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## **Determination of the Factors Affecting Professional Competency of Secondary School Teachers of Karachi**

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**Abstract:** Professional development of teachers is essential to raising student achievement. Because professional development encompasses multiple facets and adjustments during an educator's career. The ability of a teacher to oversee the teaching and learning process is known as professional competence. The capacity to drive learning is supported by instructional tactics, media, classroom management, and subject matter expertise. These are technical qualities that are directly related to the effectiveness of a teacher. The purpose of the study was to determine of the factors affecting professional competency of secondary school teachers of Karachi. The scope of the study was limited to secondary schools of Karachi. The research objectives were the following: To study the job performance of professionally developed secondary school teachers. To compare the professional competency among public and private secondary school teachers. Two hypotheses

were formulated. A comprehensive analysis of the literature was done. The strategy of research was survey. All the secondary school teachers were part of the population. A sample of 300 secondary school teachers was drawn through stratified random sampling design. Questionnaire and interview protocol were used to collect data. Data were analyzed and it is found that the majority of the teachers are continuously make them up to date and use appropriate means and make maximum efforts for their professional development. This study will contribute to the growth of knowledge regarding the characteristics of teachers. It will assist the concerned specialists in taking the appropriate steps to assess the responsibilities and abilities of educators. It will benefit many field investigators. It will assist secondary school teachers in honing their instructional techniques.

**Keywords:** professional competency, secondary school, teachers.

## Introduction

Education is usually defined as delivery of information, ability and knowledge from teachers to students. To work in a formal educational setting, teachers must meet both professional and academic requirements. According to Global Education Monitoring Report Team (2003), instructors' instructional and pedagogical abilities have a big influence on what their pupils learn. Professional development has also been linked to decreasing teacher turnover and improving teachers' capacities (Nguyen & Redding, 2018). Teacher reflection on professional practices, pedagogy improvement, and content understanding can all be facilitated by professional development activities (Fulton & Britton, 2011). Furthermore, it has been shown that professional development that is logically integrated into teachers' everyday tasks is beneficial in enhancing teacher outcomes (Croft et al., 2010). Consequently, proficient professional development initiatives can enhance educators' expertise and self-assurance in the classroom, potentially yielding significant effects on their pedagogical outcomes. The accurate position of teacher in system of education as, it is said that no system of education can be better than its teachers. The educator is the emperor in the educational setup. In teaching qualifications of the teacher play an important role but professional education or training is most essential in teaching, since trained teacher can teach better than an untrained teacher. Generally, it is claim that a trained teachers knows well how to teach effectively. The significance of teacher training that without trained teachers' schools cannot succeed. In carrying out teaching as an accountable profession be established the general areas of study in teacher education. The competence in teaching includes various wanted attributes of instructors which would render them progressively productive and confidents in classroom teaching. This idea of competence accordingly incorporates such character attributes like responsibility and obligation as an educator and efficiencies like content mastery, communication skills and it likewise includes one's capacity to create sound and great relational associations with one's partners and furthermore with students. Professional ability including both the ability to perform specific training functions (professional skills) and the ability to demonstrate acquired knowledge and higher level conceptualization. Competent teachers concern big , profound and consolidated course of action

of data and aptitudes they plan for execute and update direction. Development capacity is one segment of teachers.

### **Research Problem**

Since teachers are the foundation of the educational pyramid, the system may not function to its full potential if they do not receive enough training. Past studies have shown that professional development for teachers has a significant influence on their instructional strategies. It keeps them up to date and helps them grow so they can provide high-quality instruction and meet the requirements of their pupils. But in order to achieve these teaching competencies, school administrators must devote a substantial amount of time and funds and provide the required tools. Because of this, it is essential to choose a subject that will improve instructors' competencies. Teachers' competences are influenced by a variety of circumstances, and measuring them is a challenging task. The effectiveness of teachers' instruction and learning is recognized to be influenced by structural factors. Teachers' abilities are also impacted by organizational interest, cultural norms, and a lack of resources in schools. Numerous studies have shown that school leaders have a major influence on their faculty members' professional development, teaching abilities, and readiness for effective classroom instruction. In the study project, the researchers emphasized the critical role that professional development for teachers plays in raising the standard of instruction and raising student accomplishment in Pakistan. It has been established by earlier research that instructional leadership significantly affects both students' learning and teachers' capabilities. Previous study has indicated that more needs to be done to understand how different instructional styles affect teachers' skills in different settings.

Previous research findings suggested that teacher professional development improves teachers' capacity to carry out various duties assigned by higher authorities and effectively lead by example. Additionally, there is a strong and favorable correlation between professional training and the development of the learning environment (Haider & Ali, 2012; Sarwar et al., 2022; Siddiqui et al., 2021). Thus, the study's researcher was eager to determine the factors affecting on professional competencies of secondary school teachers.

### **Research Focus**

The research is focused on teachers' professional competency of secondary schools. Secondary schools are the back bone of any education systems and it needs a competent and professional trained teacher so they can make teaching learning process better. Secondary education is a crucial stage in developing a learner's academic capacity, which is the greatest instrument for advancing society and contending for the nation's economic standing. As a result, it is essential to concentrate on the work performance of teachers, who are generally a valuable resource for the advancement of the institutions (Kazmi et al., 2011; Nzariwehi & Atuhumuze, 2019).

## **Research Aims**

- To study the job performance of professionally developed secondary school teachers.
- To compare the professional competency among public and private secondary school teachers.

## **Two Major Hypotheses were Formulated**

- There will be no significant difference in the effectiveness of teaching style among professionally developed secondary school teachers
- There will be no significant differences in the professional competency among public and private secondary school teachers

## **Scope of the Study**

The study will be helpful because of its effectiveness in determining the factors affecting on professional competencies of secondary school teachers. It will direct and support the authorities to take decisions on the bases of the present study. The study will be the guide line for the secondary school teacher about the professional competency. The study revolved around all the secondary school teachers of Karachi.

The key terms used in the study are:

*Professional competency:* Knowledge, skills, and abilities that can prepare you for success in the job and lifetime career management are known as professional competences

*Secondary school:* The transition from elementary to secondary school is known as the secondary school. Similar to how elementary schooling prepares kids for middle school and secondary education, secondary education prepares students for high school and further education at colleges and universities with their thorough attention to detail.

*Teacher:* A teacher is someone who guides students in the acquisition and development of their skills, information, attitudes, and values. The future of individuals, society, and the world as a whole is profoundly shaped by teachers. They give students the knowledge and skills they need to excel in the classroom, in their personal lives, and in their jobs.

## **Literature Review**

In the specialized profession of teaching, every member of society contributes to the improvement of the pupils' talents. Consequently, Teachers must first possess strong academic and professional credentials. Staff development in the education sector is concerned with the teachers' ongoing professional development while they are employed. One of the most important things for the growth of the entire educational process is the performance of the teachers at educational institutions.

Professional competency is played a vital role to make a skilled and professional teacher the basic aim of this study is the determination of the factors which affects on the professional competencies of a secondary school teachers. Wahyudin (2018) indicates that one of the key determinants of the good and bad quality of student learning outcomes is the significant role that teachers play in education. Based on these prerequisites, it is evident that pursuing professional roles necessitates pursuing educational degrees tailored to that role. Warman et al. (2021) argues that when performing a task or job, a professional needs to be committed to the position by giving service to citizens who are learning priority.

The position is a call to life, and the call to life in task completion is indicated by the availability of time, commitment, and making these jobs a living career. A skilled teacher is someone who satisfies the minimal requirements for teaching at a certain level of learning while also helping pupils acquire new skills and knowledge; claim Musau and Abere (2015). Arikunto (2021) suggests that in order for a teacher to be considered professional, they must possess both a wide and in-depth understanding of the material they are expected to teach as well as a mastery of methodology, which includes theoretical concept mastery and the ability to select the best approach and apply it to the teaching and learning process.

Conversely, educators who lack professional training or who just receive introductory instruction often find it difficult to effectively meet the diverse needs of their students. Yeşilçinar and Aykan (2022) state that while induction programs can provide new instructors with some support and mentoring, they often do not provide the thorough and in-depth knowledge that pre-service training provides. If teachers do not have a solid foundation in pedagogy and instructional tactics, they may find it challenging to differentiate instruction, implement evidence-based practices, and control the classroom environment. As a result, students taught by teachers with less professional training may see a decline in academic success and engagement. Kiani (2023) indicates to teachers who participated in induction programs or who got no teaching preparation, the findings showed that pre-service teachers had more effective teaching techniques.

Pre-service training programs have been suggested as a means for educational institutions to enhance their pedagogical practices, knowledge, and teaching abilities. Asmarani et al. (2021) findings demonstrated a strong and positive correlation between teacher job productivity and professional competency. Therefore, instructors' productivity at work increases with their level of professional competence. According to the findings of Lorensius et al. (2022) academic supervision provided by school principals can support, direct, and encourage teachers as they develop their professional skills, particularly when it comes to instructing and learning activities in the classroom. Teachers are able to properly integrate and utilize their unique abilities in learning through peer input through a methodical and well-planned supervision approach.

Teachers can also learn via reflection exercises, which are a sign of a professional instructor. Instructors and supervisors alike can see the value of academic supervision in enhancing instructors' professional development and, eventually, in enhancing student learning results. A study by Moon (2013) found that one of the key factors influencing a teacher's level of trustworthiness is their

credentials, such as degrees and certifications. Moreover, maintaining a high level of behavior is necessary to accomplish broad academic goals. The term "professional qualification of teachers" describes the opportunities that working teachers have to acquire new skills, perspectives, and ways of seeing at the world that could make them even more effective teachers (Antony & Elangkumaran, 2020). Based on Sulistio et al. (2024) professional competence is a comprehensive and deep understanding of the subject matter covered in the curriculum, including scientific content and school topic curriculum material, as well as scientific structure and technique. Zaragoza et al. (2021) the findings highlight the necessity for educators in today's classrooms to be lifelong learners, especially in the areas of interpersonal and relational skills. As a result, social-emotional skills and effective classroom management are essential components of a teacher's professional development path.

Other areas of focus include collaborations between academic institutions and schools, as well as the necessity of consulting school educational teams throughout the policy-making or training plan-designing stages. Our discovery that teachers possess some of these competencies has ramifications for higher education institutions and ongoing learning. More professional credentials were linked to increased skill in teaching strategies, classroom management, and student involvement. These successes can be linked to the teachers' increased propensity to meet the unique requirements of each student through individualized instruction, tools for critical thinking, and student-centered methods. Lorensius et al. (2022) indicates that principals of schools can provide academic supervision to assist, mentor, and inspire teachers in developing their professional skills, particularly in the process of instructing and learning activities in the classroom.

Teachers are able to properly integrate and utilize their unique abilities in learning through peer input through a methodical and well-planned supervision approach. Teachers can also learn from reflection tasks, which are an essential component of professional teaching. The value of academic supervision for enhancing teachers' professional competence and, eventually, for enhancing student learning outcomes is something that supervisors and teachers can both recognize. Mulyasa (2021) emphasized teachers who are professionals possess a wide range of educational knowledge, managerial skills, creativity, teaching experience, intellectual capacity, morals, faith, piety, discipline, responsibility, and a professional openness in understanding the potential, characteristics, and developmental issues of students, create student careers and study programs, as well as conduct research and create curricula. Professional development often refers to an individual's advancement within their role as a professional worker. In a nutshell, professional development for educators is the progress made in their field as a result of acquiring new knowledge and critically evaluating their teaching approaches.

Teaching is a challenging profession that requires skill development. The art of pedagogy, or teaching, is the application and performance of a variety of abilities and skills that the educator must develop and integrate into his or her cognitive repertoire (Naqvi, 2018). It is commonly known those raising teachers' levels of education and professional development would undoubtedly result in better teaching and learning outcomes. Moon's (2013) argument is supported by Mulkeen's (2010) research, which argues that there is a strong correlation between the productivity of teachers and

the quality of their training. These trainings are only helpful when they are both applicable and useful, given the resources that teachers at each school have access to. Mugarura et al. (2022) stated that teachers are motivated to produce better work. Teachers must have access to continuing professional development in order to teach effectively. Teachers can enhance their own education through seminars, workshops, and classes, among other forms of professional development.

Professionally trained teachers can utilize their abilities to set up rules, manage disobedience, and provide a secure, encouraging learning environment for their pupils. Furthermore, in order to raise student engagement and encourage higher order thinking, instructors with postgraduate degrees commonly employ interactive teaching practices, educators with advanced degrees frequently use interactive teaching strategies to increase student engagement, encourage active involvement, and stimulate higher level thinking. Professional training should be a continuous part of a teacher's life since it is essential to maintaining and improving effective teaching practices. These ongoing professional development opportunities provide educators with the foundation for lifetime learning and enable them to stay up to date with the most effective, research-based teaching methods. With professional development programs, educators can successfully incorporate technology into their classes, implement cutting-edge teaching techniques, and improve their teaching practices in the classroom. In summary, professional development and training of the teacher plays a vital role to develop professional competences among secondary school teachers. It also helps in better teaching and learning outcomes. As teaching is challenging job it requires expertise to face these challenges. so it becomes necessary for a teacher to engage him/her in a state of art (up to date knowledge.)

## **Research Methodology**

This study employed a survey design. Researcher selected cross sectional survey design in respect of available resources. . Through survey researcher has a significant option to understand the real ground situation physically and level of effectiveness of valid data is superior.

### **Participants / Sample**

The populace is broad and varied. The population of the study was comprised of all secondary school teachers in Karachi. The total numbers of secondary school teachers were approximately 25000 both in public and private sector. Population was large and heterogeneous. Population was scattered in seven districts of Karachi. stratified random sampling design was used to draw a sample. Principle of stratification was gender. The sample size was 300 secondary school teachers. A small sample of 25 secondary school teachers was selected through purposive sampling design. It was drawn from original sample. Criterion of selection was level of experience at secondary level. The selected teachers were having experience of 15 years and above.

### **Instrument and Procedures**

In this research study researcher designed two research instruments. 1. Questionnaire 2. Semi-Structure Interview

## Data Analysis

Procedure Data was collected by adopting careful procedures and sticking to basic principles of data collection process. Prior to visiting any institution and interacting with the respondents consent were taken. After fulfilling all pre-requisites data was collected. Before data collection researcher develops friendly environment.

**Plan of Analysis.** Two types of analytical methods were used. Firstly, qualitative analysis of the interview protocols was made and the results were described in the narrative form. The second type of technique used was quantitative which involved both descriptive and inferential statistical procedures. Tables with frequencies and percentages were used for description of data. In testing the hypotheses involving two groups, the t-test was used. In item-wise analysis, which involved categorical data the chi square was used. The data analyses were done manually. Therefore, computations were carried out in detail and shown in the report to facilitate replication.

### Composition of the Sample on the Bases of Control and Professional Qualification

**Table 1**

*Distribution of Secondary School Teachers by the Control*

Control	Number of teachers	Percentage
Public	160	53%
Private	140	47%
Total	300	100%

The Table1 makes it evident that 47% of teachers worked in the private sector and 53% in the public sector. The sample's public to private secondary school ratio is 53:47.

**Table 2**

*Distribution of Secondary School Teacher by Professional Qualification*

Professional qualification	Frequency	Percentage
Professionally More Qualified	220	73%
Professionally Less Qualified	80	27%
Total	300	100%

The Table 2 makes it evident that 73% of teachers had training, whereas 27% did not. The ratio of professionally better qualified instructors to less qualified teachers in the sample is 73:27.

### Hypothesis No. 1

There will be no significant difference in the mean scores regarding effectiveness of the teaching among public and private secondary school teachers.

#### Analysis of the problem.

1.  $H_0 : \mu_1 = \mu_2$
2.  $H_1 : \mu_1 \neq \mu_2$
3.  $\alpha = 0.05$
4. Test Statistics:  $t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2 + s_2^2}{n_1 + n_2}}}$
5. Decision Rule: Reject the null hypothesis if computed  $t \geq$  tabulated  $t$
6. Conclusion

#### Application of t-test.

T-test was applied to compare the difference between public and private secondary school teachers (Table 3).

**Table 3**

*T-test of the Hypothesis No. 1*

	Private $x_1$	Public $x_2$
Mean	217.39	205.95
Variance	603.40	989.90
Sample	140	160
Df	N-2, $df=300-2= 298$	
t computed value	3.53	
t Tabulated value	1.96	

With reference to table t, it was discovered that the computed value of  $t = 3.53$  is larger than the tabulated value of  $t = 1.96$  with  $df = 298$  at  $\alpha = 0.05$ . Consequently, the null hypothesis is rejected. It is determined that secondary school teachers in public and private schools have significantly different mean scores when it comes to their teaching styles.

Looking at the table, it is evident that secondary school teachers at private schools have more effective teaching methods than those in public schools.

### Hypothesis No. 2

There will be no significant difference in the effectiveness of the teaching style among trained and untrained secondary school teachers.

### Analysis of the problem.

1.  $H_0 : \mu_1 = \mu_2$
2.  $H_1 : \mu_1 \neq \mu_2$
3.  $\alpha = 0.05$
4. Test statistics:  $t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2 + s_2^2}{n_1 + n_2}}}$
5. Decision rule: Reject the null hypothesis if computed  $t \geq$  tabulated  $t$ .
6. Conclusion

### Application of t-test.

T-test was applied to compare the difference between trained and untrained secondary school teachers (Table 4).

**Table 4**

*T-test of the Hypothesis No. 2*

	<b>Untrained X<sub>1</sub></b>	<b>Trained X<sub>2</sub></b>
Mean	221.23	206.05
Variance	671.04	871.54
Sample	80	220
Df	N-2, df=300-2=298	
t computed value	4.31	
t tabulated value	1.97	

With reference to table t, it was discovered that the computed value of  $t = 4.31$  is larger than the tabulated value of  $t = 1.97$  with  $df = 298$  at  $\alpha=0.05$ , indicating the rejection of the null hypothesis. It is determined that there is a noteworthy distinction in the average score concerning teaching style between secondary school instructors who have received training and those who have not.

It is evident from looking at the chart that untrained teachers have a more successful teaching style than trained ones.

### Item-Wise Analysis

All the items were analyzed through application of Chi square test ( Test of Goodness of Fitness), One Variable Case.

### Analysis of the problem.

1.  $H_0: f_1 = f_2 = f_3 = f_4 = f_5$
2.  $H_1: f_1 \neq f_2 \neq f_3 \neq f_4 \neq f_5$
3.  $\alpha = 0.05$

4. Test statistics= $\chi^2$

$$\chi^2 = \sum (f_o - f_e)^2 / f_e$$

5. Decision Rule: Reject the null hypothesis if computed  $\chi^2 \geq$  tabulated  $\chi^2$

**Item No. 1.** Teacher continuously has a state of art (up to date knowledge). There will be no significant difference in the quality of teaching carried out by secondary school teachers in respect of item no. 1.

**Conclusion.** With reference to the  $\chi^2$  Table, we discover that the computed  $\chi^2 = 237.1$  is more than the tabular  $\chi^2 = 9.488$  with  $df=4$  at  $\alpha = 0.05$ . As a result, the  $H_0$  is rejected, and it is determined that there is a significant difference in the quality of teaching carried out by secondary school teachers of Karachi.

It is evident from looking at the table that the majority of teachers concur that teacher continuously has a state of art. (up to date knowledge)

**Item No. 2.** Teacher uses appropriate means for his professional development. There will be no significant difference in the quality of teaching carried out by secondary school teachers in respect of item no. 2.

**Conclusion.** With reference to the  $\chi^2$  table, we discover that the computed  $\chi^2 = 284.34$  is more than the tabulated  $\chi^2 = 9.488$  with  $df=4$  at  $\alpha = 0.05$ . As a result, the  $H_0$  is rejected and it is concluded that there is a significant difference in the quality of teaching carried out by secondary school teachers of Karachi.

It is evident from looking at the chart that the majority of instructors concur that using proper techniques for professional development is important.

**Item No. 3.** Teacher maximizes their efforts for enhancing professional competencies. There will be no significant difference in the quality of teaching carried out by secondary school teachers in respect of item no. 3.

**Conclusion.** With reference to the  $\chi^2$  table, we discover that the computed  $\chi^2 = 239.2$  is more than the tabulated  $\chi^2 = 9.488$  with  $df=4$  at  $\alpha = 0.05$ . As a result, the  $H_0$  is rejected and it is concluded that there is a significant difference in the quality of teaching carried out by secondary school teachers of Karachi.

It is evident from looking at the table that the majority of teachers believe that instructors should put their best efforts into developing their professional competencies.

**Item No. 4.** Effective teaching is a significant predictor of student's academic achievement. There will be no significant difference in the quality of teaching carried out by secondary school teachers in respect of item no. 4.

**Conclusion.** With reference to the  $\chi^2$  table, we discover that the computed  $\chi^2 = 410.5$  is more than the tabulated  $\chi^2 = 9.488$  with  $df=4$  at  $\alpha = 0.05$ . As a result, the  $H_0$  is rejected and it is concluded

that there is a significant difference in the quality of teaching carried out by secondary school teachers of Karachi.

Based on a close examination of the table, it is evident that the majority of teachers concur that good instruction is a strong indicator of students' academic success.

**Item No. 5.** Teacher utilizes all resources to make process efficient. There will be no significant difference in the quality of teaching carried out by secondary school teachers in respect of item no.5.

**Conclusion.** With reference to the  $\chi^2$  table, we discover that the computed  $\chi^2 = 210.55$  is more than the tabulated  $\chi^2 = 9.488$  with  $df=4$  at  $\alpha = 0.05$ . As a result, the  $H_0$  is rejected and it is concluded that there is a significant difference in the quality of teaching carried out by secondary school teachers of Karachi.

It is evident from looking at the table that the majority of teachers concur that using all available resources helps to ensure that processes are completed quickly and effectively.

### ***Content Analysis of the Data from Interview Protocol***

A protocol for interviews was created. There were three main questions in all. The interview protocol's questions were designed to achieve particular goals. The interviewees were principals of secondary schools. Using a purposive sample strategy, 25 principals of secondary schools were chosen. Control and experience were the main criteria for selection. Ten principals came from Karachi's private secondary schools, and fifteen were from the public sector. Content analysis was used to examine the data. Sub-themes and main themes were found, and a qualitative analysis was performed.

### ***Responses of Principals of Secondary Schools***

#### *1. What are the basic professional responsibilities of secondary school teachers?*

Professional Responsibilities was the main theme, with eight more specific sub-themes. Lesson planning, instructional strategies, instructional materials, effective communication, moral principles, integrity, sense of accountability, and career guidance and counseling were the sub-themes. According to 70% of principals, teachers' fundamental professional duties included using instructional materials, instructional strategies, and well-thought-out lesson planning. Fifteen percent said they had learned moral ideals from their professors. Ten percent of the principals agreed that punctuality and integrity were essential professional duties. Five percent of respondents agreed that educators need to have strong communication skills, help students with their careers, and prepare them for further education.

#### *2. What are the factors which may affect the performance of the secondary school teachers?*

Factors Affecting Performance was the main theme, with ten specific subthemes. Subject command, school infrastructure and labs, workload, school climate, absenteeism, student-teacher relationships, pay and promotion packages, parent cooperation, current events and politics, and

departmental meddling were the sub-themes. According to 75% of secondary school administrators, a teacher's performance is influenced by their workload, the school's internal and external environments, parents' collaboration, its laboratories, and its infrastructure. Fifteen percent of respondents believed that departmental meddling and political and current affairs could have an impact on instructors' effectiveness during the teaching and learning process. According to 10% of principals, factors that impact performance include tardiness in promotions, wage packages, student-teacher relationships, and absenteeism.

### *3. What are the strategies teachers use for their professional development?*

Professional development strategies served as the primary theme, with five related subthemes. The subthemes were motivation, curiosity, consistent reading habits, professional training and seminars, and communicative abilities. According to 60% of principals, some of the best professional development tactics employed by teachers include updating courses, improving communication skills, receiving training, paying attention, continuing education, staying current with knowledge, showing enthusiasm, and performing their duties in a submissive manner. Twenty percent of principals stated that they were motivated, attended professional development sessions, completed up-to-date courses, had professional training, and were knowledgeable about new technologies, teaching techniques, and tactics. Twenty percent of respondents concurred that educators participate in various seminars and are open to taking quick courses.

## **Discussion**

Teachers must have up-to-date knowledge and abilities in order to conduct the teaching process efficiently and rapidly. Teachers are the most intelligent people when it comes to using instructional resources, tactics, and a well-planned lesson plan. In order to communicate with educators in educational settings, professional development is an essential prerequisite. The foundation of a successful teaching approach and the guarantee of education are laid by competent and experienced teachers. Tabasum et al. (2022) suggested that most crucial element in the formation of a teaching-learning process is the improvement of instructors' pedagogical abilities, which is achieved through professional training. As a result, educators can expand their expertise to manage lessons in the classroom in a suitable manner.

Professional development influences teachers' democratic interactions with students in the classroom. Jabeen et al. (2023) study showed that because teachers are heavily influenced by prejudices, dishonesty, and merit, the least qualified and least motivated teachers rule the teaching profession. The lack of the newest technical and pedagogical skills, insufficient number of teaching and learning tools, and inadequate training of instructors in schools result in overworked teaching staff. When combined, these factors have a severe negative influence on a child's upbringing and education, severely harming the process of teaching and learning in schools.

It is determined that secondary school teachers at private schools have more effective teaching methods than those in public schools. Teachers in private schools employ pertinent audiovisual aids,

instructional approaches, strategies, and information technology, and administrators and coordinators oversee them on a continual basis. In private schools, teachers choose to become teachers voluntarily. Teachers now prioritize ongoing professional development and are more consistent and on time. Ghunio and Shaikh (2023) stated that continuous professional development programs improve teachers' confidence, knowledge, and skills, which improves their approaches. They offer fresh approaches, materials, and equipment for educational advancement, encouraging professionalism, group learning, and ongoing development. Teachers in secondary schools in the public sector employ less effective teaching methods since they are not held accountable or closely monitored. Compared to their educated counterparts in secondary education, untrained instructors are more effective teachers. The results demonstrate that secondary schools with no formal training teach more effectively than those with training. In the teaching profession, an inexperienced teacher would cause frustration for the entire educational system because he is unfamiliar with current teaching methods. These findings also support Imran's (2008) findings, which said that "teachers teaching in public secondary schools were more experienced and had greater academic and technical training than teachers teaching in private secondary schools. It has been noted that school administrators are forced to hire inexperienced teachers, particularly in the private sector. As a result, they place more trust in the content than in the instructor's skillful ability to impart knowledge. They also have a greater desire to learn and seek out new and creative ideas that will improve their instruction and aid in the teaching-learning process, as well as opportunities for salary increases and promotions. While untrained instructors are free to teach in any manner they see fit in order to advance in their careers, qualified teachers are subject to certain restrictions and limitations. It happens that teachers are not always born teachers. They become teachers by accident or by good fortune. However, inexperienced teachers take up the teaching style, which is why their performance is superior to theirs. They are essentially workers who strive to establish themselves in the field, whereas certified teachers hold positions that are typically permanent.

The majority of teachers consistently possess a state of art, it is decided. To be able to instruct in an engaging and successful method, they constantly seek to stay current on fresh and cutting-edge information. According to the research, preparing teachers for professional growth is a crucial step toward raising educational standards (Coe et al., 2014). Jabeen et al. (2023) suggests teachers and students can both benefit greatly from a warm and reliable environment, which will greatly reduce these challenges. Public schools should get instructional materials, ongoing professional development, and teacher training sessions, and promotions should be granted based on the qualifications of the instructors.

Additionally, the enhancement of student achievement across disciplinary focuses was greatly impacted by teacher Professional Development programs (Didion et al., 2020). Teachers put out their best effort to improve their professional abilities for effective teaching and use the proper tools for their own professional development. It has also been discovered that professional growth makes a substantial contribution to the sources of efficacy (Hoi et al., 2017). As per Tschannen-Moran and McMaster (2009), professional development offers educators the chance to accomplish a range of tasks associated with their teaching practice and presents genuine proof of accomplishment in

mastery experiences. The academic success of pupils is significantly predicted by effective instruction, and educators always make use of all available resources to streamline the process. Content analysis leads to the conclusion that effective use of instructional resources, strategies, well-crafted lesson plans, integrity, timeliness, and the provision of career guidance and counseling are among the fundamental professional requirements of teachers. Teachers encourage their students to take short courses, attend workshops and seminars, and establish a reading habit as a means of professional growth. According to the Naila and Mirwan (2022) findings, teachers who attended the training reported feeling more confident about their grasp of pedagogy. Therefore, in order to maintain the caliber of instruction and learning in schools, the study proposes that continuous professional development training be made mandatory for all teachers and suggests instituting training seminars in schools. This research study is limited to the secondary school teachers of Karachi as the secondary education is very significant stage to develop students' abilities. Teachers at this level should be professional and qualified. So it becomes helpful for future of the students. According to the results, putting the following strategies into practice could hasten the beneficial changes being made to the educational system and help establish different professional and refresher course for the future.

## **Conclusions and Implications**

This research focuses on the distinct cultural and educational background of Karachi. In order to provide a more comprehensive perspective, the study looks at the vast spectrum of factors influencing teacher professional competency. The study offers a more in-depth and comprehensive investigation by combining quantitative and qualitative methodologies. The study gives secondary school teachers' perspectives and experiences priority, resulting in a more genuine understanding. Programs for professional development were the focus of the investigation.

The study aids in the creation of tactics to raise student accomplishment by illuminating the factors that contribute to a teacher's effectiveness. The results of the study can help shape policy choices that are suited to the unique educational requirements of Karachi. This study offers fresh viewpoints and ideas that contribute to the corpus of knowledge already available on teacher professional competence. The results of the study can help school administrators establish environments that are encouraging of teachers' development and efficacy. The study gives instructors the confidence to take charge of their professional development by outlining the elements that affect their competence. The study's conclusions can be modified and used in different educational environments both domestically and abroad.

This research produced a number of discoveries that call for additional discussion. According to the literature review, teacher performance and intelligence have consistently been the main topics of discussion in teacher education and education research. A teacher's aptitude, information, talent, capacity, and skill competency are important factors in determining the quality of their instruction, but so are their eagerness, dedication, responsibility, and commitment to the profession. Learning results are increased when highly motivated teachers conduct effective teaching practices. In order to carry out the teaching process effectively and quickly, instructors need to possess cutting edge

knowledge and skills. When it comes to using instructional resources, strategies, and a carefully thought-out lesson plan, teachers possess the highest level of reasoning ability. To effectively collaborate with instructors in educational institutions, professional development is a fundamental requirement. The cornerstone of an efficient and successful lesson plan and the assurance of the quality of education is having knowledgeable and skillful educators.

### **Recommendations**

It is recommended by the current study that teachers pursue self-study and in-service refresher courses as additional means of advancing their professional development and strengthening their material knowledge. To stop decline, the government should mandate retraining for all instructors after three years. Something as simple as offering one-day courses every three years or organizing an annual faculty professional development day for all teachers. Refresher courses and motivational treatment should be made available to qualified and experienced educators as well.

### **Suggestions for Future Research**

Further research should be focused on the several aspects one suggestion is to investigate the teaching competencies among the secondary school teachers. Additionally, research should be concentrated on to find the factors which affects the performance of the secondary school teachers. Further studies should also analyze to investigate the teachers professional training program which are conducting at government level. Furthermore, to do the comparative study of teachers' professional development programs conducting at government and private sector. Moreover it could be to analyze the challenges and issues faced by secondary school teachers of Karachi during teaching learning process. Furthermore, impact of different professional programs on the performance of the secondary school teachers in public sector. Additionally, how professional development opportunities affect the competency of teachers. Further studies can be the relationship between student performance and teacher competency. Moreover the effect of educational initiatives on the professional competency of teachers. Likewise, the effect of teacher professional competence on the quality of education

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