



Impact of Teacher Motivation on Student Engagement and Classroom Behavior in Secondary Schools

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Abstract

This paper seeks to establish selected elements of teacher motivation to their respective effects on classroom behaviours, of particular interest are Intrinsic motivation, Extrinsic motivation, job satisfaction and professional development. This study adopted a quantitative method; 150 teachers from different schools in Makassar City were administered questionnaires, and regression analysis was used to test the level of teacher motivation and classroom dynamics. The findings show that type of motivation plays a huge role in the classroom, with self-interest having the greatest impact on student attentiveness. It also shows that job satisfaction is reducing rate of poor classroom behavior and enhancing teacher-student communication, while professional development enhances teacher student relationship. The results of extrinsic motivation were also noticeable but lower than intrinsic motivation. The research findings offer an important contribution to future research in the field, as they offered an overall picture of teacher motives and their implications for different aspects of classroom dynamics. The study has focused on the need for education policies that encourage the growth of intrinsic motivation through organisational work culture and staff due process. This shows that by addressing motivation at this level schools are likely to create teacher incentive of the positive environment that is most likely to enhance the learning process of the students. The study has practical implications to upgrading the educational practices; it is recommended that increasing the level of teacher motivation leads to development of better classroom climate, therefore promoting a better education.

Introduction

Motivation is an important ingredient in the teaching – learning process as it determines a number of features related to the process. Over the past few years, the concept of motivation for an instructor, to boost classroom climate has gained some level of acceptance. While the motivated teachers I observed not only work harder, but also help to create a positive environment in the classroom for students and contribute an effective performance in the academic achievements of students. In the conception of motivation as a person's internal determination to get a behaviour done, motivation has been examined from various perspectives such as the teaching and learning achievement motivation forcasters (Brown, 2023; Ryan et al., 2021). Nevertheless, there is a lack of study that examines how this specific teacher motivation contributes to the various aspects of the classroom environment since motivation is a broader concept of student learning, classroom behaviour and interaction pattern between the teacher and the students.

Classroom time effects involve the relations between the teacher and learners, and the surrounding environment that influences learning and teaching processes (Frenze et al., 2021; Kilag & Sasan, 2023). Classroom climate refers to the organization structures that pertain to learners' reactions, the teacher-pupil relationships and the learning environment. This is primarily because high motivated teachers are likely to facilitate a classroom environment that will elicit active students' participation and positive behavior as deduced. On the other hand, lack of motivation to teach results in students who are unmotivated, disruptive, and unruly and bring the learning environment down (Rone et al., 2023).

This leads to the second principal component of teacher motivation which is intrinsic and extrinsic motivation. Intrinsic motivation is defined as working on activities for the purpose of the activities' interest and enjoyment (Khalilzadeh & Khodi, 2021; Hyseni & Hoxha, 2021). Whereas, extrinsic motivation is when people are motivated by an outside force such as pay, employment security or even appreciation. Intrinsically motivated teachers were found to provide positive classroom climate since their enthusiasm created positive climate in the classroom (Morris et al., 2022). Extrinsically motivated teachers may not show high level of classroom enthusiasm and may be self-motivated only by extrinsic rewards, which might bring constructive effects in teaching activities but might harm the atmosphere in the classroom and the students' activity (Lan, 2022).

It postulates that teacher motivation does not solely affect the teacher but rather, a major determinant of the learning circumstances. The teacher motivation can also increase effectiveness in instruction by practicing desirable teaching strategies, enhancing student conduct and developing a favorable tone of learning environment for students. Teacher-student relationship and positive classroom climate, with high levels of student involvement, appropriate behavior and quality interactions, In the present study of classroom organization and management it has been postulated that such features of student demeanour do enhance student achievement and wellbeing (Li et al., 2022; Walker & Graham, 2021). On the other hand, negative classroom climate, characterized by poor student behaviour, learners' disengagement and low motivation are likely to result in negative effects such as reduced students' academic performance and increased teacher stress and burn out (Wang et al., 2022; Hoffmann et al., 2021).

There are many prior works that have examined the link between teacher motivation for work and student performance but limited research has attempted to understand the impact of the motivation given specifically to teachers on the particular classroom environment. Lauermann & Berger (2021) define correlation between motivation and engagement of the teacher as well as their learners, by stating teachers' motivation levels determine the level of engagement in the classroom. Ma et al. (2020) also have shown that if teacher motivation is high, teacher-student relations were of higher quality so the behavior of learners and learning outcomes were influenced. Such results stress needs for research regarding the origins of teacher motivation as well as the impact of its various forms on the social context of a class.

In many educations' context, motivation of teachers depends on number of factors which include work pressure, organizational support, professionalism and perception of the teacher, about teaching and learning process. As Darling-Hammond et al stated in their article of 2009, teacher motivation is always associated with access to resources, support, and professional development. If teachers are supported by their administrators and other teachers, they are likely to be motivated and put on a positive touch on the classroom (Zhang et al., 2021). On the other hand, teachers who have some of the barriers like low salary, no resources, poor working conditions they are likely to be demotivated thus; negative classroom outcomes (Leal et al., 2021).

The effects of motivation on classroom environment are most evident when learners from diverse cultural and economic backgrounds are taught. Informed teachers are better placed for handling diversity in their classrooms; relations, embracing and nurturing students in every class, (Markey et al., 2021). Teachers who are not motivated may not be able to facilitate student learning to learners with different background and this led to learner disengagement and behavioral problems (Filgona et al., 2020).

As more research is done on the motivational aspects of teachers, there is still a dearth of integrative papers that give quantitative insight into how teacher motivation does impact classroom processes. Many previous research works are directed at general impacts of teacher motivation on students' performance and teachers' productivity (Bardach & Klassen, 2021). There is a dearth of evidence-based research that targets the relationship between teacher motivation and components of detailed classroom processes, meaning the behaviour, participation and interpersonal interactions between the teacher and the students. This lack of research is what had encouraged this study to provide a closer look at the direct and indirect consequences of teacher motivation on the classroom situations.

Based on these considerations, the purpose of this study will be to examine the correlation between teacher motivation and classroom phenomena, with special emphasis on the interaction of motivation with students' engagement, behavior and the Teacher Student Interactions. Because this research aims at comparing the impact of teacher motivation on the overall classroom environment, it is appropriate that it adopts a quantitative method. It is anticipated that the results of this study will help advance understanding of teacher motivation as it relates to the classroom environment and classroom climate and provide useful recommendations for practice to educators, school leaders, and policymakers interested in enhancing the quality of instruction and student achievement.

Method

This study employed a quantitative research design to investigate the relationship between teacher motivation and classroom dynamics. The primary objective was to analyze how teacher motivation influences various aspects of classroom dynamics, including student engagement, classroom behavior, and teacher-student interactions. A survey-based approach was adopted to collect data from teachers and students in selected schools.

The participants in this study were 200 teachers and 1,000 students from public and private schools in the city of Makassar, Indonesia. The teachers had varying years of experience, ranging from 2 to 20 years, and taught in different subject areas. The student participants were selected from grades 7 to 12 and included a diverse group in terms of socio-economic background, ethnicity, and academic performance. The sample size was determined using a power analysis to ensure sufficient statistical power for detecting meaningful relationships between variables.

A stratified random sampling technique was used to select the schools and participants. First, a list of schools in Makassar was obtained, and schools were categorized by type (public and private) and level (secondary schools). Within each category, schools were randomly selected to ensure a representative sample. Teachers from these schools were invited to participate, and student participants were chosen from the classrooms of the selected teachers. Consent forms were distributed to both teachers and students, and participation was voluntary. The final sample included 200 teachers and 1,000 students, with each teacher having an average of 5 students completing the survey.

Two primary data collection instruments were used in this study: a teacher motivation questionnaire and a classroom dynamics survey. Both instruments were developed specifically

for this study and were designed to measure key variables related to teacher motivation and classroom dynamics. This instrument was adapted from the Teacher Motivation Scale (TMS) and consisted of 24 items designed to assess both intrinsic and extrinsic motivation factors. The questionnaire included items related to teachers' passion for teaching, satisfaction with their work, professional development opportunities, and external rewards such as salary and recognition. Respondents were asked to rate each item on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree." This survey was developed based on previous research on classroom environment and dynamics. It consisted of 30 items focusing on key aspects of classroom dynamics, including student engagement, classroom behavior, and teacher-student interactions. Teachers and students were asked to evaluate various classroom behaviors and interactions, such as the level of student participation, cooperation, and disruptive behavior. The survey used a 5-point Likert scale, ranging from "never" to "always."

Data collection was conducted over a three-month period. The teacher motivation questionnaires were distributed to teachers during professional development workshops, and they were asked to complete the surveys within a week. The classroom dynamics surveys were administered to students in the selected classrooms, with teachers' consent. Students were provided with instructions on how to complete the survey, and responses were collected anonymously to ensure confidentiality. The surveys were collected and compiled by the researcher's assistants.

After the data collection process, the completed surveys were checked for completeness, and any incomplete responses were excluded from the analysis. The final dataset consisted of 180 valid teacher motivation questionnaires and 900 student classroom dynamics surveys.

The data were analyzed using descriptive and inferential statistical techniques. Descriptive statistics, such as means, standard deviations, and frequency distributions, were used to summarize the demographic characteristics of the participants and the overall scores for teacher motivation and classroom dynamics.

Inferential statistics were employed to test the research hypotheses and examine the relationships between teacher motivation and classroom dynamics. Multiple regression analysis was used to assess the impact of teacher motivation on classroom dynamics, including student engagement, classroom behavior, and teacher-student interactions. Pearson correlation coefficients were also calculated to explore the strength and direction of the relationships between the variables.

Additionally, structural equation modeling (SEM) was used to examine the direct and indirect effects of teacher motivation on classroom dynamics. This method allowed for a more comprehensive understanding of how different dimensions of teacher motivation influenced various aspects of classroom dynamics, controlling for potential confounding variables such as years of experience and school type. All analyses were conducted using SPSS and AMOS software, and a significance level of 0.05 was used for hypothesis testing.

Result and Discussion

Teacher motivation which encompasses both intrinsic and extrinsic factors, directly influences classroom dynamics, including student engagement, classroom behavior, and teacher-student interactions. A motivated teacher is more likely to implement effective teaching strategies, create positive classroom environments, and foster meaningful connections with students. This study sought to explore the relationship between various dimensions of teacher motivation and key elements of classroom dynamics. By examining these connections, the study aimed to contribute to a deeper understanding of how teacher motivation impacts student outcomes and classroom behavior, providing insights that can guide educational practices and policies. The

following sections present the findings of this research, shedding light on the specific ways in which teacher motivation influences the classroom environment.

Table 1. Demographic Characteristics of Participants

Variable	Category	Frequency (n)	Percentage (%)
Teachers			
Gender	Male	90	50.0
	Female	90	50.0
Age Group	20–30 years	60	33.3
	31–40 years	70	38.9
	41–50 years	40	22.2
	51+ years	10	5.6
Years of Teaching Experience	2–5 years	60	33.3
	6–10 years	70	38.9
	11–20 years	50	27.8
Students			
Gender	Male	480	53.3
	Female	420	46.7
Age Group	12–15 years	500	55.6
	16–18 years	400	44.4
Academic Performance	Low	300	33.3
	Moderate	400	44.4
	High	200	22.2

Table 1 presents the demographic characteristics of the participants in the study. It includes the gender, age group, and teaching experience for the teachers, as well as the gender, age group, and academic performance levels for the students. This table provides an overview of the diversity and composition of the sample.

Table 2. Descriptive Statistics for Teacher Motivation

Dimension	Mean	Standard Deviation (SD)	Range
Intrinsic Motivation	4.15	0.85	1–5
Extrinsic Motivation	3.60	0.90	1–5
Job Satisfaction	4.30	0.70	1–5
Professional Development	3.85	0.80	1–5

Table 2 displays the descriptive statistics for teacher motivation. The mean scores reflect the overall levels of intrinsic and extrinsic motivation, job satisfaction, and professional development. The values indicate that teachers generally report high levels of intrinsic motivation and job satisfaction, with moderate levels of extrinsic motivation and professional development satisfaction.

Table 3. Descriptive Statistics for Classroom Dynamics

Dimension	Mean	Standard Deviation (SD)	Range
Student Engagement	4.10	0.78	1–5
Classroom Behavior	3.75	0.82	1–5
Teacher-Student Interaction	4.00	0.72	1–5

Table 3 provides the descriptive statistics for classroom dynamics, focusing on student engagement, classroom behavior, and teacher-student interactions. The mean values indicate

that students report generally high levels of engagement and positive interactions with teachers, with moderate reports of classroom behavior.

Table 4. Correlation Matrix Between Teacher Motivation and Classroom Dynamics

Variable	Student Engagement	Classroom Behavior	Teacher-Student Interaction
Intrinsic Motivation	0.56	0.48	0.62
Extrinsic Motivation	0.42	0.40	0.47
Job Satisfaction	0.59	0.55	0.68
Professional Development	0.51	0.44	0.52

Table 4 displays the Pearson correlation coefficients between teacher motivation and classroom dynamics. All correlations are statistically significant ($p < 0.01$), indicating moderate to strong positive relationships between teacher motivation dimensions and various aspects of classroom dynamics. Higher intrinsic motivation, job satisfaction, and professional development are associated with more positive classroom dynamics, including greater student engagement, better classroom behavior, and stronger teacher-student interactions.

Table 5. Multiple Regression Analysis for Teacher Motivation Predicting Classroom Dynamics

Predictor	B	SE	β	t	p
Intrinsic Motivation	0.35	0.05	0.40	7.00	0.000
Extrinsic Motivation	0.15	0.06	0.18	2.50	0.013
Job Satisfaction	0.28	0.04	0.35	7.00	0.000
Professional Development	0.22	0.05	0.25	4.40	0.000

Table 5 presents the results of the multiple regression analysis examining the impact of teacher motivation on classroom dynamics. Intrinsic motivation, job satisfaction, and professional development were all significant predictors of classroom dynamics, with intrinsic motivation having the strongest effect ($\beta = 0.40$, $p < 0.01$). These results suggest that as teachers' intrinsic motivation and job satisfaction increase, classroom dynamics such as student engagement and teacher-student interactions improve.

Table 6. Structural Equation Modeling (SEM) Results for Teacher Motivation and Classroom Dynamics

Path	Estimate	S.E.	C.R.	p
Intrinsic Motivation → Engagement	0.30	0.05	6.00	0.000
Job Satisfaction → Behavior	0.25	0.05	5.00	0.000
Professional Development → Interaction	0.20	0.04	5.00	0.000

Table 6 presents the structural equation modeling (SEM) results, which show the direct effects of teacher motivation factors on classroom dynamics. Intrinsic motivation had a significant positive effect on student engagement ($\beta = 0.30$, $p < 0.01$), job satisfaction influenced classroom behavior ($\beta = 0.25$, $p < 0.01$), and professional development impacted teacher-student interactions ($\beta = 0.20$, $p < 0.01$). These results further support the notion that teacher motivation plays a key role in shaping classroom dynamics.

The purpose of this research was to establish the impact that teacher motivation brings to the teaching learning process with emphasis on intrinsic motivation, extrinsic motivation, job satisfaction and professional development. This study shows that procedure motivation has a positive correlation with many elements of classroom dynamic, including student involvement,

classroom conduct, and teacher-student relationship. This discussion will contrast these findings to other what is currently known about teacher motivation as well as its implications for teacher practice and impact on classroom climate, as well as identify the limitations of current existing literature.

The findings of this study show that teacher motivation, self-generated motivation and job satisfaction in this study are central in facilitating positive behaviours in the classrooms. As posited by previous studies, intrinsic motivation was the strongest predictor of classroom patterning with a significant effect on student participation ($r = 0.40$). This is in consonance with Ryan & Deci (2020) proposal for the need to adopt intrinsic motives to increase teachers' interest and efficiency within the class. When teachers rely on internal motivation it is common for them to use enhanced and attractive teaching methods, which have an impact on the interactions of the students (Lepper & Malone, 2021).

This argument is supplemented by other studies having looked at how the motivated teacher fosters engagement which enhances student activity (Slemp et al., 2020). Through intrinsic motivation, teachers are most likely to promote behaviors that encourage the students' motivation hence, increases engagement (Bailey et al., 2021). On the other hand, extrinsic motivation positively affected classroom dynamics but seemed to have a weaker impact than intrinsic motivation; this finding supports the conclusions of scholarly literature indicating that extrinsic incentives (monetary reward, public recognition) exert comparatively less impact on cultivating sustained interest in classroom interactions (Zhang et al., 2023).

Regarding class conduct, the study conclusion was that job satisfaction was a determinant, a fact consistent with other research on the correlation between teacher satisfaction and conduct in the classroom. Satisfied teachers are more likely to cultivate good or correct attitude from their students since they know how to handle those students who misbehave. This is in agreement with other who stated that happy teachers are effective in matters relating to discipline of students as well as facilitating growth of the students' academics. These positive relationships indicate that improving conditions that increase teacher job satisfaction could be a way of improving classroom behavior.

Teacher classroom behaviour and use of time was also a candidate variable arising from this analysis as a predictor of classroom climate amongst which was professional development. Therefore, this finding complements the existing literature by arguing that teacher learning for continued professional development plays a crucial part in influencing teacher-student relationships. conducted previous research that highlighted the effect of professional development on teaching practices and students' performance, but the present research emphasise its effect on the quality of the interactions existing between teachers and students. Professional development helps teachers improved their ability for a positive interaction with their students, hence improving relationships with the students. This was in line with the study conducted that was established that teachers who attend professional development programmes being used display higher levels of empathy and understanding when dealing with students.

The general perception of teacher professional development as a positive influence in the school environment is well documented in the literature Nevertheless, there is a shortage of like for like with reference to the development of better-quality teacher-student relationships Thus, this study is unique. That professional development enhances interpersonal relations between teacher and learners underlines the need for supporting and developing teachers in different ways that cannot be achieved by programme-based education and training alone.

This paper is also a significant contribution to the literature in its consideration of the multifaceted nature of teacher motivation and the way in which this model considers the impact

of various sorts of motivation on other aspects of class interactions. Extending prior research that has focused on intrinsic motivation or job satisfaction for instance, this study includes multiple dimensions of teacher motivation and how they interconnectively impact student engagement, behavior in class, and perception of interaction with the teacher.

One other significant contribution is that unlike most previous studies that tested mediated effects of motivation, this study focused on the direct effects of teacher motivation on classroom. Prior research on the influence of teacher motivation has essentially targeted its effects on teaching performance and students' achievement, whereas residual research has examined the direct effect on classroom behavior. This study is an effort to meet that need by demonstrating how motivated teachers help to define classroom interactions and behaviors which will offer a much more comprehensive view of the teacher's role in the classroom learning process.

In addition, this work calls for professional development which has not been reported in the literature to have a positive impact on teacher-student relations. The study therefore supports the need for increased funding on professional development programmes which address teacher interpersonal skills in addition to the motor mechanics of teaching and learning that are encapsulated in Lesson Study.

There are important policy implications for educational policies and practice that can be derived from this study. policy makers should agree with the fact that they should encourage teachers' intrinsic motivation, proposing work contexts that promote autonomy, competence, and relatedness according Self-Determination. When a teacher is motivated at their workplace, they will ensure that they exhibit behaviour that will enhance positive aspects of class hence benefiting the students.

Employer responsibility towards raising job satisfaction among teachers should be pursued by leaders. By using the right resources in the teaching profession, offering teachers proper rewards, and professional development, teacher job satisfaction as well as the management of classroom can be improved. Moreover, the professional development should not only develop teachers' instructional practices with better quality, but also develop educational relationships between teachers and students, which in turn will promote positive teacher-student relationship.

Conclusion

Speaking of the main findings of this study it is pivotal to state that the level of motivation has a strong impact on classroom climate and the classroom climate depends on the levels of intrinsic motivation, job satisfaction and extent of professional development. The conclusion not only contributes substantiatively to the existing literature by presenting a multi-dimensional view of teacher motivation but also emphasise the need to cultivate intrinsically motivating organisational environment in which teachers can enrich themselves professionally as well as satisfy their jobs. To this end, motivation of the teachers will help shaped better classroom environment within the institutions thereby ensuring good teaching and attractive results from the learners.

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