

Comparing the use of Robert Marzano's model of instructional strategies in the Pakistani context*

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Abstract

This study examined and compared Robert Marzano's model of instructional strategies in public and private schools in Pakistan. Instructional strategies involve various activities teachers perform while teaching. The study used a causal-comparative research design and a questionnaire was developed by the researchers to measure teachers' perceptions about their use of Marzano's instructional strategies. The convenience sampling technique was used and 300 primary school teachers (150 from public and 150 from private schools) in district Okara were selected. The collected data were analyzed through SPSS. The study revealed that there were no significant differences between public and private school teachers and male and female schoolteachers' perceptions of using Marzano's model of instructional strategies. The study also revealed that there was a significant difference between the teachers having different academic qualifications, and MA/MSC/MPhil teachers were found better than BA/BSC teachers in using these instructional strategies. The study further showed that there was a significant difference between teachers having different professional qualifications, and MED/MA Education teachers were found better than B. ED teachers. A significant difference was found between teachers' perceptions of having different years of experience with more experienced teachers showing higher scores as compared to less experienced teachers. Recommendations have also been given in the end.

Keywords: Marzano's model, establish goals and student progress, practice and deepen knowledge

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INTRODUCTION

The aim of this study was to comprehend the instructional strategies of Robert Marzano and their use in Pakistani public and private primary schools. Instructional strategies involve various activities that teachers perform during their instruction. Instructional strategies are used to improve the knowledge and skills of learners so that they can take more interest in their studies (Marzano et al., 2001). An effective teacher needs to adopt different classroom motivational strategies that might increase the motivation of students and enhance their active participation in learning (Odera, 2011). Effective instructional strategies help students to develop interests in topics and critical thinking skills, engage them in learning, and enhance their outcomes (Jones, 2014). There is no single best strategy that we can select from various instructional strategies for students learning, but we may adopt them according to the required situation (Marzano, 2012). Instructional strategies help students learn and obtain future goals or targets. Instructional strategies help to develop critical thinking skills of students and enhance their confidence for future success (Assor et al., 2002).

Marzano believes that different strategies improve teachers' ability which motivates their students to exert more effort. When teachers use different strategies and emphasize student on active learning with the help of different activities like case study, and group study, and encourage the students to solve their problems, the teacher becomes in a better position to achieve the objectives effectively (Meyers & Jones, 1993). Instructional strategies can be classified into two categories: micro strategies in which meta-cognition and active students' participation are ensured, while macro strategies involve critical thinking process, cooperative learning and maximize students' interest (Walsh & Sattes, 2000). Strategies involve actions and thoughts that individuals use to achieve the goals of learning (Chamot, 2004). Instructional strategies based on critical inquiry and investigation are essential to enhance the thinking abilities of learners (Dyer & Osborne, 1995; Whittington & Newcomb, 1986).

In an educational context, the role of instructor and instructional strategies never come to an end. Instruction is an opportunity that assists to develop the learners' emotional, physical, intellectual, and social growth (Middleton & Midgley, 2002). Due to individual differences, students might learn better through different methods, various activities, and different environments (Noels et al., 1999). Marzano (2012) provided different competencies of effective teachers such as knowledge of relevant subjects, verbal communication, motivation and interaction with students, creating an environment to develop rules and regulations, and providing them necessary information that might enable the learners to solve their life problems. Instructional strategies are useful in daily life and play different roles in the classroom. When a teacher adopts good behavior with students, the students inspire and try to improve their results. Effective teachers engage the students in developing interests in studies and follow classroom rules to become successful in life.

Through this study, the researchers examined Robert Marzano's Model (2001) of instructional strategies and their use in Pakistani public and private primary schools. Robert Marzano is the leading educationist who has provided a model for instructional effectiveness and different instructional strategies to improve the progress of students. These instructional strategies give teachers different ways how to teach students in an effective manner. Different classroom strategies might allow teachers to work effectively in the classroom and to become more efficient. Teachers can use these strategies to get better results, enhance cognitive thinking and skills of students, and maintain a good relationship. The teacher uses these strategies in different ways to manage classrooms. The present study focused on how effectively the Marzano et al. (2001) model is used by teachers in private and public primary schools in Pakistan.

Objectives of the Study

The objectives of the present study are:

- 1) To understand Robert Marzano's instructional strategies in Pakistani public and private primary schools.
- 2) To compare the use of Robert Marzano's instructional strategies based on demographic variables such as teachers' gender, qualification, and experience.

Hypotheses of the Study

The study involves the following null hypotheses:

- 1) There is no significant difference in perceptions of public and private primary school teachers in using Robert Marzano's instructional strategies in Pakistan.
- 2) There is no significant difference in perceptions of male and female teachers at primary schools in using Robert Marzano's instructional strategies in Pakistan.
- 3) There is no significant difference in perceptions of teachers having professional qualifications B. ED and M. ED / M. A. Education in using Robert Marzano's instructional strategies in Pakistan.
- 4) There is no significant difference in perceptions of teachers having academic qualifications of B. A / B. SC and M. A / M. SC / M. Phil are using Robert Marzano's instructional strategies in Pakistan.
- 5) There is no significant difference in perceptions of teachers having varied instructional experiences in using Robert Marzano's instructional strategies in Pakistan.

The Literature Review

The study examined the use of Robert Marzano's model of instructional strategies in primary schools in Punjab, Pakistan. Marzano et al. (2001) provided three effective strategies of instruction that are being used by effective teachers such as use of effective instruction strategies, design curriculum according to syllabus, and effective use of classroom management techniques. These instructional strategies have an important and substantial role in the Pakistani education system as they improve the students' skills and academic achievement. To increase students' motivation and active participation in learning, an effective teacher is required to adopt different motivational strategies through using modern educational technology such as media and computers to maximize the interest of students towards their learning and enhance the level of achievement (Marzano, 2012; Odera, 2011).

Effective instruction and learning are the most important tool to develop the abilities and skills of students which leads them to become successful members of the society (Jones, 2014; Marzano et al, 2001). Effective strategies assist teachers to help students based on the principles of building a positive classroom environment and to develop better relationships between teachers and students (Assor et al., 2002). The classroom management strategy has been described as the actions of teachers that develop such an environment that facilitates both social and academic learning (Evertson & Weinstein, 2006; Gregory & Weinstein, 2004). Further, Marzano et al. (2001) provided an important following model in which nine instructional strategies were introduced to enhance the effectiveness of teachers and capture students' interest in their learning.

There is various research which revealed that Pakistani teachers have a lot of problems in managing their classes effectively (Ali, 2000; Ahmad et al., 2012; Tahir & Qadir, 2012). Ali (2000) found in his study that students from different locations create a disturbance in the classroom not only for themselves but also for others, and teachers are not capable of handling the situations effectively. In another study, Ahmad et al. (2012) revealed that most teachers were aware about the handling of overall instructional process in the classroom but did not implement it effectively. They often did not use proper gestures and postures to facilitate the instructional process, were not punctual in their instruction, and did not follow the rules and regulations. Furthermore, it was also found that teachers have the competence in making lesson plans and its effective implementation, but they did not use instructional resources to facilitate the teaching and learning process in the classroom. In addition to this, it was also revealed that teachers deal their student with positive behavior but do not make arrangements in which the participation of students is ensured in different activities of the classroom (Tahir & Qadir, 2012). Therefore, in the Pakistani context, it is required to adopt an effective model of instructional strategies that would enhance the effectiveness of teachers and the skills of their students. For this purpose, the study used Marzano et al. (2001) model of instructional strategies to examine and compare the competency of teachers in the use of these strategies in classrooms that might not have been tested before in the Pakistani context.

To Establish Learning Goals and Track Students' Progress

Teachers' communication skills and interaction involving good behavior have a significant role in achieving goals such as students' progress and inspire them to pay full attention to their lessons. After identifying the learning goals, it should be stated with clarity to the students which can be used to provide feedback to their students (Hattie & Timperley, 2007). Teachers should involve their students in setting the learning goals that are essential to harmonize the instructional process (Brophy, 2005). Another ability of teachers to examine students' development and growth is essential for the quality of education in which teachers collect data about student progress through various tests which further inform the effectiveness of teachers in the classroom (Edmund &

Hartnett, 2014). Marzano (2009) also provided a standard-based grading assessment and reporting system to inform the results of students on each subject through involving four categories used to describe the students' performance such as minimal, basic, proficient, and advanced assessment.

Through assessment, students get healthy feedback from their teachers in a formative process and acquire mastery through the summative process (Gillies & Ashman, 1998; Marzano, 2009). On the other hand, Guskey (2001) gave a criterion-referenced approach in which teachers recognize the expectations of their students and an effective methodology to assess student achievement. Various studies explored the value of standard-based system of grading that provides awareness to teachers on how to teach their students effectively and enhance students' motivation and interest to achieve higher grades and marks in their assessment (Cherniss, 2008; Haptonstall, 2010; Reys et al., 2003).

Establishing Rules and Procedures

The development of rules and procedures is essential to harmonize and regulate the overall instructional process in which each stakeholder understands their responsibilities in the institutions (Marzano, 2009). Effective teachers arrange physical activities by providing a comfortable environment, using polite behavior, appropriate language, and respecting students in the classroom (Lord Nelson et al., 2004). If there are no rules and procedures in the classroom, teachers cannot manage a supportive environment and students cannot perform better on their standardized tests (Walker et al., 1987). Therefore, teachers should focus on effective classroom management through employing preventive procedures instead of reactive procedures and maintaining a positive environment in which teachers should behave appropriately with their students (Lewis & Sugai, 1999). Further, rules and procedures are most required for classroom management which determines the expectations and reinforcement, and teachers might manage the misbehavior of their students by identifying the causes of those occurrences (Colvin et al., 1993).

Helping Students to Interact with New Knowledge

Teachers need to help their students to get new information and knowledge which is highly required to maximize the skills and abilities of students. To provide new knowledge and skills is the old model strategy in which students are assessed through various written or oral tests, and teachers teach their students in groups in an interactive environment to enhance their interest towards their learning (Marzano, 2009). Similarly, through creating a connection between new knowledge and previous knowledge, teachers lead their students to make a conclusion based on the data which maximize the meta-cognition skills of learner to become successful member of society (Pittaway & Edwards, 2012). Visual instruction includes demonstrated methods or videos that might be used by teachers to get new ideas and knowledge. Furthermore, when we talk about effective interaction with new knowledge that might involve new ideas and expectations that are generated in mind, teachers make sure that expectations are clearly outlined and that students are still working towards their common objectives (Aquino-Sterling, 2016).

Helping Students' Practice and Deepen New Knowledge

Marzano (2009) gave the idea that helping students' practice and interact with new knowledge develops advanced thinking skills that assist learners to engage in different classroom activities and teachers to engage their students to learn new knowledge which is further categorized into two types of knowledge: procedural knowledge which involves skills, strategies or process of new knowledge that develops confidence of learner, and declarative knowledge which involves informational and deepen new knowledge through making review and revision of content (Anderson et al., 1995; Pittaway & Edwards, 2012). Furthermore, it has been revealed through different studies that procedural knowledge builds the capacity of learners to do their work without consciously thinking about the process (LaBerge & Samuels, 1974). On the other hand, declarative knowledge involves three main steps such as revision which is essential to develop the knowledge, time in which students explore and deepen new knowledge, and homework through which students practice more to deepen their knowledge (Linnenbrink & Pintrich, 2003).

Helping Students to Generate and Test Hypotheses

There are different types of generating and testing hypotheses. Firstly, students should comprehend some information about the topic whether they are studying or observing the topic. Secondly, students should develop some basic comprehension of the rules about the given topic, how it acts, why things occur as they do, and what

influences some event. Thirdly, students must predict the topic, and how and why to test the hypothesis. Fourth, the student must make a report about findings by explaining why the result is associated with and what he predicted (Marzano et al., 2001).

Two types of hypotheses improve the understanding of learners: The deductive method is used for a general rule to predict the future, while the inductive method involves new conclusions which are based on information (Owen, 2003). The hypothesis can be conducted individually in a group and students can be engaged in cognitively complex task through generating and testing hypothesis which involves investigation, problem-solving, decision making, system analysis, experimental inquiry, and invention where the teacher acts as a resource provider and a guider that engage their students in a cognitively complex task where students might generate a hypothesis (Marzano et al., 2001).

Engaging Students

There are various ways to engage the students such as activities, positive feelings or emotional engagement, and cognitive engagement (Fredricks, 2014), but if students do not take an interest in learning activities and their interest diverts to the other side then they do not engage properly in activities or may be disengaged or may do not show their response relevantly (Fredricks et al., 2004). When the teacher effectively controls the class without losing their temper and politely advises them, then student engagement level can be increased as a result. Collaborative learning such as lectures, small group projects, role-playing, journaling, sketching, partner discussions, and debates is also another source to increase the engagement level of the students (Wentzel, 2009). Using different activities, teachers can maintain and sustain the interest of students to maximize their learning outcomes (Anderman & Patrick, 2012; Fredricks et al., 2004).

Recognizing Adherence to Rules and Procedures

Marzano (2012) emphasized that teachers should boost their students' adherence to rules and procedures regularly in the classroom. After establishing the rules and regulations for the classroom, teachers ensure the implementation of the determined rules and regulations. Students should be rewarded for good behavior in the process of learning to maintain discipline in the classroom (Marzano, 2007). A classroom where learners trust on their teachers and teachers has the potential to create a supportive environment, student maximize their learning within the boundaries of regulations and rules (Hester, 2013).

Maintaining and Developing Effective Relationships

The relationship between teacher and student plays an important role in the classroom atmosphere. Students spend more time with a teacher and teacher knows the cognitive level of their students which is more effective for the teacher-student relationship. Effective communication, giving respect, concentrating on goals, and attention are required to establish strong mutual relationships (Good, 2000). Teachers create emotional relationships with students at the primary level that are essential for positive student' behavior and their future study because student outcomes and behavior are highly dependent on the effectiveness of the teacher and their relationship with students (Jones & Vesilind, 1995). Kizlik (2009) stated that effective classroom management requires consistency, teacher behavior, fairness, and courage which are also helpful in establishing good relationships. Teachers allow and encourage all students to participate in discussions, and interactions also provide help to develop good relationships (Marzano, 2009).

Communicating High Expectations for All Students

Academic opportunities and expectations have more effects on student outcomes (Weinstein, 2002). Teachers can communicate high expectations by providing proper feedback to the students and guiding them properly (Hossain et al., 2008; Weinstein, 2002). Expectations develop healthy interaction and a supporting environment which is highly required to complete the assigned task in the classroom (Schunk & Mullen, 2012). Further, by providing motivation and expectations to the students, teachers can produce better results because students develop great confidence in their abilities which maximizes their performance (Marzano, 2007).

Overall, Marzano's Model of instructional strategies is most important for teachers because these nine factors help teachers improve their students' performance and skills. These strategies help students to develop the deepen their knowledge and students also take more interest in their studies. Teachers use different strategies and methods to improve the performance of their learners and enhance their knowledge. Teachers also use

instructional strategies to manage the classroom and enhance the thinking capability of students. By implementing these strategies students might be able to think deeply and understand the rules and regulations of the classroom. The study focused on how effectively the Marzano et al. (2001) model is used by primary teachers in Pakistan, a gap that exists in the literature and the researchers tried to fill this gap through this study.

METHOD

Research Design

This study is quantitative in nature and causal comparative research design was used in the given study. Data were collected through conducting the survey. All public and private primary schools of district Okara were the population of the study and 40 public primary schools, and 40 private primary schools were chosen as a sample through convenience sampling techniques. Among them, 300 primary school teachers were selected randomly from district Okara as a sample of the study from public and private primary schools in which 150 teachers were from the public primary schools and 150 teachers were from the private primary schools.

Instrumentation

The instructional Strategies scale was developed by the researchers to examine Marzano's instructional strategies in primary schools by the researchers through ensuring the validity and reliability of that scale. The scale consisted of 41 items involving 9 main domains of instructional strategies. Likert type scale was used for this questionnaire and response scales were as Never, Sometime, Often, Mostly, and Always. The internal consistency coefficient of the scale was 0.89, which is highly appropriate in social sciences. This result demonstrated that the instrument was valid and reliable to be used.

Data Collection

One of the researchers visited the sampled primary schools in district Okara. After obtaining the consent from teachers, data were obtained from primary school teachers by using a questionnaire developed by the researchers through visiting the sampled schools. The researchers ensured all ethical concerns of the study such as informed consent, data confidentiality, safety, and harmfulness.

Data Analysis

The study used a quantitative approach and SPSS version 20 was used to enter and analyze the data. To analyze the data, a t-test for an independent sample was employed in this study. The details of the data analysis are provided in the following.

FINDINGS

In the following Table 1, the researcher examined the difference between public and private primary schools by using Marzano's instructional strategies and the means of these two groups were compared by using a t-test for the independent sample to find out the difference between these two groups.

According to Table 1, the private school teachers showed higher scores than public school teachers on the factors: hypothesis, $t(298)=-1.915$, $p=0.05$, and engagement $t(298)=-3.20$, $p=0.00$. However, no significant difference was found between teachers' perceptions of goal achievement, rules, interaction, practice, adherence, relationship, and expectation. Overall, there was no significant difference was found in using Marzano's instructional strategies model between public and private primary schools, $t(298)=-1.710$, $p>0.05$.

According to Table 2, the male teachers showed higher scores than female teachers on the factors: rules, $t(298)=2.369$, $p=0.01$, and relationship $t(298)=2.00$, $p=0.04$. However, no significant difference was revealed between both female and male teachers' perceptions of goal, interaction, practice, hypothesis, engagement, adherence, and expectations. Overall, there was no significant difference in using Marzano's instructional strategies model between male and female primary school teachers, $t(298)=0.011$, $p>0.05$.

In the following Table 3, the study examined the difference between primary school teachers having different academic qualifications (BA/BSC and MA/MSC/M.Phil) in using Marzano's instructional strategies and means of these two groups were compared through using t-test for independent sample to find out the difference between

these two groups. In the following Table 2, the study examined the difference between male and female teachers of primary schools in using Marzano's instructional strategies, and the means of these two groups were compared through using a t-test for independent sample to find out the difference between the groups.

Table 1. Comparison of Public and Private Primary Schools on Factors of Marzano's Instructional Strategies

Factors	School type	N	Mean	S.D.	t	df	Sig.
Goal	Public	150	10.522	3.898	0.495	298	0.621
	Private	150	10.273	3.998			
Rules	Public	150	7.602	1.738	1.519	298	0.130
	Private	150	7.264	1.762			
Interaction	Public	150	24.965	6.658	0.470	298	0.638
	Private	150	24.570	6.611			
Practice	Public	150	20.488	7.137	0.149	298	0.882
	Private	150	20.363	6.425			
Hypothesis	Public	150	9.397	3.534	1.915	298	0.051
	Private	150	10.212	3.166			
Engagement	Public	150	27.511	7.717	3.206	298	0.001
	Private	150	30.339	6.616			
Adherence	Public	150	8.965	3.395	0.080	298	0.936
	Private	150	9.000	3.340			
Relationship	Public	150	8.738	3.576	0.769	298	0.442
	Private	150	9.080	3.470			
Expectations	Public	150	8.943	3.504	1.574	298	0.117
	Private	150	9.622	3.361			
Overall	Public	150	127.13	11.940	1.710	298	0.088
	Private	150	130.72	18.120			

Table 2: Comparison of Male and Female Teachers on Factors of Marzano' Instructional Strategies

Factors	Gender	N	Mean	S.D.	T	df	Sig.
Goal	Male	137	9.378	3.736	-1.591	298	0.113
	Female	163	10.482	3.983			
Rules	Male	137	8.000	1.471	2.369	298	0.018
	Female	163	7.273	1.780			
Interaction	Male	137	25.945	7.086	1.238	298	0.217
	Female	163	24.509	6.542			
Practice	Male	137	20.081	6.188	-0.312	298	0.755
	Female	163	20.444	6.699			
Hypothesis	Male	137	9.405	3.095	-1.121	298	0.263
	Female	163	10.053	3.318			
Engagement	Male	137	27.918	7.551	-1.466	298	0.144
	Female	163	29.733	6.977			
Adherence	Male	137	9.756	2.772	1.490	298	0.137
	Female	163	8.882	3.414			
Relationship	Male	137	10.054	3.415	2.004	298	0.046
	Female	163	8.828	3.491			
Expectations	Male	137	9.162	3.531	-0.497	298	0.620
	Female	163	9.460	3.400			
Overall	Male	137	129.27	12.582	0.011	298	0.991
	Female	163	129.66	17.120			

Table 3: Comparison of Teachers' Academic Qualifications on Factors of Marzano's Models Instructional Strategies

Factors	Academic Qualification	N	Mean	S.D.	t	df	Sig.
Goal	B.A/B.SC	207	10.193	4.030	1.000	298	0.318
	M.A/M.SC/M.PHIL	93	10.688	3.813			
Rules	B.A/B.SC	207	7.347	1.796	0.227	298	0.020
	M.A/M.SC/M.PHIL	93	7.397	1.682			
Interaction	B.A/B.SC	207	24.458	6.720	0.889	298	0.375

	M.A/M.SC/M.PHIL	93	25.193	6.386			
Practice	B.A/B.SC	207	20.154	6.607	0.956	298	0.340
	M.A/M.SC/M.PHIL	93	20.946	6.682			
Hypothesis	B.A/B.SC	207	9.787	3.386	1.461	298	0.145
	M.A/M.SC/M.PHIL	93	10.387	3.053			
Engagement	B.A/B.SC	207	29.236	7.216	1.000	298	0.031
	M.A/M.SC/M.PHIL	93	30.118	6.707			
Adherence	B.A/B.SC	207	9.029	3.406	0.300	298	0.764
	M.A/M.SC/M.PHIL	93	8.903	3.240			
Relationship	B.A/B.SC	207	8.864	3.508	0.851	298	0.396
	M.A/M.SC/M.PHIL	93	9.236	3.484			
Expectations	B.A/B.SC	207	9.289	3.495	1.011	298	0.313
	M.A/M.SC/M.PHIL	93	9.720	3.218			
Overall	B.A/B.SC	207	128.362	16.018	2.050	298	0.051
	M.A/M.SC/M.PHIL	93	132.591	17.596			

According to table 3, M.A/M.sc/MPhil teachers showed higher scores than B.A/B.sc teachers on the factor: engagement, $t(298)=-1.00$, $p=0.031$, and rules, $t(298)=-0.227$, $p=0.020$. There was no significant difference between M.A/M.sc/MPhil teachers and B.A/B.sc teachers on factors such as adherence, interaction, practice, hypothesis, relationship, expectations, and goals. Overall, a significant difference was revealed between them and M.A/M.SC/MPhil teachers showed higher scores than B.A/B.sc teachers, $t(298)=-2.050$, $p=0.051$.

In the following Table 4, the study examined the difference between primary school teachers having different Professional qualifications (BED and MED/MA Education) in using Marzano's instructional strategies and means of these two groups were compared through using t-test for independent samples to find out the difference between the groups.

According to the table 3, M.ED/M.A Edu teachers showed higher scores than B.ED teachers on the factors: engagement, $t(298)=-0.484$, $p=0.028$, and rules, $t(298)=0.227$, $p=0.02$. There was no significant difference between M.ED/M.A Edu teachers and B.ED teachers on factors: goal, interaction, practice, hypothesis, adherence, relationship, and expectations. Overall, there was a significant difference in using Marzano's instructional strategies model between M.ED/M.A Education teachers and B.ED teachers, $t(298)=0.372$, $p=0.04$ and M.ED/M.A Education teachers showed a higher score than B.ED teachers.

Table 4: Comparison of Teachers' Professional Qualifications on Factors of Marzano's Model of Instructional Strategies

Factors	Professional qualification	N	Mean	S.D	t	df	Sig.
Goal	B.ed	175	10.514	4.128	0.866	298	0.387
	M.ed/M.A Edu	125	10.112	3.727			
Rules	B.ed	175	7.232	1.714	0.227	298	0.021
	M.ed/M.A Edu	125	7.396	1.826			
Interaction	B.ed	175	24.874	6.718	0.580	298	0.562
	M.ed/M.A Edu	125	24.424	6.489			
Practice	B.ed	175	20.354	6.889	1.141	298	0.888
	M.ed/M.A Edu	125	20.464	6.275			
Hypothesis	B.ed	175	10.028	3.273	0.343	298	0.732
	M.ed/M.A Edu	125	9.896	3.333			
Engagement	B.ED	175	29.342	7.455	0.484	298	0.028
	M.ed/M.A Edu	125	29.744	6.496			
Adherence	B.ED	175	8.868	3.380	0.742	298	0.459
	M.ed/M.A Edu	125	9.160	3.315			
Relationship	B.ed	175	8.714	3.463	1.560	298	0.120
	M.ed/M.A Edu	125	9.352	3.529			
Expectations	B.ed	175	9.291	3.361	0.792	298	0.429
	M.ed/M.A Edu	125	9.608	3.487			

	B.ed	175	129.371	17.160			
Overall	M.ed/M.A Edu	125	130.096	15.865	0.372	298	0.042

In the following Table 5, the study examined the difference between primary school teachers having different instructional experiences (1-10 years and 11-20 years) in using Marzano's instructional strategies and means of these two groups were compared through using t-test for independent sample to find out the difference between the groups.

Table 5: Comparison of Instructional Experiences of Teachers on Factors of Marzano's Instructional Strategies

Factors	Experience	N	Mean	S.D	t	df	Sig.
Goal	1-10 years	106	10.915	3.759	1.843	298	0.066
	11-20 years	194	10.036	4.048			
Rules	1-10 years	106	7.047	1.774	-2.318	298	0.021
	11-20 years	194	7.536	1.730			
Interaction	1-10 years	106	22.207	6.078	-4.985	298	0.000
	11-20 years	194	26.041	6.519			
Practice	1-10 years	106	18.801	6.203	-3.131	298	0.002
	11-20 years	194	21.273	6.708			
Hypothesis	1-10 years	106	9.717	3.343	-0.996	298	0.320
	11-20 years	194	10.113	3.266			
Engagement	1-10 years	106	28.717	6.705	-1.440	298	0.151
	11-20 years	194	29.943	7.231			
Adherence	1-10 years	106	8.575	3.411	-1.588	298	0.113
	11-20 years	194	9.216	3.304			
Relationship	1-10 years	106	8.830	3.393	-0.547	298	0.584
	11-20 years	194	9.061	3.562			
Expectations	1-10 years	106	9.094	3.267	-1.236	298	0.218
	11-20 years	194	9.603	3.483			
Overall	1-10 years	106	123.905	13.878	-4.593	298	0.000
	11-20 years	194	132.824	17.157			

According to Table 5, teachers who experienced 11-20 years showed a higher score than teachers who experienced 1-10 years on the factors: interaction, $t(298)=-4.985$, $p=0.00$, practice, $t(298)=-3.13$, $p=0.002$, and rules, $t(298)=-2.318$, $p=0.02$. However, there was no significant difference between teacher experience of 11-20 years and teacher experience 1- 10 years on factors: goal, hypothesis, engagement, relationship, and expectations. Overall, there was a significant difference in using Marzano's instructional strategies, and teachers having experience 11-20 years showed a higher score than teachers having experience 1-10 years, $t(298)=-4.593$, $p=0.000$.

DISCUSSION AND CONCLUSION

The study focused on the Model of Robert Marzano's instructional strategies and their use in Pakistani public and private primary schools. The study revealed that there were no significant differences between public and private school teachers' perceptions and male and female schoolteachers' perceptions of using Marzano's model of instructional strategies. The study also revealed that there was a significant difference between the teachers having different academic qualifications, and MA / M.sc / MPhil teachers was found better than BA / B.sc teachers in using these instructional strategies. The study further showed that there was a significant difference between teachers having different professional qualifications, and MED/MA Education teachers were found better than BED teachers. A significant difference was also found between teachers having different years of experience and more experienced teachers were found better as compared to less experienced teachers in using instructional strategies. Overall, the result of the study confirmed that Marzano et al. (2001) model might contribute to developing a better understanding of teachers, head teachers, and policymakers about the instructional strategies that are essential to obtain better results for students.

However, the study revealed that teachers having good academic qualification, professional qualifications, and more experienced primary school teachers were better at performing these nine instructional strategies which were provided by Marzano et al. (2001) but gave a better understanding to teachers of the importance of these

instructional strategies in using their instruction. Communicating goals and tracking students' progress are most required by teachers to ensure the implementation in the classroom to obtain better results (Brophy, 2005; Marzano, 2009). The development of rules and procedures is essential to harmonize and regulate the overall instructional process in which each stakeholder understands their responsibilities in the institutions to maximize the outcomes of instruction (Marzano, 2009; Lord Nelson et al., 2004). It is essential for teachers to help their students get new information and knowledge which is highly required to develop the skills and abilities of students (Marzano, 2003; Pittaway & Edwards, 2012). Helping students practice and interact with new knowledge develops advanced thinking skills that assist students to participate in activities and teachers to engage their students to learn new knowledge (Anderson et al., 1995; Marzano, 2009). All these previous studies are in line with the study at hand that teachers through using effective instructional strategies might develop better skills of students and enhance the academic achievement of learners.

Further, generating the hypothesis involves investigation, problem solving, decision making, system analysis, experimental inquiry, and invention where the teacher acts as a resource provider and a guide that engage their students in the cognitively complex task (Marzano et al., 2001). By engaging the students in different activities, teachers can maintain the interest of students to maximize their learning (Anderman & Patrick, 2012). In a classroom in which students have faith in their teachers and the teacher has the potential to develop a great environment, the student can maximize their learning within the boundaries of regulations and rules (Hester, 2013). All previous research is also consistent with the given study and further confirmed that through having better ideas about instructional strategies by teachers, the quality of education can be maximized and desired results can be obtained.

Furthermore, Effective classroom management requires common sense, consistency, teacher behavior, fairness, and courage which are also helpful to establish good relationships (Good, 2000; Kizlik, 2009). Academic opportunities and expectations have more effects on student outcomes (Weinstein, 2002). Overall, results based on Marzano's model (2001) of instructional strategies were encouraging and consistent with various studies that further strengthen the idea that effective teachers through using these instructional strategies can maximize the performance of their students.

Overall, the study at hand concluded that there was no significant difference between public and private school teachers and male and female schoolteachers in using Marzano's model of instructional strategies. The study also revealed that there was a significant difference between the teachers having different academic qualifications and MA / M.sc / M. Phil teachers were found better than BA / B.sc teachers in using these instructional strategies. The study further also showed that there was a significant difference between teachers having different professional qualifications, and MED/MA Education teachers were found better than BED teachers. A significant difference was also found between teachers having different years of experience and more experienced teachers were found better as compared to less experienced teachers.

Recommendations

The study revealed that primary teachers having less academic, professional, and instructional experience were implementing these instructional strategies at a low level as compared to the primary teachers having more academic and professional qualifications, and instructional experience. Therefore, the study recommended that district authorities and policymakers take the steps and ask teachers to enhance their qualifications in terms of academic and professional, and arrange different professional development trainings immediately for these teachers to overcome the prevailing deficiencies to obtain the required results. Overall, the study also recommended training for teachers on the provided Marzano's model (2001) of instructional strategies to enhance the competence of teachers and maximize the student's achievement.

Statement of Researchers

Researchers' contribution rate statement: The first author contributed 60 % through writing the introduction and methodology, while the co-author contributed 40 % through writing the review of related literature and discussion in the given study.

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