intrinsic motivators such as personal drive, commitment, and dedication and extrinsic elements such as academic supervision and demands associated with multitasking. Even lacking proper motivation resulting from supervisory practices, the results are likely to be more detrimental; furthermore, if educators do not authentically receive supervision and coaching, considerable resistance to the supervision process will be seen (Ampofo et al., 2019; Hoque et al., 2020).

In the educational context, adequate academic supervision can increase teacher job satisfaction by providing constructive support and evaluative feedback (Olsen & Huang, 2019). In contrast, multitasking, often inherent in educators' daily responsibilities, can adversely affect the quality of their work and overall job satisfaction (Lee, S., & Choi, 2019). Academic supervision plays a role in improving teacher performance and productivity through supervision and support in the instructional process. A study by Hyseni Duraku Hoxha (2021) states that strategic guidance within schools is needed, which is highly dependent on the motivation and initiative of school principals. Furthermore, educational leadership methods that assist educators in their professional development and advancement are considered more potent long-term motivators than environmental conditions and compensation (Nurabadi et al., 2021). Even adequate supervision is one of the determinants of increasing teacher job satisfaction by providing constructive feedback and facilitating skill improvement (Widyantoro et al., 2024). In contrast, multitasking can undermine job performance and satisfaction, often found in teachers' daily routines. A comprehensive study by Jamian et al. (2020) states that multitasking can reduce teachers' work efficiency and decrease job satisfaction.

Despite various studies, there are still gaps in understanding how rewards can moderate the interaction between academic supervision, multitasking, and teacher job satisfaction. Rewards may be motivational incentives that enhance teacher performance, especially in challenging multitasking scenarios. An investigation by Puni et al. (2018) showed that appropriate rewards can improve job satisfaction and performance among employees, including educators. Previous research has primarily concentrated on the direct impact of academic supervision and multitasking on job satisfaction, often ignoring the potential role of rewards as a moderating variable (Sahito & Vaisanen, 2019; Wang et al., 2020a; Yacobson et al., 2024). Therefore, it is necessary to explore further how teacher rewards can influence this relationship and how they can catalyze increased teacher job satisfaction in more complicated contexts.

Addressing this gap is critical, as it can yield new insights into strategies that educational institutions and policymakers might implement to improve teacher job satisfaction (Elrayah & Semlali, 2023). By understanding the role of rewards, schools can design more efficacious reward systems that strengthen teachers' motivation and improve their classroom performance. This study aims to empirically investigate the hypothesis that rewards serve to moderate the effects of academic supervision and multitasking on teacher job satisfaction.

Quality of work supported by teacher job satisfaction in Indonesia's education context remains a complex concern. According to data disseminated by World Bank staff, teacher quality is also triggered by workload, work environment conditions, and inadequate support from institutional management (Khairina et al., 2024). Research by Iwu et al. (2018a) shows that elements such as work environment, support from superiors, and access to professional development opportunities influence educators' job satisfaction considerably. Additional findings imply that teachers' level of satisfaction can positively influence their performance and improve student academic outcomes (García Torres, 2018). Even the subsequent impact of teacher job satisfaction is essential to teacher performance and commitment in the long term (Sariwulan et al., 2019).

In the comprehensive model of teacher job satisfaction, variables such as low academic achievement, behavioral problems, socioeconomic status (SES), organizational climate and discipline, geographic

location of the school, principal job satisfaction, autonomy in teaching practice, engagement among stakeholders, teaching experience, teacher self-efficacy, teacher-student relationships, collaboration among teachers, and effectiveness of professional development serve as significant predictors of teacher job satisfaction (Wang et al., 2020b). So, this finding is in line with the findings of Ker et al. (2022) that teachers' work environments, professional development opportunities, and peer support positively contribute to increasing teachers' job satisfaction. Data from the OECD (2018) shows that teacher job satisfaction levels in Indonesia remain concerning, with many teachers feeling less supported by school leaders. Other study findings confirm that a favorable school climate and support from the principal are intrinsically linked to teacher job satisfaction (Dicke et al., 2020; Fütterer et al., 2023; Pérez Fuentes et al., 2023). Therefore, stakeholders in education and teaching should not hesitate to state that effective academic supervision can be an essential mechanism to increase teacher job satisfaction.

Data shows that teachers' job satisfaction levels in various regions across Indonesia are still below anticipated benchmarks. For example, the Teacher Competency Test (UKG) results reveal that many educators struggle to master the teaching content they are expected to deliver (Pradewo, 2022). This study's findings confirm the urgent need to improve education standards by encouraging increased teacher job satisfaction. However, teachers' challenges in carrying out their responsibilities have become increasingly complex, primarily due to the increasing multitasking demands. Teachers often struggle to balance responsibilities, from instructional tasks to assessments and interactions with student guardians. The investigation of Jamian et al. (2020) confirmed that educators' job satisfaction is strongly influenced by improper multitasking management. In this regard, incentives or rewards can serve as a mechanism to increase educators' motivation and job satisfaction, giving them the impetus to navigate the existing challenges associated with multitasking.

While there is limited research on teacher multitasking, related studies show that teachers are often required to oversee multiple tasks simultaneously, including instructional and administrative responsibilities, potentially resulting in stress and reduced job satisfaction (Kim, 2019; Zydziunaite et al., 2020). Further investigation found that excessive multitasking can disrupt focus levels and operational efficiency, thus impacting overall teacher performance(Jamet et al., 2020; Kemp, J. E., & Schmidt, 2023). So, this certainly reinforces previous studies exploring the moderating influence of polychronicity and the importance of unity in explaining the interaction between individual preferences and the ability to multitask effectively (Bachmann et al., 2019; Sanderson et al., 2013).

Although many empirical investigations have investigated the consequences of academic supervision and multitasking on educators' job satisfaction, significant gaps remain in our understanding of how rewards potentially moderate or mediate these relationships. Previous research has primarily concentrated on the direct correlation between academic supervision, multitasking, and job satisfaction without adequately addressing the potential influence of rewards as a variable that may affect these dynamics (Brezicha et al., 2020).

For example, a study conducted by Puni et al. (2018) states that transformational leadership can increase teacher job satisfaction through rewards. However, no empirical research has specifically examined how rewards influence the relationship between academic supervision and Multitasking on educators' job satisfaction. These findings suggest the need for further exploration of how rewards given to teachers can influence this relationship and how rewards can act as a catalyst to improve teacher job satisfaction in more complicated contexts. In addition, research entities exploring rewards' consequences on educators' job satisfaction in Indonesia are still relatively rare. Many existing studies prioritize alternative factors, such as organizational culture and job satisfaction, while ignoring the influence of rewards within the framework of academic supervision and multitasking. Therefore, examining how rewards can serve as moderators in the interaction between academic supervision and multitasking concerning teacher job satisfaction is imperative.

Addressing this research gap is critical to understanding the intricacies of teacher job satisfaction in the contemporary educational landscape. By elucidating how rewards can moderate the effects of academic supervision and multitasking on job satisfaction, educators can be enhanced by formulating more effective strategies to improve teacher job satisfaction. Appropriate rewards can serve as motivational incentives that encourage educators to demonstrate a more significant commitment to their professional responsibilities, especially under challenging conditions such as multitasking.

Indeed, it is very complicated to clarify the complexity between emotional motivators (such as rewards, advancement opportunities, empowerment, and recognition), material rewards (including promotion, certification, incentives, and additional leave), job satisfaction, burnout, affective commitment, performance, and propensity to transition in the teaching profession. The urgency of this research is further supported by the fact that teacher job satisfaction directly influences the quality of education and the resulting student learning outcomes. A study conducted by Harter et al. (2002) confirms that increasing levels of job satisfaction are positively correlated with performance, including educator performance. Correspondingly, rewarding productive performance is crucial in encouraging increased employee job satisfaction (Koo et al., 2020). Thus, when employees feel that their contributions are recognized, they are more likely to experience increased satisfaction in their professional roles (Brinia et al., 2021; Buksnyte-Marmiene et al., 2022; Shah et al., 2020). Therefore, examining how rewards can act as a moderating variable affecting the relationship between academic supervision, multitasking, and teacher job satisfaction is imperative. This study is expected to generate innovative and practical solutions to improve teacher job satisfaction through a more comprehensive approach.

This study aims to contribute significantly to the interaction between academic supervision, multitasking, and teacher job satisfaction by examining the moderating role of rewards. First, we estimate the contribution of academic supervision to teacher job satisfaction. Second, we estimate the effect of multitasking on teacher job satisfaction. Third, rewards contribute to moderating the impact of academic supervision on teacher job satisfaction. Finally, we predict a positive contribution of rewards in moderating the effect of multitasking on teacher job satisfaction. While many previous investigations have explored the effects of supervision and multitasking on job satisfaction, this study introduces an innovative perspective by evaluating how rewards can influence these relationships. The uniqueness of this study lies in its concentrated examination of the educational landscape in Indonesia, where many external influences, such as academic policies and organizational culture, often shape teachers' working conditions. The findings of this study may further corroborate established theories of motivation, including reward theory and Herzberg's 1959 Two-Factor Theory (Herzberg et al., 2017), which underscore the critical role of rewards in enhancing job satisfaction. Consequently, this study provides substantial empirical evidence advocating for improved educational managerial practices.

Method

Procedure

This empirical research uses a quantitative approach with an ex post facto design. The study is correlational in ascertaining the effects of academic supervision and multitasking on physical education teacher job satisfaction. The research involved 212 public high school physical education teachers selected through a multistage cluster sampling technique.

Participant

The demographic focus of this study consisted of all educators of senior high schools affiliated with the Central Java Provincial Government. A sample of 212 was drawn using *multistage cluster sampling*.

Data collection

Data were collected through questionnaires adapted from the Minnesota Satisfaction Questionnaire (MSQ) and Supervisory Behavior Description Questionnaire (SBDQ), distributed through Google Forms.

Data analysis

Data was analyzed using the Structural Equation Modeling Partial Least Squares (SEM-PLS) technique. The construct of academic supervision (X1) is an exogenous variable consisting of three manifest variables: academic supervision planning, implementation, review, and evaluation follow-up (Aspire). Multitasking is also an exogenous variable, which includes the ability to manage time, flexibility, and prioritization. Reward (M) is a moderating variable on academic supervision and multitasking. This moderating variable consists of manifest variables: the type of reward given to the teacher, the value of the reward given to the teacher, and how often the reward is given to the teacher. Meanwhile, Job Satisfaction (Y) is an endogenous variable consisting of five indicators: satisfaction with salary,

satisfaction with the job, satisfaction with promotion, attitude of superiors (supervision), and satisfaction with coworkers.

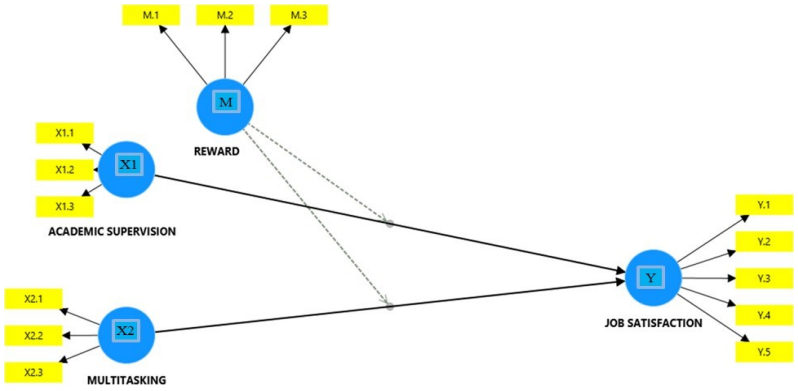
Table 1. Measurement of constructs, manifest variables, and indicators

Latent Variable 1.	Manifest Variables	Indicator
Academic supervision (X1)	Academic supervision planning (X1.1)	1) Supervisors emphasize the goals, objectives, and strategies of supervision 2) Systematize academic supervision activities 3) Establish a schedule for supervision 4) Formulate supervision instruments and rubrics
	Implementation (X1.2)	1) Supervisors understand the frameworks, principles, characteristics, attributes, and trends associated with each academic discipline within the school. 2) Supervisors foster teachers in the preparation of syllabi, lesson plans/modules, and learning objectives for each subject development area at school. 3) Apply methodologies aligned with the objectives of academic supervision and the challenges faced. 4) Supervisors assess and observe the instructional process carried out by educators. 5) Supervisors apply a variety of strategies by the chosen method 6) Supervisors assist educators in evaluating learning outcomes 7) The supervisor supports the educator in formulating a program for follow-up 8) Supervisors monitor students' academic performance 9) Supervisors monitor the progress of teachers' professional development and pedagogical competencies
	Evaluation and follow-up (X1.3)	1) Submission and reporting of supervision results 2) Evaluation and assessment of supervision results 3) Strengthened supervision and follow-up programming
Multitasking (X2)	Ability to Manage Time (X2.1)	1) Ability to manage time 2) Ability to complete tasks on time 3) Ability to prioritize tasks
	Flexibility (X2.2)	1) Adaptability to changing situations 2) Ability to complete tasks in various ways 3) Ability to work under pressure 4) Ability to handle distractions 5) Ability to switch between tasks smoothly
	Priority (X2.3)	1) Ability to prioritize tasks 2) Ability to focus on essential tasks 3) Ability to complete important tasks first
Reward (M)	Types of rewards given to teachers (M1)	1) Recognition of teacher achievement from the school or government 2) Bonuses or financial incentives based on teacher performance. 3) Opportunities to develop professional competencies (training or further study). 4) Non-financial, such as giving challenging assignments or certificates.
	The value of the award given to the teacher (M2)	1) Appropriateness of salary and benefits to performance 2) Correspondence of bonus value to achievement 3) Value of non-financial rewards
	How often rewards are given to teachers (M3)	1) Frequency of salary and allowances 2) Frequency of bonus provision 3) Frequency of non-financial rewards
Job Satisfaction (Y)	Job satisfaction with salary (Y1)	1) Salary match with qualifications and work experience 2) Salary matches with standard of living 3) Fair and transparent salary increases
	Job satisfaction with the job itself (Y2)	1) Job suitability with interests and talents 2) Challenge and variety in work 3) Meaning and value of work
	Job satisfaction with promotion (Y3)	1) Fair and transparent opportunities for promotion 2) Clarity of criteria and requirements for promotion 3) Recognition of achievements and performance
	Job satisfaction with supervisor attitude (supervision) (Y4)	1) Support and attention from superiors 2) Clarity of feedback and direction from superiors 3) Trust and respect from superiors
	Job satisfaction with coworkers (Y5)	1) Cooperation and mutual help among coworkers 2) Open and effective communication between coworkers. 3) Positive and supportive work atmosphere

The questionnaire was designed using a modified instrument of the Minnesota Satisfaction Questionnaire (MSQ) to measure and assess job satisfaction (Weiss et al., 1967) and the Supervisory Behavior Description Questionnaire (SBDQ) to evaluate academic supervision (Fleishman, 1989). Each question in the questionnaire used a Likert scale. The data collection procedure utilized the Google Forms platform. Data collected from surveys and questionnaires were then examined through descriptive and inferential statistical techniques. The data were analyzed with SmartPLS 4 through the Structural Equation Modeling Partial Least Squares (SEM-PLS) method, which includes the outer model and Inner model analysis. The outer model in the context of path analysis is a component of the

structural equation model used in the Partial Least Squares Path Modeling analysis method (Edeh et al., 2023).

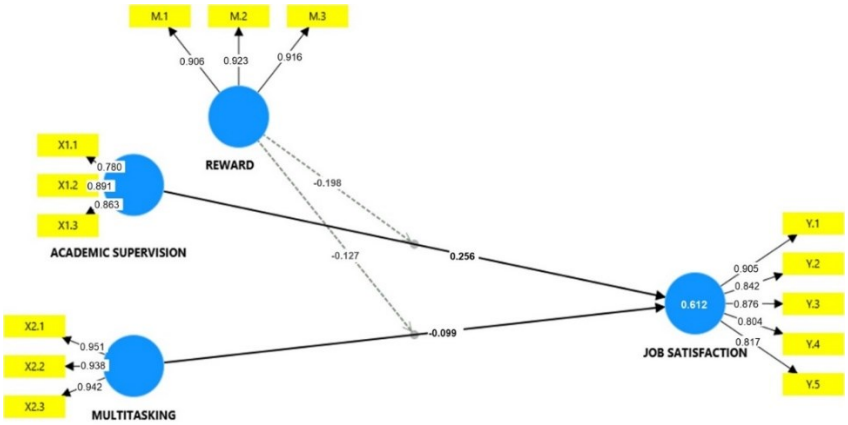
Figure 1. presents a conceptual model of Teacher Job Satisfaction influenced by academic supervision and multitasking and moderated by reward.



Results

PLS outputs here report measurement estimates and are based on structural models on modeling and analysis of variables or composite indicators (see Figure 2). The following is the development of the *outer model* in this study:

Figure 2. Outer Model Testing



The *outer loading* value of each indicator in this study is shown in Table 2.

Table 2. Outer Loading Value of Each Indicator

Indicator	Outer Loading	Description
M.1	0,906	Valid
M.2	0,923	Valid
M.3	0,916	Valid
X1.1	0,780	Valid
X1.2	0,891	Valid
X1.3	0,863	Valid
X2.1	0,951	Valid
X2.2	0,938	Valid
X2.3	0,942	Valid
Y.1	0,905	Valid
Y.2	0,842	Valid
Y.3	0,876	Valid
Y.4	0,804	Valid
Y.5	0,817	Valid

Upon thorough examination of the data illustrated in the table, it is clear that the external loading values associated with each indicator show significant stability, given that they all exceed the critical threshold value of 0.7, which is widely recognized in the field as an acceptable standard for assessing the dependability and validity of measurement tools instruments. Each variable in this study has a *Cronbach's Alpha* value for each variable shown in Table 3.

Table 3. Cronbach's Alpha Value of Each Variable

Variables	Cronbach's Alpha
Job Satisfaction	0,903
Reward	0,903
Academic Supervision	0,802
Multitasking	0,939

Table 3. shows that each variable mentioned has a value exceeding 0.7. Therefore, all variables applied in this study are consistent in each measurement. Thus, all these variables can be used in this research framework. Each variable in this study has a Composite Reliability value shown in Table 4.

Table 4. Composite Reliability Results for Each Variable

Variables	Composite Reliability
Job Satisfaction	0,928
Reward	0,939
Academic Supervision	0,883
Multitasking	0,961

By scrutinizing the Composite Reliability values, it is evident that all the variables considered have values that exceed the 0.700 threshold. This significant finding signifies that each variable used in the framework of this particular study adheres to the set Composite Reliability standards, thus ensuring that they are robust enough for analytical purposes. Therefore, it can be affirmed that all these variables are appropriate for inclusion and utilization in the ongoing research effort.

Table 5. Average Variance Extracted Test Results

Variables	Average Variance Extracted (AVE)
Job Satisfaction	0,722
Reward	0,837
Academic Supervision	0,716
Multitasking	0,890

Table 5. above shows that each variable has an *Average Variance Extracted* value that exceeds 0.5. Therefore, each variable used in this study can reflect the latent variable represented. Therefore, all variables can be used in this study. Several approaches can be used to test Discriminant Validity. Standard methods include the *Fornell-Larcker Criterion*, *Heterotrait-Monotrait* (HTMT), and *cross-loading*.

Table 6. Fornell-Larcker Criterion Test

Variables	Job Satisfaction	Multitasking	Reward	Academic Supervision
Job Satisfaction	0,850			
Multitasking	0,137	0,944		
Reward	0,588	0,240	0,915	
Academic Supervision	0,592	0,252	0,452	0,846

The data in the Table 6. shows that the correlation coefficients calculated between the various variables show significantly increased magnitudes when compared to other related variables. These results indicate that the test based on the Fornell-Larcker Criterion has been successfully met.

Table 7. Heterotrait-Monotrait (HTMT)

Variables	Job Satisfaction	Multitasking	Reward	Academic Supervision
Job Satisfaction				
Multitasking	0,146			
Reward	0,647	0,261		
Academic Supervision	0,690	0,290	0,521	

The data presented in the table clearly show that the HTMT (Heterotrait-Monotrait) ratio for each variable consistently falls below the critical threshold value of 0.850. This data analysis indicates that each variable meets the initial HTMT criterion and fulfils Discriminant Validity. The following table illustrates the cross-load values corresponding to each indicator.

Table 8. Cross Loading Value of Each Indicator

Indicator	Job Satisfaction	Multitasking	Reward	Academic Supervision
M.1	0,524	0,178	0,906	0,373
M.2	0,538	0,258	0,923	0,442
M.3	0,550	0,223	0,916	0,424
X1.1	0,442	0,197	0,266	0,780
X1.2	0,560	0,242	0,426	0,891
X1.3	0,490	0,198	0,435	0,863
X2.1	0,152	0,951	0,225	0,226
X2.2	0,109	0,938	0,233	0,244
X2.3	0,124	0,942	0,224	0,246
Y.1	0,905	0,120	0,493	0,515
Y.2	0,842	0,101	0,459	0,520
Y.3	0,876	0,109	0,454	0,488
Y.4	0,804	0,111	0,502	0,476
Y.5	0,817	0,138	0,572	0,509

After evaluating the cross-loading coefficients of each indicator used in this investigation, all indicators showed cross-loading values exceeding the threshold of 0.700, indicating the strongest correlation with the corresponding latent variable. As a result, there is no need to eliminate any indicators from the analysis.

Table 9. Collinearity Statistics (VIF) Test Results

Indicator	VIF	Description
M.1	2.713	Valid
M.2	3.090	Valid
M.3	2.844	Valid
X1.1	1.531	Valid
X1.2	1.964	Valid
X1.3	1.860	Valid
X2.1	4.280	Valid
X2.2	4.179	Valid
X2.3	4.134	Valid
Y.1	3.953	Valid
Y.2	2.437	Valid
Y.3	3.499	Valid
Y.4	1.961	Valid
Y.5	2.027	Valid

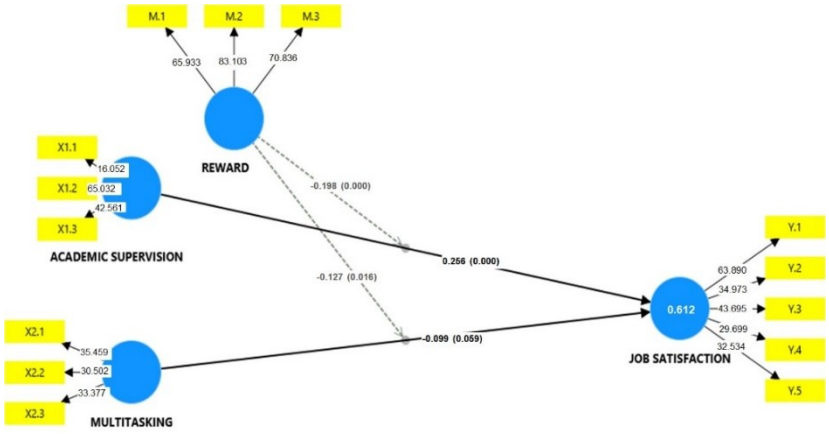
According to the data in the previous table, each indicator shows a Variance Inflation Factor (VIF) value below the threshold of 5. Consequently, it can be concluded that multicollinearity problems only exist among some of the variables in the construct. Model fit output are presented in Table 10.

Table 10. Model Fit Output

	Saturated Model	Estimated Model
SRMR	0,055	0,075
d_ULS	1.143	2.142
d_G	2.426	2.597
Chi-Square	1742.094	1814.689
NFI	0,708	0,696

The data presented in the previous table shows that the SRMR value in the *saturated model* is 0.055 <0.08, while in the *estimated model,* it is 0.075 <0.08. Based on this comparison, it can be concluded that the model made meets the standards of model feasibility and can be said to be fit. In this research, inner model analysis involves various methods, including R Square testing, T Statistic for hypothesis testing, and Q Square measurement.

Figure 3. Inner Model Test Model



The R-Square metrics for each of the dependent variables examined in this study are encapsulated in Table 11.

Table 11. R Square Test Results

Variables	R Square	R Square Adjusted
Job Satisfaction	0,612	0,598

Based on Table 11. it can be concluded that the job satisfaction variable is influenced by the independent variable by a factor of 0.612, or equivalent, 61.2%, while the remaining 38.8% is determined by other variables outside this study's analysis. The following are the results of the Q Square test.

Table 12. Q Square Results

	SSO	SSE	Q^2 (=1-SSE/SSO)
Job Satisfaction	1060,000	614.851	0,420

As mentioned above, the table illustrates that the *Q Square* value for the Job Satisfaction variable is 0.420, which exceeds 0. Thus, it can be concluded that the independent variables demonstrate substantial capacity to predict the Job Satisfaction variable effectively. The following are the results of testing *path coefficients*.

Table 13. Hypothesis Test Results

Construct	T Statistics (|O/STDEV|)	P Values	Hypothesis	Description
Academic Supervision -> Job Satisfaction	4.378	0,000	H1	Accepted
Multitasking -> Job Satisfaction	1.889	0,059	H2	Rejected
Reward x Academic Supervision -> Job Satisfaction	3.657	0,000	H3	Accepted
Reward x Multitasking -> Job Satisfaction	2.404	0,016	H4	Accepted

Based on the output obtained from the SmartPLS analysis presented above, it can be conclusively affirmed that the relationship between Academic Supervision and Job Satisfaction is indeed significant, as evidenced by the P-value of 0.000, which is significantly less than the 0.05 threshold and the accompanying T Statistic value of 4.378, which exceeds the critical value of 1.96. Consequently, this leads to the acceptance of hypothesis H1, which suggests that Academic Supervision exerts a considerable and statistically significant effect on the level of job satisfaction.

Table 14. Activities that require the use of technologies for which there was an increase in the self-perception of competence after the beginning of the pandemic

Activity	Level of Competition	2020	2021
Do a job in Word by formatting it well	I never did	3%	-
	You could do it with help	22%	9%
	I can do it alone	75%	91%
Make an Excel spreadsheet by uploading a list of classmates and telephone numbers of each one	I never did	9%	9%
	You could do it with help	44%	34%
	I can do it alone	47%	57%
Send an email with a document or image attached	I never did	9%	-
	You could do it with help	9%	6%
	I can do it alone	82%	94%
Edit the size or color of an image using Paint or an app on your phone	I never did	-	-
	You could do it with help	31%	12%
	I can do it alone	69%	88%
Share a document with another person using collaborative tools (e.g. Google Drive)	I never did	19%	3%
	You could do it with help	22%	9%
	I can do it alone	59%	88%
Create videos	I never did	28%	-
	You could do it with help	34%	31%
	I can do it alone	38%	69%

Discussion

Job Satisfaction experienced by employees

On the other hand, when examining the effect of Multitasking on Job Satisfaction, the analysis revealed P Values of 0.059, which exceeds the 0.05 threshold, and a T Statistic value of 1.889, which is also less than 1.96, thus indicating that multitasking has no significant impact on Job Satisfaction. Consequently, hypothesis H2 is rejected, indicating a lack of substantial relationship between the two variables. Furthermore, concerning the moderating role of reward in the interaction between Academic Supervision and Job Satisfaction, the analysis yielded P Values of 0.000, which is significantly lower than the critical value of 0.05, in addition to a T Statistic of 3.657, which surpasses the required threshold of 1.96. This evidence strongly supports the acceptance of hypothesis H3, suggesting that reward plays an influential moderating role in enhancing the positive influence of Academic Supervision on Job Satisfaction. In addition, the analysis regarding the interaction between Reward and Multitasking on Job Satisfaction presents a P-value of 0.016, which is again lower than the 0.05 benchmark, and a T-statistic of 2.404, thus confirming that reward also serves to moderate the relationship between Multitasking and Job Satisfaction. Therefore, hypothesis H4 is accepted, confirming that the presence of reward significantly influences how multitasking affects Job Satisfaction, further contributing to understanding this complex interrelationship within the framework of Academic Supervision.

The Effect of Academic Supervision on Teacher Job Satisfaction

Academic supervision is an important determinant that significantly affects teachers' job satisfaction. Empirical evidence suggests proficient supervision can improve teachers' motivation and job satisfaction (Toropova et al., 2021b). This study's findings revealed that the P value relating to the effect of academic supervision on job satisfaction was 0.000, signifying a statistically significant effect. Furthermore, the T Statistic value of 4.378 indicates that this influence is strong and affirmative. Interestingly, this important finding aligns with previous studies that have established that support from superiors and adequate supervision can increase teacher job satisfaction (Lopes & Oliveira, 2020).

In this scientific context, academic supervision serves not only as supervision but also as a form of professional support for educators (Ampofo et al., 2019). When teachers feel that they receive constructive supervision, they are more likely to experience a sense of fulfillment in their professional role. For example, a comprehensive study conducted by Iwu et al. (2018b) provided strong evidence that educators who obtained affirmative and constructive feedback from their supervisors reported increased levels of job satisfaction. Thus, this implies that the dynamics between educators and supervisors directly influence educators' perceptions of their professional experiences. Supervision by the school principal has a positive impact on teacher professionalism and the quality of education (Yani et al., 2024).

Nonetheless, it is crucial to recognize that not all supervision modalities produce positive outcomes. Overly strict supervision or a lack of opportunities for teachers to innovate can result in feelings of dissatisfaction. Consequently, a fair and collaborative approach to supervision is essential to ensure that educators perceive themselves as valued and supported in their professional growth (Hoque et al., 2020; Olsen & Huang, 2019). In addition, research has shown that productive working conditions and collegial support can enhance the beneficial effects of academic supervision on job satisfaction (Wang et al., 2020a). In other words, a positive and collaborative organizational culture can magnify the effects of adequate supervision, thus fostering a more satisfying work environment for educators. These findings reinforce the importance of adequate academic supervision in enhancing teachers' job satisfaction. With the proper support, educators can experience increased motivation and engagement in their professional duties, which ultimately positively influences the quality of education they provide.

The Effect of Multitasking on Teacher Job Satisfaction

Multitasking is common among teachers, especially in the contemporary digital era. Nonetheless, the consequences of multitasking on teacher job satisfaction remain a topic of ongoing scholarly discourse. The investigation findings show that the P-values relating to the impact of multitasking on job satisfaction are 0.059, indicating that the effect has no statistical significance. In addition, the statistical T-score of 1.889 further suggests that the impact of multitasking on job satisfaction is not strong enough to be established as a credible hypothesis.

Previous investigations have shown that multitasking can escalate workload and stress, reducing job satisfaction (Kreuzfeld & Seibt, 2022). Educators who are forced to multitask often report feeling overwhelmed and find it difficult to dedicate full attention to each task, potentially leading to decreased teaching quality and job satisfaction. For example, an extensive investigation by Jamian et al. (2020) explained that when teachers work on multiple tasks, many reports mentioned increased stress levels alongside reduced job satisfaction.

Conversely, there is a counter-argument that multitasking can increase efficiency in specific contexts. Sometimes, educators adept at managing multiple responsibilities at once can experience a sense of fulfillment from achieving more in a compact timeframe. However, this phenomenon significantly depends on contextual factors and the methods used by educators in organizing their workload (Khan et al., 2022). Thus, schools should foster an environment that facilitates educators' effective management of multitasking responsibilities. Training and developing time management competencies can empower educators to perform their tasks efficiently without compromising the quality of their instructional delivery. In summary, while multitasking has the potential to increase productivity, its effect on educators' job satisfaction requires scrutiny. Without adequate support and a strategic framework, multitasking can become a burden that adversely affects teacher job satisfaction and overall performance.

The Effect of Reward on PE Teacher Job Satisfaction

Reward is a significant determinant of teachers' professional satisfaction. This study's findings indicate that reward moderates the relationship between academic supervision and Multitasking concerning job satisfaction, reflected by P-Values of 0.000 and 0.016, respectively. The statistical T-values of 3.657 and 2.404 further underscore the apparent significance of rewards in this context.

Rewarding educators through financial incentives and non-financial recognition has increased their motivation and overall job satisfaction (Puni et al., 2018). When teachers see that their efforts and achievements are recognized and rewarded in academic supervision, they are more likely to experience a greater sense of satisfaction regarding their professional role. Notably, many teachers show strong enthusiasm for professional development initiatives despite the many responsibilities given to educators beyond their instructional duties, such as participating in external training programs (Kohnke, 2021). This enthusiasm persists even in the context of differences between the priorities set by training providers (i.e., universities) and those aspects that educators perceive as most favorable for improving their pedagogical practice. However, the professional development activities chosen tend to emphasize the exchange of practical teaching methodologies (e.g., informal discussions, mentorship) rather than recognizing those involved in conferences and workshops that need more systematic integration.

In addition, rewards take on an essential role in the realm of multitasking. Educators who are adept at navigating multitasking and then receive recognition for such achievements typically report increased levels of job satisfaction. The emerging idea is that a well-structured reward system can be an influential mechanism to increase job satisfaction, especially in high-pressure scenarios such as multitasking. However, it is crucial to recognize that not all rewards have an equal effect. According to Harter et al. (2002), carefully designed rewards that align with teachers' specific needs tend to be more effective in increasing job satisfaction than those that are generic and unimportant. This statement is further substantiated by Hussain et al. (2022), who state that it is essential for educational administrators to discern educators' preferences and formulate appropriately customized reward systems. In summary, rewards are essential in mediating the effects of academic supervision and multitasking on teacher job satisfaction. By implementing an appropriate reward framework, educational institutions can foster a more satisfying and productive work atmosphere for teachers.

Previous research has mainly concentrated on the direct effects of academic supervision and multitasking on job satisfaction, often neglecting potential influences (Brezicha et al., 2020; Iwu et al., 2018a). This investigation posits that rewards serve as incentives and mechanisms that can amplify the beneficial impact of academic supervision on educators' job satisfaction. The importance of rewards in this context is supported by motivational theories, including Skinner's reward theory (Saul McLeod, 2024), which states that rewards can augment desired behavior. In this context, when teachers perceive that their contributions are acknowledged and rewarded, they are more inclined to attain fulfillment in their occupational role. This perspective supports the idea that 'favorable' working conditions, including support from leadership, play an essential role in increasing teachers' job satisfaction.

Conversely, the negligible effect of multitasking on job satisfaction implies that while multitasking is a routine aspect of educators' daily responsibilities, it does not always exert a positive influence. Thus, inadequately managed multitasking (several tasks at a time, with varying difficulty levels) can lead to increased stress levels and decreased job satisfaction. Consequently, rewards can serve as a mechanism to motivate educators amidst the challenges posed by multitasking, promoting increased job satisfaction.

Conclusions

Ultimately, the research findings reveal that academic supervision is essential in determining teachers' job satisfaction, while multitasking does not seem to have a prominent effect. The reward concept is a moderator that enhances the correlation between academic supervision and multitasking concerning job satisfaction. These results offer important insights for policymakers in the education domain to formulate strategies and practices to improve teachers' job satisfaction, ultimately producing beneficial effects on the overall quality of education. Schools can develop more effective reward programs by recognizing that rewards can mediate the relationships between academic supervision, multitasking, and teacher job satisfaction. This approach will increase physical education teacher motivation levels and positively influence the quality of education they provide. Consequently, school management must consider implementing a reward system aligned with teachers' needs, thus fostering a more supportive and fulfilling professional environment. A comprehensive longitudinal study could investigate the ongoing contribution of reward systems to teacher job satisfaction, retention, performance, and student achievement. Such findings would empower policymakers to design reward strategies that reflect well-established and significant long-term outcomes.

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