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Management and Metacognition: An Insturctional Approach Influencing Students' Self-Regulated Learning

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ABSTRACT

The article was classroom management of secondary schools' teachers and metacognitive self-regulation and attitudes towards studying among students of South Punjab Pakistan. In the quantitative research, the sampling of 953 teachers in the secondary schools was undertaken on multi-stage stratified random selection. They were Teachers Classroom Management Questionnaire, adapted subscale on metacognitive self-regulation ability and an attitude scale of studies. The TCMF is eight-dimensional and includes seating arrangement, student-teacher relationship, and time management, use of writing board, classroom norms, conductive environment, appropriate instructional techniques and feedback. The findings no longer show any direct impact of classroom management on the metacognitive self-regulation and the attitude towards studying among the students. To some extent, classroom management is welcomed but the quality of teaching and engagement of students and structural constraints help to curtail its success in the attitude towards academic performance and self-control. The research also confirmed that in addition to classroom management training, and metacognitive plans, the formative feedback and positive school climate, it also improved the performance of the students. The future policy, teacher training and study must be based on the longitudinal, mixed-method research aimed at studying the classroom performance and improvement of the students.

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1. Introduction

One of the pillars of the pedagogical excellence that can have a direct effect on the academic ecosystem and determine major learning outcomes in the students is a strong classroom management. It goes beyond a disciplinary regulation to a structure of a learning environment, which is organized, dignified, and conducive to cognitive as well as affective interactions (Egeberg, McConney, & Price, 2021). The classification of classroom management is particularly definitive in the secondary school level where the adolescents have to cope with advanced developmental and educational demands. It establishes the antecedents of the further process of learning, including metacognitive skills and positive academic attitudes (Brunzell, Stokes, & Waters, 2019). The skills of planning, monitoring, and appraising personal approaches to learning have risen to prominence as an indicator of academic success and lifelong learning because of their ability to be metacognitively self-regulated (Padmanabha & Srinivas College of Education, 2020). Successful self-regulating learners are better equipped to set objectives, modify approaches to action in order to respond to task needs, and evaluate their learning insights that lead to more extensive and long-term learning (Cogliano, Bernacki, & Kardash, 2021). Simultaneously, the personal attitude of a student to studying, his or her motivation, perseverance, and attitude to academic activity are some of the most influential motivational

factors due to which the engagement and success depend (Sahin & Yilmaz, 2020). As a cognitive and an affective construct, these two outcomes are important educational outcomes that will assist students to become more competent and able to fulfill future challenges. The theoretical models presuppose a substantive correlation between the teacher practices and the following outcomes of the students. The Social Cognitive Theory (Bandura, 1986) is concerned with the reciprocal interaction between the environmental factors (including classroom management) and the individual factors.

In addition, good classroom administration can build up students in terms of their abilities and bond through the development of a secure, predictable, and supportive climate and thus prompt more beneficial perspectives towards academic effort in line with Self-Determination Theory (Ryan & Deci, 2000). However, as much as the two theories are closely related to each other, there is a deficiency of empirical data that could outline the real impact of the classroom management on the metacognitive self-regulation and study attitudes, particularly in a specific cultural and education context, like in Pakistan. Pakistani secondary school system with typical high classes, the lack of resources, and the examination orientation of teaching and learning (Jabbar & Dani, 2020) is a unique environment to study these processes. Here, it is necessary to comprehend how and whether the teacher management practices can be translated in to better student self-regulation and motivation to inform desired teacher training, and evidence-based policy reform. Therefore, the proposed research will investigate the association between classroom management and secondary school teachers and the capacity of metacognitive self-regulation and attitude of students in Pakistan towards studying. The study through this relationship hopes to provide empirical evidence to close the gap that exists between the hypothetical and classroom reality so that it can ultimately be used to inform the process of enhancing the quality and learning outcome of the students in the secondary schools.

2. Literature Review

An essential aspect of effective pedagogy is classroom management that is not limited to the concept of discipline but also the creation of an organized, pleasant, and engaging learning environment (Egeberg, McConney, & Price, 2021). It may be defined as a vast scope of competencies and strategies that teachers employ to make the classroom cleaner, systematized, and focused to devote as much time as possible to teaching and interacting with students (Wolff et al., 2015). Previously conflated with reactive discipline, a contemporary way, which rests on the research of theorists like (Good & Brophy, 2003), treats it as more holistically as the proactive development and maintenance of the classroom environment as conducive to teaching and learning to the fullest extent. This shift does point to the fact that management is a state of successful teaching, rather than a remedial and separate one (Egeberg, McConney, & Price, 2021). Recent researches deconstruct the classroom management into a series of dimensions that are related to each other. Emmer and Stough (2001) and Evertson and Neal (2006) assume that it is all the activities of the teachers to make sure that they engage students and work together. This will involve the establishment of expectations, routine and norms. Well-established and regular procedures help students in offloading the cognitive load in a way that the mental resources can be used on the learning activities rather than deciphering the environmental cues (Marzano & Marzano, 2003).

It is impossible to talk about the successful management outside of the curriculum delivery and pedagogical decision. It involves lesson planning, differentiation, use of different instructional strategies and timing so as to be sustainable and to accommodate diverse needs of students (Schipper et al., 2018). The affective aspect of management, which is based on the creation of positive, respectful, and trusting relations between the students and teachers, and peers is obligatory. These associations result in the climate of psychological security of students who can feel valued, and they are more eager to become risky academically and take help (Pianta, 1999; Sybing, 2019). This is the creation of the classroom environment and sitting position and the manner in which the resources are placed to facilitate the interaction, minimize distraction, and support the planned activities (Wu, Gao, & Shen, 2020). The self-regulation concept is metacognitive self-regulation (MSR), which refers to the ability of learners to plan, monitor, control and evaluate their cognitive activity and strategies to achieve learning goals (Padmanabha & Srinivas College of Education, 2020; Zimmerman, 2000). It is hypothesized that the connection between development of MSR and classroom management is synergistic(Ragmoun, Alfalih, & Alfalih, 2017; Ragmoun & Alwehabie, 2020). Low-threat predictable environment Metacognition is successful in a well-managed classroom. Without the

necessity to struggle against unpredictability or face social threat, students can perform the process of reflective thinking that is required to execute self-regulation (Egeberg, McConney, & Price, 2021). Specifically, the managerial practice directly scaffolds MSR: the teachers will be able to model metacognitive strategies through think-aloud (instructional management), through structured self-assessment and goal-setting opportunities (procedural management), and through formative feedback that can support self-reflection, but not correction (Wisniewski, Zierer, & Hattie, 2020). Further, the existence of a good relational climate encourages students to clarify their ideas, confess their lack of understanding, and overcome learning difficulties jointly, which are all metacognitive processes (Sybing, 2019). Consequently, classroom management can be viewed as the structure of external frames which make the inner process of self-regulatory capacity possible. Student attitude towards study refers to a complex of motivation, beliefs, emotions and behavioural tendencies that are aimed at studying (Filgona et al., 2020).

One of such approaches is the expectancy-value theory (Wigfield & Eccles, 2000), which holds that motivation is obtained as a result of anticipation of accomplishment and perceived value of an activity. Classroom management has a tremendous influence on both. The atmosphere of stress and punishment could lead to anxiety and helplessness that reject expectancy among students to perform well. Conversely, a well-structured classroom can enhance students with respect to clarity, fairness and support that, on the other hand, boosts confidence in their abilities to perform (Korpershoek et al., 2020). Procedural clarity and good time management make tasks more accessible resulting in less frustration and increase expectancy(Ahmed, Azhar, & Mohammad, 2024; Mohammad & Ahmed, 2017). Similarly, in the case of attainment value (personal importance) and utility value (usefulness) students develop toward school work, relational management of teachers who demonstrate care and respect can increase the end result (Wigfield & Eccles, 2000). Another aspect that can be considered as intrinsic value is the instructional management that will be involved to relate the content with the interests of the students and apply the active learning strategies. The article by Poulou (2020) confirms the fact that classroom control is perceived as a good attitude towards the classroom, engagement growth, and academic perseverance. Despite the fact that the principles of effective classroom management are usually studied, their application and impact is too situational. Such problems as high classes, low resources, rigid curricula, and exams pressure are general weaknesses of the system faced by teachers in such places as Pakistan (Batra, 2019; Mughal, Aldridge, & Monaghan, 2019). These constraints can be maintaining a bias to order and content coverage over the fine, student oriented managerial activities which facilitate MSR and positive attitudes in the best way. The studies conducted in similar environments propose that authoritative control can better supplement the management patterns to maintain order in the crowded classroom settings, which may lead to the decline in autonomy of the student, as well as dialogic interaction both of which facilitate the metacognitive development (Taimur & Mursaleen, 2020).

3. Research Methodology

The authors in this chapter explain the methodological background that will be applied to investigate the impact of the classroom management of secondary school teachers on the ability to self-regulate metacognitively and attitude towards studying in students. It also describes the research design, the population and the sampling procedure, instrumentation, data collection and data analysis procedures that will ensure the research reliability, validity and ethical integrity.

3.1. Nature of the Study

This article was a quantitative research study albeit with a descriptive and correlational research design. It was primarily aimed at measuring, describing and analyzing the relationships of the most important variables without manipulating them. A large sample size was employed to gather numerical data employing a survey method that would enable them to be statistically analyzed in order to determine the level of classroom management practices, metacognitive self-regulation among students and their attitudes towards studying the constructs that were examined and the hypothesized correlations among them tested.

3.2. Research Design

The survey design used is a non-experimental, cross sectional survey design. This design was appropriate to gather data at a single point to assess the current situation and examine how

the variables naturally interact in a real-life educational setting (Creswell & Creswell, 2017). The design assisted in the achievement of the study objectives as it described the levels of classroom management, metacognitive self-regulation and attribute of study.

3.2.1. Variables

Independent Variable (IV): Teachers Classroom Management that were operationalized using eight factors whereby they incorporated: Seating Arrangement, Student-Teacher Relationship, Time Management, Use of Writing Board, Classroom Norms, Conducive Environment, Appropriate Instructional Techniques along with Feedback. Dependent Variables (DV): Metacognitive Self-Regulation Ability (SMSRA) of the students, Students Attitude towards Study (ATS)

3.3. Population of the Study

The population of the study was all the teachers and students in the public secondary schools in South Punjab in Pakistan. The South Punjab is further subdivided into three divisions namely: Bahawalpur, Multan and Dera Ghazi Khan. All departments are broken into a number of districts and tehsils. The researchers chose teachers as the primary respondents in the research, and self-reports in terms of classroom management and attitudes towards the student metacognition and attitudes.

The phrase sample and sampling technique denotes the technique used to select a sample from the entire population (Brook, Traill, & Bradshaw, 2006).<|human|>Sample and Sampling Technique is a phrase that is used to refer to the method of choosing a sample of the whole population (Brook, Traill, & Bradshaw, 2006).
The sample to have representable and manageable sample was through multi-stage stratified cluster random sampling.

Stage 1: The research sample was selected purposely as South Punjab area.
Stage2: The three divisions were selected randomly with one district per each of them:

- Rahim Yar Khan (Bahawalpur Division)
- Pakistan Multan Division Khanewal (Khanewal)
- Muzaffargarh (based on Dera Ghazi Khan Division)

Stage 3: A tehsil was selected randomly and each of the selected districts was picked randomly.
Stage 4: The list of all the major secondary schools (male/female, urban/rural) was prepared in the sampled tehsils. On the basis of this list, 5 schools of both genders' locale (Male Urban, Female Urban, Male Rural and Female Rural) were chosen randomly in every tehsil. This gave up 5 schools by 4 categories by 3 tehsils = 60 schools.
Stage 5: The sampling was done using N= 953 teachers in a proportionate random sample to sample out approximately fourteen (14) teachers in each sampled school which has a total of fifty-three (53) schools.

This sampling approach has given adequate representation regarding the geographical location, the type and gender of school.

3.4. Research Instruments

Data collection was done using a structured and self-administered questionnaire booklet comprising of four sections.

Part A: Teacher demography (Qualification, Age, Teaching Experience, Gender, School Location).

B: Classroom Management Factors Questionnaire in Teachers (TCMF-Q). It is a self-administered instrument that was designed based on a comprehensive literature review (e.g., (Hepburn, Beamish, & Alston-Knox, 2021; Wu, Gao, & Shen, 2020) and had 40 items divided into eight subscales (5 items each) to be measured with a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree).

Section C: Metacognitive Self-regulation Ability Scale (SMSRA) of the students. This scale is a 12-item scale, which is anchored on the extensively-tested Motivated Strategies of Learning

Questionnaire (MSLQ; (Pintrich, 1991). Educators rated their judgment on typical behaviors of their students (e.g. When students are confused about something in a classroom, they go back and see how they can solve it) on a 5-point frequency scale (1= Never to 5=Always).

Section D: Students Attitude towards Study Scale (ATS). It is a 12-item scale, which was adjusted in accordance with the existing study attitude inventories (e.g., LASSI; (Weinstein, Palmer, & Schulte, 1987). The teachers were to rate their perception of the study habits/attitudes of students (e.g. Students create a study schedule to manage their time effectively) using a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree).

3.6. Validity and Reliability of Instruments

3.6.1. Validity

Content validity: The initial form of the TCMF-Q was consulted with a sample of five expert professionals in the field of education, measurement and classroom management. They were considered when it comes to their comments on the topicality, understandability and coherence. The Content validity index and Content Validity Ratio (CVR) were calculated following the measure presented by Lawshe (1975). Everything exceeded the threshold of CVR of 0.99 (5 experts) thereby creating the necessity of such.

Construct Validity: the factor structure of the TCMF-Q was calculated and established through Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) by using SPSS-AMOS. EFA (Principal Axis Factoring with Promax rotation) was used to get the hypothesized eight-factor structure and the items were loading on the factors (loadings > 0.40). The reasonableness of the model was demonstrated in the indices of model fit to following CFA (kh2/df -3, CFI-0.90, RMSEA-0.08), which confirms the construct validity (Kline, 2023).

3.7. Data Collection Procedure

The permission of the appropriate District Education Authorities and principals of the sampled schools was taken. The individual participants were informed of the purpose of the study in advance, the confidentiality and voluntary character of the study, and informed consent was signed by the individual participants in paper format. The researcher himself visited the sampled schools to deliver questionnaire. Teachers were given easy guidelines to follow and they were anonymized. The average duration was between 25 and 30 minutes. The questionnaires were collected and their fullness was checked. Answers that did not give any response or were patterned were filtered out.

3.8. Data Analysis Plan

Data were analyzed using the IBM SPSS statistics (version 27) and the IBM AMOS (version 23).

Descriptive Statistics: Frequencies, percentages, means and standard deviations were done to provide an overview of the demographics and justify the level of every variable (RQ 1, 5, 6).

Inferential Statistics: Pearson Correlation: To assess the bivariate relationship with the variables of classroom management of teachers, the metacognitive self-regulation of students and the attitude of students towards studying (Part of RQ 7).

Independent Samples t -test: The differences between the variables in terms of gender and locale (urban/rural) (RQ 2-4).

One-Way Analysis of Variance (ANOVA): To make a comparison of the significant differences between the group of teachers qualification, age, and experience. ANOVA was found to be significant and post-hoc tests (Tukey HSD) were conducted (Part of RQ 8-10).

Measurement Model Testing: CFA was used in testing agreement and validity of the latent constructs (TCMF as a higher-order factor, SMSRA, ATS).

Structural Model Assessment: A test of hypothesized direct effects of Teachers Classroom Management on SMSRA and ATS was conducted that provides a good test of the primary

hypotheses of the research (RQ 7, 11, 12). The model was checked by the use of kh2/df, CFI, TLI, and RMSEA.

4. Results and Discussions

In this chapter, the findings of the statistical tests performed to test the influence of classroom management of middle school teachers on the ability to metacognitively self-regulate and attitude toward studying in students are given. The findings are systematized based on the research questions and consist of the descriptive statistics, inferential statistics and the findings of Structural Equation Modeling (SEM). Clarity and presentation are increased by means of tables and figures.

4.1. Descriptive Statistics

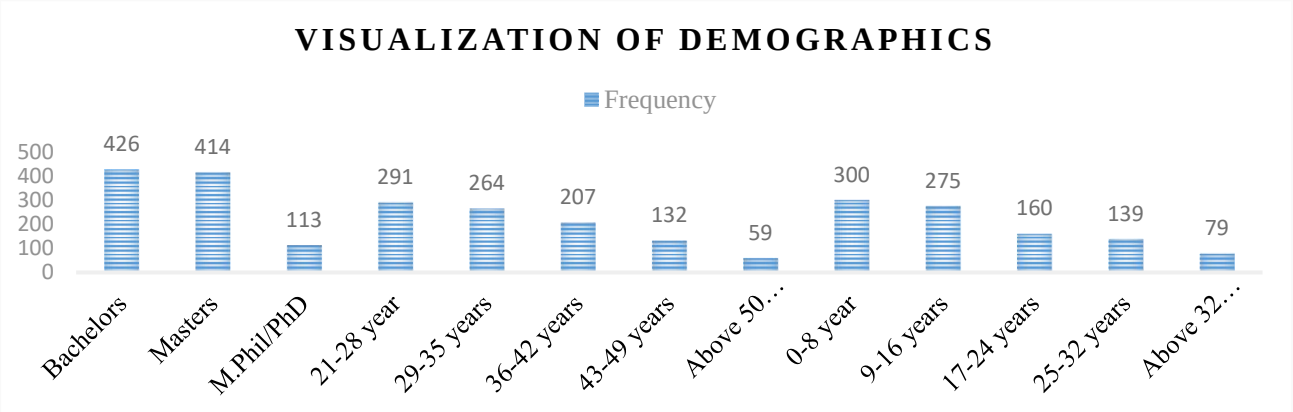
In this section, the descriptive summary of the demographics of sampled students is presented in regards to their gender, school types and area. The data is displayed in table format, with frequency distribution and the percentages.

Table 1: Frequency Distribution of Demographics of the Respondents

Variables	Groups	*F*	%
Qualifications	Bachelors	426	44.7
	Masters	414	43.4
	M.Phil/PhD	113	11.9
Age_Group	21-28 year	291	30.5
	29-35 years	264	27.7
	36-42 years	207	21.7
	43-49 years	132	13.9
	Above 50 years	59	6.2
Experience in Years	0-8 year	300	31.5
	9-16 years	275	28.9
	17-24 years	160	16.8
	25-32 years	139	14.6
	Above 32 years	79	8.3
	N	953	100%

In this study, the sample of 953 secondary school teachers was processed. The qualification wise distribution shows that there are highly educated teachers. Bachelors (44.7) and Masters (43.4) are almost equal in the number of degrees, with an overall count of 88.1 of the sample. This is particularly notable because of the percentage of 11.9% having advanced research qualification (M. Phil/PhD) which is quite high among teachers in secondary schools. The teachers of the age profile are of relatively young and mid-career teachers.

Figure 1: Frequency Distribution of Demographics



The highest is the bracket of 21-28 years (30.5%), then the 29-35 years (27.7%). The teachers aged below 36 years make up 58.2% of the sample together. The distribution decreases gradually according to age: 21.7% are 36-42 years, 13.9% are 43-49 years and only 6.2% are above 50. In terms of experience, close to one-third (31.5%) of them have the experience of 0-8 years and 28.9% have experience of 9-16 years. The percentage progressively declines among

more experienced teachers: 16.8% of teachers with 17-24 years' experience and 14.6 with 25-32 years' experience and 8.3 with more than 32 years of experience.

4.2. Meta Cognitive Self-Regulation Ability Scale of the students

The best metacognition behavior is the reaction of students to confusion, (with item 43) having the highest mean score of 3.73 (SD = 1.21). This result implies that, in cases of students noticing their confusion in the classroom, they exhibit the relatively high tendency of returning back to the classroom and trying to make sense. This metacognitive repair technique is a core phase in metacognition and is promising in that it can show that students have at least some ability to identify the occurrence of comprehension failures and make the appropriate response. The relative small standard deviation of this item also indicates that the behavior is more regularly engaged among the student population as compared to other metacognitive strategies. Although there is some strength, the metacognitive functioning is mostly moderate to weak, and there are critical areas with limited development on the middle of the scale.

Table 2: Mean Performance Analysis SMCSRA Scale

Item #	Factor (Construct)	Item/Statement	N	Min	Max	Mean	Std. Dev	Scale Mean Score	Scale Std. Dev.
41	SMCSRA_1	Students often miss important points in class because they are thinking of other things	953	1	5	2.48	1.07	3.05	1.37
42	SMCSRA_2	Students ask questions to help focus their reading and understanding.	953	1	5	3.00	1.41		
43	SMCSRA_3	When students become confused about something in class, they go back and try to figure it out.	953	1	5	3.73	1.21		
44	SMCSRA_4	If study materials are difficult to understand, students change the way they approach the material.	953	1	5	3.10	1.43		
45	SMCSRA_5	Students skim new material before studying it thoroughly to see how it is organized.	953	1	5	3.05	1.39		
46	SMCSRA_6	Student ask themselves questions to check their understanding of the material.	953	1	5	3.11	1.39		
47	SMCSRA_7	Students adjust their study methods based on what they need to learn.	953	1	5	3.09	1.42		
48	SMCSRA_8	Students appear to read without understanding what the content is about.	953	1	5	2.96	1.44		
49	SMCSRA_9	Student think about what they need to learn from a topic rather than just reading through it.	953	1	5	2.95	1.41		
50	SMCSRA_10	Students identify concepts they don't understand well when studying	953	1	5	3.02	1.42		
51	SMCSRA_11	Students set goals for themselves to direct their study activities.	953	1	5	3.08	1.42		
52	SMCSRA_12	If students get confused while taking notes in	953	1	5	3.00	1.42		

Item #	Factor (Construct)	Item/Statement	N	Min	Max	Mean	Std. Dev	Scale Mean Score	Scale Std. Dev.
		class, they make sure to sort it out afterwards.							

Students are slightly involved in self-questioning to evaluate knowledge (M = 3.11), changing study techniques in relation to learning requirements (M = 3.09), and formulating objectives in order to guide study activities (M = 3.10). These mediocre scores suggest that students are familiar with such strategies but apply them in a random or shallow manner. The previewing of material to know how it is organized (M = 3.05), the detection of what they cannot understand (M = 3.02), the posing of questions during the reading process (M = 3.00), and the process of sorting out confusion at the end of the lesson (M = 3.00) all range closely around the middle, suggesting lukewarmth proactive metacognition planning and control. More concern is items with highly deficient metacognitive (least agreement) items. Little thoughtful, surface processing is observed in the reading because students tend to read without comprehending the information (M = 2.96, SD = 1.44). This is further supported by their statement that they tend to read passively without necessarily thinking of what they need to learn (M = 2.95, SD = 1.41). Worst of all, the lowest score on the scale was item 1, as the students confirmed to be missing the key points of the lesson on a regular basis because of distractions (M = 2.48, SD = 1.07). This significant attentional deficit demonstrates a wide range of executive control and metacognitive vigilance problems during training. The standard deviation on this item is less implying that this is not a unique problem attributed to struggling kids. The moderate metacognitive self-regulation is observed with secondary school students whose SMCSRA mean score is 3.05 (SD = 1.37). The mediocre performance presents educational problems since children have no awareness of education and control. The standard deviation is great, as it implies that there are those pupils who have better self-regulation and those who have difficulties with learning. This diversity presents a challenge to the educators and gives a chance to the research study on the classroom management to cater to these variations. Teachers used a 12-item scale to evaluate the metacognitive self-regulation of students.

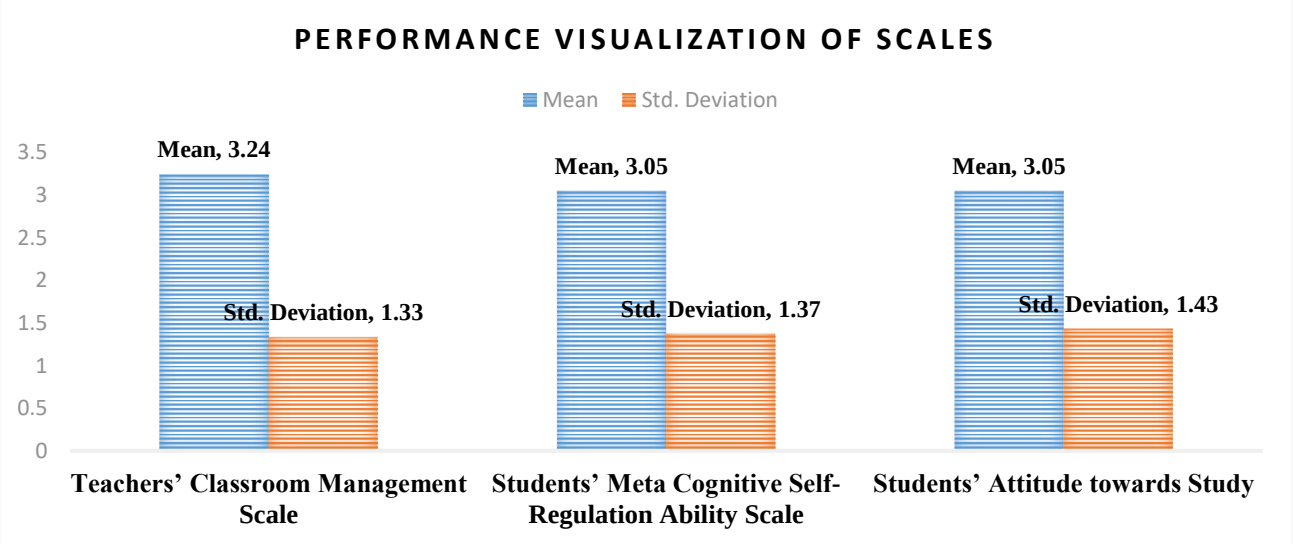
4.3. Summary of the Scales

Table 3 is a mean description of the three major scales applied in the research which represent a general view of the classroom management of teachers, metacognitive self-regulation of students and attitude towards studying; the results show moderate levels of the constructs.

Table 3: Mean Summary of the Scales

Scale	Mean Score	Standard Deviation
Teachers' Classroom Management Factors Scale	3.24	1.33
Students' Meta Cognitive Self-Regulation Ability Scale	3.05	1.37
Students' Attitude towards Study	3.05	1.43

Figure 3: Performance Visualization of Overall Scales



The highest mean score was given to Teachers Classroom Management Scale (M = 3.24, SD = 1.33) which indicated that the teachers tend to have adequate to moderately effective level of classroom management. The average score in Students Metacognitive Self-regulation Ability Scale (3.05, SD= 1.37) shows that students have an average metacognitive regulation.

This demonstrates that students have prior knowledge and control of their learning cycles including planning, tracking and evaluating what they have understood, but that they attend to these yet to be mastered. The Attitude toward Study Scale among the Students also indicated neutral to somewhat positive attitude towards academic activities with an average score of 3.05 (SD = 1.43). The information does not indicate that students are not optimistic about the process of learning; however, the data may indicate that students are more motivated, interested, and dedicated. The classroom management by teachers is rated better than the self-regulation and the study attitudes of students. The similarity of mean scores and fairly large standard deviations of the scale's points at the difference between the respondents, which identified the necessity of using instructional strategies and interventions to enhance the metacognitive and learning attitude of students, and classroom control.

4.4. Inference

Table 6 displays a Factor Matrix. Scale Correlations present Pearson correlation coefficients. The findings have low statistically significant weak construct correlations. The classroom management of teachers (TCMF) and the study attitude of students (ATS) are statistically significant and in a positive manner (r =.070, p =.030). In spite of this tiny cycle, statistics indicate that improved classroom control by the educators is linked to slightly more favorable attitude of the study by the students. This implies that the presence of an orderly, helpful, and well-managed classroom can enhance the academic attitudes of students, however, slight. The metacognitive self-regulation capability (SMSRA) of students is positively associated with classroom management (TCMF) of instructors however not significantly (r =.027, p =.402). In this sample, classroom-based management strategies have no direct influence on the metacognitive self-regulatory ability of students such as planning, monitoring, and evaluating what they are learning.

In the same way, the correlation between the ability of metacognitive self-regulation (SMSRA) of students and the attitude towards study (ATS) of students is not significant and has a low value (r =.008, p =.808), which implies that the self-regulatory capacities of students depend very little on their attitude towards the study in the current data set. On the whole, it can be seen that the correlation matrix indicates that the constructs are conceptually connected but to a great extent are independent dimensions. The statistically significant relationship, that is between the classroom management of the teachers and the attitude of the students towards study, points to the possibility of classroom management to influence the attitude towards the study of the students, but the small effect size made by the relationship suggests that there can be other factors with a greater influence.

Table 4: Factor Matrix using Correlations among Scales

		TCMF	SMSRA	ATS
TCMF	Pearson Correlation	1	.027	.070*
	Sig. (2-tailed)		.402	.030
	N	953	953	953
SMSRA	Pearson Correlation	.027	1	.008
	Sig. (2-tailed)	.402		.808
	N	953	953	953
ATS	Pearson Correlation	.070*	.008	1
	Sig. (2-tailed)	.030	.808	
	N	953	953	953

*. Correlation is significant at the 0.05 level (2-tailed).

4.5. Demographic Analysis of Variables through ANOVA

The qualifications-wise test based on one-way ANOVA was done to test whether there is a significant difference in the educational qualification of students (Bachelor, Master, and M. Phil/ PhD) in the scales of the study. In the case of the Teachers' Classroom Management Factor (TCMF), there was a comparably similar degree of the mean scores by qualification group, where Master students (M = 130.25, SD = 8.67), Bachelor students (M = 129.52, SD = 8.38), and M. Phil/PhD students (M = 128.27, SD = 8.36) had the highest mean scores respectively. The analysis of ANOVA did not show significant difference between the three groups, F (2, 950) = 2.548, p =.079. In as much as the mean differences indicate that there is a slight difference between them, the differences are not high to indicate that perceptions towards classroom management vary according to qualification level.

Table 5: Qualifications wise Analysis using ANOVA

Scales	Groups	N	Mean	SD	Df	*F*	p.value (sig. 2-tailed)
TCMF	Bachelors	426	129.52	8.382	2	2.548	.079
	Masters	414	130.25	8.671			
	M.Phil/PhD	113	128.27	8.359			
	Total	953	129.69	8.520			
SMSRA	Bachelors	426	36.60	4.708	2	.104	.901
	Masters	414	36.61	5.042			
	M.Phil/PhD	113	36.38	5.079			
	Total	953	36.58	4.895			
ATS	Bachelors	426	36.72	5.010	2	.531	.588
	Masters	414	36.40	5.214			
	M.Phil/PhD	113	36.81	5.051			
	Total	953	36.59	5.102			

The mean scores in the case of Students Metacognitive Self-Regulation Ability (SMSRA) were almost similar in all the categories of qualification. There were little differences among the bachelors' students (M = 36.60, SD = 4.71), Master students (M = 36.61, SD = 5.04) and M. Phil/ PhD students (M = 36.38, SD = 5.08). ANOVA also proved that there is no significant difference, F (2, 950) = 0.104, p =.901, that means that the abilities of metacognitive self-regulation do not depend on the level of qualification in students. Equally, in the case of Students Attitude towards Study (ATS), the means of the different groups of Bachelor (M = 36.72, SD = 5.01), Master (M = 36.40, SD = 5.21), and M. Phil/PhD students (M = 36.81, SD = 5.05) were very similar. The results of ANOVA indicated that there were no statistically significant differences between the groups F (2, 950) = 0.531, p =.588. This implies that attitudes that students have towards studying do not change much despite the level of qualification. Generally, the results of ANOVA show that educational qualification does not play a critical role in affecting the perceptions of classroom management by teachers, the metacognitive self-regulated ability of students, or the attitude of students towards the study. The fact that the mean scores of the qualification levels are similar indicates that these constructs are rather stable at different levels of higher education.

5. Conclusions

The authors were able to conclude that the performance of the teachers in terms of classroom management reflects high relational skills and poor strategic and procedural implementation as witnessed among the 953 secondary school teachers in South Punjab, Pakistan, but the effects of the practices on the metacognitive self-regulation abilities of the students are not statistically significant. The causal relationship hypothesis is rejected, which proves that there is a functional disconnection between the activities of the management and the particular cognitive and affective outcomes of the students within the sampling environment. The metacognitive self-regulation and attitudes of students are also poorly developed and show significant weaknesses in proactive planning, sustained attention, and monitoring comprehension, a fact that highlights the systemic weaknesses of self-directed learning skills, which are required to advance to higher academic levels. These findings confirm the stunning uniformity of the teacher characteristics as such the factors of high academic education, experience, sex, and school location have no significant impact on classroom management and perceived student achievement.

This supports the hypotheses on credential-based teaching effectiveness and shows that there is an experience plateau. The weak and insignificant correlations determined indicate that the influence of classroom management might be indirect, or through the quality of academic interaction, the extent of cognitive engagement, or perhaps depends on achieving a level of quality of implementation that has not been attained yet by most educators. These results should be viewed in the framework of the limited ecosystem of Pakistani secondary education in schools, where the large classes, the exam-related stress, and the scarcity of resources probably put more emphasis on content delivery than on the detailed and student-focused teaching approach that leads to the development of metacognition. According to the research, the further enhancement of student self-regulation and study attitudes will involve going beyond generic management enhancement to add up to integrated pedagogical frameworks. These models need to position classroom management in a strategic relationship with direct teaching of metacognitive strategies, positive feedback loops that enhance self-assessment and a positive relational climate that actively fosters cognitive risk-taking. It requires a paradigm shift in the professional development approach, which should proceed in terms of from management to the increase of the capacity of the teachers to work with the integrative pedagogy as well as the systemic shifts towards the elimination of the contextual obstacles to the activity of the type of the deep, interactive instruction.

5.1. Future Research Suggestions

The proposed future researches are to use mixed methods approaches to achieve triangulation of data through classroom observation, student self-reports and teacher interviews to address the drawbacks of single-informants surveys and track the long-term developmental effects of classroom management on student performance. More significantly, studies are to be carried out as to the complexity models of mediation, whereby the role of academic self-efficacy, student engagement and teacher-student academic interactions may serve to mediate the effects of management and moderation analyses are to be performed, addressing the student previous achievement, school background, and teacher-student academic interactions. The general principles may be identified in local adaptations in comparison studies across cultures and multi-level analyses are to be performed to identify the impact of school leadership and institutional policies on classroom practices. The qualitative studies are also capable of analyzing the attitude of the instructors and their implicit assumptions, which may bring light into classroom management and student development.

References

Ahmed, D. M., Azhar, Z., & Mohammad, A. J. (2024). The Role of Corporate Governance on Reducing Information Asymmetry: Mediating Role of International Standards for Accounting (IAS, IFRS). *Kurdish Studies*, *12*(1).

Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ*, *1986*(23-28), 2.

Batra, R. (2019). Creating brand meaning: A review and research agenda. *Journal of Consumer Psychology*, *29*(3), 535-546. https://doi.org/https://doi.org/10.1002/jcpy.1122

Brook, B. W., Traill, L. W., & Bradshaw, C. J. (2006). Minimum viable population sizes and global extinction risk are unrelated. *Ecology letters*, *9*(4), 375-382. https://doi.org/https://doi.org/10.1111/j.1461-0248.2006.00883.x

Brunzell, T., Stokes, H., & Waters, L. (2019). Shifting teacher practice in trauma-affected classrooms: Practice pedagogy strategies within a trauma-informed positive education model. *School Mental Health*, *11*(3), 600-614. https://doi.org/https://doi.org/10.1007/s12310-018-09308-8

Cogliano, M., Bernacki, M. L., & Kardash, C. M. (2021). A metacognitive retrieval practice intervention to improve undergraduates' monitoring and control processes and use of performance feedback for classroom learning. *Journal of Educational Psychology*, *113*(7), 1421.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Egeberg, H., McConney, A., & Price, A. (2021). Teachers' views on effective classroom management: a mixed-methods investigation in Western Australian high schools. *Educational Research for Policy and Practice*, *20*(2), 107-124. https://doi.org/10.1007/s10671-020-09270-w

Emmer, E. T., & Stough, L. M. (2001). Classroom Management: A Critical Part of Educational Psychology, With Implications for Teacher Education. *Educational Psychologist*, *36*(2), 103-112. https://doi.org/10.1207/S15326985EP3602_5

Evertson, C. M., & Neal, K. W. (2006). Looking into Learning-Centered Classrooms: Implications for Classroom Management. Working Paper. *National Education Association Research Department*.

Filgona, J., Sakiyo, J., Gwany, D. M., & Okoronka, A. U. (2020). Motivation in Learning. *Asian Journal of Education and Social Studies*, 16-37. https://doi.org/10.9734/ajess/2020/v10i430273

Good, T. L., & Brophy, J. E. (2003). Looking in classrooms (9e éd.). *Boston, MA: Allyn et Bacon*.

Hepburn, L., Beamish, W., & Alston-Knox, C. L. (2021). Classroom management practices commonly used by secondary school teachers: results from a Queensland survey. *The Australian Educational Researcher*, *48*(3), 485-505.

Jabbar, A., & Dani, S. (2020). Investigating the link between transaction and computational costs in a blockchain environment. *International Journal of Production Research*, *58*(11), 3423-3436. https://doi.org/https://doi.org/10.1080/00207543.2020.1754487

Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.

Korpershoek, H., Canrinus, E. T., Fokkens-Bruinsma, M., & De Boer, H. (2020). The relationships between school belonging and students' motivational, social-emotional, behavioural, and academic outcomes in secondary education: a meta-analytic review. *Research Papers in Education*, *35*(6), 641-680. https://doi.org/10.1080/02671522.2019.1615116

Lawshe, C. H. (1975). A QUANTITATIVE APPROACH TO CONTENT VALIDITY[1]. *Personnel Psychology*, *28*(4), 563-575. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x

Marzano, R. J., & Marzano, J. S. (2003). *Classroom management that works: Research-based strategies for every teacher*. Ascd.

Mohammad, A. J., & Ahmed, D. M. (2017). The impact of audit committee and external auditor characteristics on financial reporting quality among Malaysian firms. *Research Journal of Finance and Accounting*, *8*(13), 9-16.

Mughal, A. W., Aldridge, J., & Monaghan, M. (2019). Perspectives of dropped-out children on their dropping out from public secondary schools in rural Pakistan. *International Journal of Educational Development*, *66*, 52-61. https://doi.org/10.1016/j.ijedudev.2019.02.004

Padmanabha, C. H., & Srinivas College of Education, M., Karnataka, India. (2020). METACOGNITION: CONCEPTUAL FRAMEWORK. *i-manager's Journal on Educational Psychology*, *14*(1), 1. https://doi.org/10.26634/jpsy.14.1.16710

Pianta, R. C. (1999). *Enhancing relationships between children and teachers.* American Psychological Association.

Pintrich, P. R. (1991). A manual for the use of the Motivated Strategies for Learning Questionnaire (MSLQ).

Poulou, M. S. (2020). Students' adjustment at school: The role of teachers' need satisfaction, teacher–student relationships and student well-being. *School Psychology International*, *41*(6), 499-521.

Ragmoun, W., Alfalih, A. A., & Alfalih, A. A. (2017). A Proposal for an Integrative Model of Academic Innovativeness: The Case of Business Schools in the Kingdom of Saudi Arabia. *International Journal of Human Resource Studies*, *8*(1), 1. https://doi.org/10.5296/ijhrs.v8i1.11953

Ragmoun, W., & Alwehabie, A. M. (2020). Sustainable human resource management (SHRM) and corporate social responsibility (CSR): An Integrated Mediated Moderation Model of dynamic capabilities (DC) on family business industry. *Management Science Letters*, 2259-2268. https://doi.org/10.5267/j.msl.2020.3.010

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54-67. https://doi.org/https://doi.org/10.1006/ceps.1999.1020

Sahin, D., & Yilmaz, R. M. (2020). The effect of Augmented Reality Technology on middle school students' achievements and attitudes towards science education. *Computers & Education*, *144*, 103710. https://doi.org/https://doi.org/10.1016/j.compedu.2019.103710

Schipper, T., Goei, S. L., de Vries, S., & van Veen, K. (2018). Developing teachers' self-efficacy and adaptive teaching behaviour through lesson study. *International journal of educational research*, *88*, 109-120.

Sybing, R. (2019). Making Connections: Student-Teacher Rapport in Higher Education Classrooms: Student-teacher rapport in higher education classrooms. *Journal of the*

Scholarship of Teaching and Learning, *19*(5). https://doi.org/10.14434/josotl.v19i5.26578
Taimur, S., & Mursaleen, H. (2020). Youth volunteerism, as non-formal education, for professional and social integration of young labor force in Pakistan. *Asian Social Science*, *16*(8), 117. https://doi.org/https://doi.org/10.5539/ass.v16n8p117
Weinstein, C. E., Palmer, D., & Schulte, A. C. (1987). Learning and study strategies inventory (LASSI). *Clearwater, FL: H & H Publishing*.
Wigfield, A., & Eccles, J. S. (2000). Expectancy–Value Theory of Achievement Motivation. *Contemporary Educational Psychology*, *25*(1), 68-81. https://doi.org/10.1006/ceps.1999.1015
Wisniewski, B., Zierer, K., & Hattie, J. (2020). The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research. *Frontiers in Psychology*, *10*, 3087. https://doi.org/10.3389/fpsyg.2019.03087
Wolff, C. E., Van Den Bogert, N., Jarodzka, H., & Boshuizen, H. P. A. (2015). Keeping an Eye on Learning: Differences Between Expert and Novice Teachers' Representations of Classroom Management Events. *Journal of Teacher Education*, *66*(1), 68-85. https://doi.org/10.1177/0022487114549810
Wu, H., Gao, X., & Shen, J. (2020). Principal leadership effects on student achievement: a multilevel analysis using Programme for International Student Assessment 2015 data. *Educational Studies*, *46*(3), 316-336. https://doi.org/10.1080/03055698.2019.1584853
Zimmerman, B. J. (2000). Attaining Self-Regulation. In *Handbook of Self-Regulation* (pp. 13-39). Elsevier.