The Role of Professional Development on Teacher's Performance: A Case Study Among Teachers in a Private School in Dubai

أثر التطوير المهني على كفاءة المعلمين: دراسة حالة بين المعلمين في مدرسة خاصة في دبي

by

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Abstract

This study has been performed to determine the impact of professional development on the performance of teachers in context of private school sector of Dubai. The study intends to explore the impact of professional development and perception of professional development on the performance of the teachers. Based on the primary study model, the study uses a sample size of 150 individuals and a structured questionnaire was used to collect data. The simple random sampling approach has been used in this regard. It was hypothesized that there is a significant relationship between the performance of teachers, professional development, perception of professional development and importance of professional development. The key theories used in this case includes social development theory and organizational development theories in reference to the variables of the study. The major data analysis techniques used were correlation analysis, descriptive statistics, and the regression analysis. The findings of the study conclude that there is a strong and significant relationship between the variables of the study. The correlation analysis and the regression analysis indicate a strong association between the variables based on significant correlations and coefficient of determination. Based on the findings of the study, it has been recommended that certain standards should be developed by the institutions that promote the level of professional development among staff members can be increased. In addition to it, the outcomes of the study are constrained due to the sample size, data collection approach, lack of studies in that particular research area and the scope of the research. The study is expected to add significantly in the existing body of knowledge due to its practical implications in this regard. This study can be replicated in a different sector of a country or for a different population and a comparison can be drawn that which sector needs the resources of professional development.

الملخص

تم إجراء هذه الدراسة لتحديد أثر التطوير المهني على أداء المعلمين في سياق قطاع المدارس الخاصة في دبي. تهدف الدراسة إلى استكشاف تأثير التطوير المهني وإدراك التطور المهني على أداء المعلمين. بناءً على نموذج الدراسة الأولية ، تستخدم الدراسة حجم عينة من 150 فردًا ، وتم استخدام استبيان منظم لجمع البيانات. تم استخدام نهج أخذ العينات العشوائي البسيط في هذا الصدد. تم افتراض وجود علاقة ذات دلالة إحصائية بين أداء المعلمين والتطوير المهني وإدراك التطور المهني وأهمية التطوير المهني. النظريات الأساسية المستخدمة في هذه الحالة تشمل نظرية التنمية الاجتماعية ونظريات التطوير التنظيمي في إشارة إلى متغيرات الدراسة. كانت تقنيات تحليل البيانات الرئيسية المستخدمة هي تحليل الارتباط والإحصاء الوصفي وتحليل الانحدار. خلصت نتائج الدراسة إلى أن هناك علاقة قوية ودلالة بين متغيرات الدراسة. يشير تحليل الارتباط وتحليل الانحدار إلى وجود ارتباط قوي بين المتغيرات بناءً على الارتباطات المهمة ومعامل التحديد. بناءً على نتائج الدراسة ، أوصي بضرورة تطوير معايير معينة من قبل المؤسسات التي تعزز مستوى التطوير المهني بين الموظفين. بالإضافة إلى ذلك ، فإن نتائج الدراسة مقيدة بسبب حجم العينة ونهج جمع البيانات ونقص الدراسات في مجال البحث المحدد ونطاق البحث. من المتوقع أن تضيف الدراسة بشكل كبير في مجموعة المعرفة الحالية بسبب آثارها العملية في هذا الصدد. يمكن تكرار هذه الدراسة في قطاع مختلف من بلد ما أو لمجموعة سكانية مختلفة ويمكن إجراء مقارنة بين القطاع الذي يحتاج إلى موارد التطوير المهني.

Dedication

I dedicate my dissertation work to my dear parents and family who supported me in all the moments.

To my dear husband, for supporting me in all my decisions.

To all my colleagues who inspired me with their passion in education

To my friend Deema who encouraged me to continue my Masters' in Education.

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Walking through this new journey in my educational quest to reach and understand how I can benefit myself and all my surroundings, I stepped into some hard challenges and requirements that never been crafted within my educational personality. But as a believer that God will always help get out of these challenges, and mine in this Journey is my mentor Dr. Solomon.

He was always there, even with this COVID-19 pandemic all around the world and added a lot to my research skills and polished my writing approach.

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Abstract

Dedication

Acknowledgement

List of Tables

Chapter 1: Introduction

1.1   Overview of the Chapter

In the education system, the role of a teacher is not hidden and when the teacher comes with a developed and professional background it makes the education system more efficient and effective. The chapter focuses on the overview and background information on the role of Professional Development on teacher's performance. On students learning some things like facilitating teachers in activities related to professional development and taking chances for innovation by teachers have a positive effect. To increase the achievements of students an instructional leader must support their teachers and encourage them to improve their teaching practices. In schools, coaching and mentoring is being provided by the instructional leaders. New skills are being practised and implemented in classrooms by the teachers who receive coaching. From each other teachers can also learn somethings.an informal strategy is being implemented in some of the high performing schools by the principals in which teachers work with each other to improve their methods of teaching. New skills are being practised by teachers in classrooms under this support, combining their sessions learning. To do the job in the best way, teachers require a variety of resources and useful material. To do the best in their job the teachers require some material, and the instructional leader must ensure the presence of these things. To deliver the knowledge teachers must have access and knowledge to the expert people. The job of an instructional leader is to gather the people with this expertise to give access to teachings to them in everything. The teachers are being supported by the instructional leaders because they provide them with the resources and materials required by them. For their staff, instructional leaders are resources of instructions. The principal as a resource of instruction keeps a check on the trends of the assessments and curriculums. The principals can become a resource of instructions to their staff as the gain of their professional development is being continued by the principals. The main responsibility of the instructional leader is to provide the support and direction to the teacher to improve their instructions (Simonsen et al.,2017).

In many types this type of support can come, like the role of instructional resources being adapted by the principle, coaching and mentoring, management of resources, and the access to opportunities regarding professional development. There are positive effects on student learning when teachers are being supported in their work. The level of responsibility of

teachers, students, parents and the community is high on the leader of the school. A supportive, motivating and understanding leader is needed by the classroom teachers. A universal principle will have a variety of leadership skills and will help with different leadership models. For supporting the teachers by the method of coaching, mentoring and professional development and to communicate a clear goal to the teachers and student's instructional leadership is a pathway. The effect of principal being the instructional leader is posture on the achievement of the student.

The effect of strong instructional leaders is therefore positive on the students' learning. The promotion of students learning is the basic goal of instructional leadership. There must be communication between the principal enacting instructional leadership and staff to promote the learning of students. Furthermore, the teachers are being supported by the principals who are enacting instructional leaders for the betterment of their practice by mentoring them and helping them by giving access to the resources they need and by providing them opportunities regarding professional development (Tong et al.,2017). The teachers are being supported by the instructional leaders to improve their practice of teaching. There are many challenges faced by instructional leaders. The principals do not have enough time, also less knowledge to be a good instruction leader and they also hesitate to comment on the teachers' classroom practices as reported by them. Learning and teaching are being improved by the principals who use these principles of instructional leadership. Education does not end if a person completes a degree or starts working in his career. A working person can still improve his skills and career-mind along with some professional techniques of handling stuff by getting more education and knowledge about his field.

Becoming more proficient in jobs with improved skills is not difficult. In the education and teaching field, the administration needs to look after and encourage teachers or mentors to pursue their professional development so that they can get more knowledge and practice in their field. In this way, they can provide the best learning techniques to their students and the outcomes would be unbelievable. The most effective and satisfying aspect of working is to have a complete grip on the subject. Most likely, the modern era is setting up new and latest trends of education and learning which should be understood by the teachers as they are the ones teaching students. The roles and functioning of the education system are changing day by day and teachers are expected to improve their basic knowledge according to the updates (Simonsen et al.,2017). In the multicultural classrooms, teachers may find it difficult to teach

the students because she might be unaware of the latest trends and settings to handle children from different backgrounds. Students need some special learning needs in their classrooms which makes more effective use of information technology and effective communication strategies in the education area. Moreover, the impact of professional development teacher's performance is not so hidden as the teachers start again with more people confidently. Moreover, in evaluating and planning the accountability frameworks, teachers do a lot of work to involve the parents in the school functions. While having professional development practices, teachers can face all the challenges happening in the career field. However, the main duty should be paid by the education systems where they can provide opportunities and framework to the teachers so that they can get professional development while maintaining their higher standard of teaching. In this way, the high-quality teaching workforce should be retained. Research studies done by (Tony et al.,2017) have explained the review on effective teaching practices which are all noticed due to the professional development courses including training, and feedback from the students.

Such training sessions and career development opportunities help utilise the adequate time teachers have during summer breaks or vacations. Hence, teachers leave a positive impact on students after getting professional development because they somehow learn the teaching and learning techniques, some activities on student-level like the one's students are asking for. Hence, in developing schools it has been noticed that teachers are encouraged to enrol themselves in the professional developmental programs. The impact is not only on students, but the educational organisations also gain a remarkable benefit because of expert and experienced staff.

Several objectives can be served if the teachers get developed beyond their initial training provided by the old education system. Such objectives involve
- The update of knowledge of a particular subject under the recent advancements in the area
- The skills, attitude, and educational approach of the students get developed when the professional level mentor is teaching them
- Individuals can apply in their relevant field by knowing the pros and cons of the particular field
- Some aspects of teaching practices can allow individuals to develop and implement the new strategies related to the student's course curriculum

- Expert opinions can be exchanged, and a better idea can be concluded
- Some teaching staff who is weak and unable to pursue their career a be motivated and encouraged

1.2   Background and Motivation to the Study

"As a teacher, the activities that develop a person's skills, knowledge, expertise is known as professional activities". The sharing of good practices, collaborative planning and teaching and coaching can help in providing development, as in the last case. The guidance and support provided by the principal in establishing best practices in teaching while working with the teachers is a model of instructional leadership. By this model, the principal and the staff both set the goals related to student achievement by communicating. According to this model, the principal supports the teachers. Coaching and mentoring are provided by the principal to those teachers who require it. The principal also provides opportunities regarding professional development which helps the teachers to explore the best methods in the teaching. The basic goal of this leadership of instructions is to increase the achievement of students by the close working of teachers and the principal (Saric & Steh,2017).

The teacher must have access to both formal and informal opportunities for professional development to teach students with more accuracy. Other than the sessions mandated by the state, the teachers at high school are being encouraged by the principles to attend the sessions of professional development. Teachers discover new educational strategies through their professional development, and they become able to pay back their duties. They become able to provide the classroom with enough knowledge and a way to make changes to the lecture delivering style. A proper and updated curriculum for the better future of the students can be provided. Hence some changes are hard to evaluate because professional development takes place gradually (Svendsen, 2017). Teachers become more efficient in their presentation and discussion. They become confident to talk to everyone and expose new education delivery methods to the higher authorities. Professional development helps a teacher understand where his time should be spent. More time should be spent on evaluating the students and their needs and less time is required for the presentation scenarios. Teachers become better at planning and implementing strategies if they get required professional development. Efficiency and extra focus on the students is the outcome if teachers take professional development seriously (Meissel et al.,2016).

Latest trends of the world are increasing the awareness among the teachers that they should be recruited carefully and should develop professionally by taking the courses of their effective field. As such steps make them more efficient and professional. Developing the attitude of teachers professionally helps them to support their students where they provide a supportive environment for the students to discuss their relevant problems. Hence, the necessity of professional development lies in the place that it makes the teachers up to date with the changings in teaching practices and what students need with the changing environment. Professional development makes teachers successful and they create a sense of active learning among them which makes them well-planners for the learning activities. In the classroom, the teaching practices get improved with a long term and collaborative performance with the students. Research studies have revealed that professional development helps in designing the elements that maximize the learning and focusing ability of the teachers so that they can reach their collaborative participation and coherence approach with the school's policies (Maass & Engeln,2018).

1.3   Statement of the Problem

This research paper will examine the impact PDs to the teacher's performance in teaching and learning. Although (Meissel et al.,2016, Maass & Engeln,2018 studies are done on the impact of training on teacher methodology in different regions of the world. There is a need for professional training for Teacher's performance in school including their teaching methodology and learning knowledge is going to be done in this study

1.4   Purpose and Objectives

The purpose of the study is to explain the impact PDs to the teacher's performance in teaching and learning. The role of professional development in a teacher's learning program and teaching is explained in the research paper. The main focus is on professional development and how it influences the learning and teaching ability of a teacher. However, the objectives revolve around the facts which are discussed in the study.

- To Build a roadmap for capitalizing on Professional Development to enhance the teacher's performance.

- To Understand and improve school leaders' perception of Professional Development.
- To Highlight the importance of the PDs in improving the teaching and learning in the school.

1.5   Research Questions

The main research question is listed as below
- How does PDs affect a teacher's performance in the school? In this scenario, the impact of performance shown by the teacher is explained in detail.
  - Can the PDs affect the teaching and learning strategies at the school? Because, the effect of learning strategies and teaching methods can change the overall learning behaviour of the students.
  - The role the PDs play in the teacher's performance in the school is also discussed in the study.

1.6   Rationale of the Study

The demand of society lies in the high-quality teaching and learning standards form the education system and to achieve the expected standard, the teaching staff should be well trained, and knowledge based. A great deal of knowledge must be possessed by the teachers if they want to entertain the students and their parents with different teaching strategies and skills. Teaching practise is the requirement in every educational institute because of the high demands and standards of the education society. As we are living in the 21st century where problem-solving skills, critical thinking, innovation, and creativity are all the tools helpful in achieving the standards of society. Such skills are related in a variety of ways and in developing some problem-solving skills specifically related to the active learning approach. A variety of approaches can be achieved by the teaching staff if they want to work on brainstorming, collaborative and cooperative work, and team-based problem-solving skills. Such educational strategies are introduced by the teachers to help the students in becoming self-directed and long life-learners. Teachers should apply effective learning and teaching strategies in the 21st century's generation so that students can develop learning abilities and skills in the classroom. The teacher must work on the relevant professional training if he or she wants to use the

instructional strategies effectively and efficiently in the classroom. Some teacher training and induction programs are offered in various educational systems which makes teachers more professional and successful in their profession.

Therefore, it is proved that professional development or the professional training process is the most important factor in the teaching category of today's classrooms (Meissel et al.,2016). Teachers having sound and professional background can be effective in delivering the instructions to the class. In most research studies, the relationship between teacher's professional development and classroom practices has been discussed which will be explained in the literature review with references (Maass & Engeln,2018). The paper will explain and prove the impact of professional development on teacher's performance in the classroom.

1.7   Structure of the Dissertation

The introduction section covers the background of the topic that how professional development impacts the teaching performance. Overview of the concept of professional development and its impact on the teaching and learning capability of teachers. The statement of the problem states the problem to be resolved in the topic. Purpose and objectives explain the purpose behind the research work. The research questions explain the questions to be discussed in the research. The rationale of the study is also described. Further, the literature review focuses on the conceptual and theoretical framework of the study.

Chapter 2: Literature Review

2.1 Overview

The literature chapter explains the highlights from different research studies on the impact of professional development on teaching practices. The impact is usually concluded as positive and beneficial for the teachers, the students, and the educational institutes as it has built up a core competence and strong skills among the teaching staff. Moreover, the overall education level has improved because of professional development in teaching practice. With the latest trends, teachers can educate the students according to their needs and basic requirements. The literature has answered the research questions by putting the references into account which has quitted the studies from different authors and researchers.

2.2 Conceptual Analysis

The evidence of the effects of professional development design elements on the likelihood of program success is called out by the developers and the policymakers (Svendsen,2017). As explained in the research study, there was a clear impact of participation in professional development on the ability of teachers to develop knowledge and skills (Opfer,2016). Another research (Borg,2018) noted that in dealing, planning and good thinking with students and colleague's important element is the skills related to emotional intelligence. As proposed by a study, there are valued changes in the teaching as there is a positive impact of professional development on teachers as this helps them decide and implement those changes (Capper,2018). A recent study expresses the impact of the professional development on the behaviour of the leadership, as this helps teachers to educate their students with more efficiently, and also helps in achieving stability between student, national need and school (Ryan & Dagostino, 2018).

Reported in the same studies (Borg,2018 , Capper,2018 , Ryan & Dagostino, 2018) that some of the professional developments do not meet the benchmark which was needed to have a strong effect on their practice and student learning. There are long-term and immediate impacts of professional development as stated in a reseal. Additionally, to evaluate the effectiveness of teachers practice in a better way the ability to reflect gives the skills needed by the teachers in a better way. The perception of physical education professional development helped teachers

so much as they experienced the immediate positive impacts. There is a development of strong confidence in teachers with their practice as a result of professional development as stated by (Borg,2018, Capper,2018, Ryan & Dagostino, 2018).

To get a positive learning outcome in the classroom the most important factor in classroom teaching practice. As stated by (Opfer,2016), there are positive impacts of classroom teaching practice related to better learning and better outcomes by students. Further, that there is a direct connection between the learning outcomes of the students and the performance of teachers in the class. To improve the delivering quality of the education there is a need for high level and long-lasting consistent performance by the teachers (Capper,2018). Another important factor in the quality of teaching is ongoing professional development. According to a study, effective learning of teachers is a process which is kept going with their experience and this promotes their skills of teaching, upgrading their knowledge and development of new proficiency (Bautista et al.,2017 and Svendsen,2017).

To become successful in the school efficient and continuous professional training is required. Programs like the induction program and mentoring programs are for the training of the teachers and their professional development. Professional learning community practice had some of the activities. In developing the professional background of teachers, a very productive factor is Professional learning community practice (PLC) (Opfer,2016). For the development of a new teacher successfully mentoring and coaching for colleagues is effective. opportunities are created by great induction programs for teachers to teach them the best practices (Capper,2018). The learning techniques used by teachers is mainly affected by the development in the professional activity, participation in seminars, and duration of their learning sessions. Professional development has been considered as a regular task form past years, but research studies have found it more than just a one-day training. Recent studies have explained that professional development for a teacher is the way of sharing information with the students (Bautista et al.,2017, Svendsen,2017). Some researchers (Opfer,2016, Brog,2018, Svendser,2017) have argued that the short and long term activities can be compared where more opportunities for active learning and collaboration among the teachers can be discussed. Another study has revealed that if teachers enrolled themselves into the professional developmental activities, they are more likely to provide opportunities for the students where students can discuss their content and misconceptions (Kennedy,2019).

Research studies have suggested that such professional developmental activities leave a positive impact on the teaching profession because they get to know about new practices of getting feedback from the students which in return helps them to improve their teaching style. Research work done on the teaching and learning international survey involves the forms of professional development where nine different choices were provided to the teachers so that they can choose their respective option including workshops, conferences, seminars, qualification programs, participation in international teaching network, research collaboration and many others (Opfer,2016). Some other studies have also inserted information regarding such choices which has provided teachers with a way to choose a course for themselves and start learning through professional development activities. However, research studies have not found it easy for the teachers to adopt the professional development activities as the organizational budget may not support the teachers and they must do it on their own. All the funding cost might be sustained by the teachers and they must look after each policy and campaign related to the professional development campaign (Santos & Miguel, 2019).

2.3   Theoretical Framework

Some successful factors **impacting the professional development implementation positively involve collaboration among the teachers and the organizations. Another study (Opfer,2016) in teaching and learning international survey analysed that the participation of teachers in professional development helps examine the characteristics of the students. The difference between the interest level of males and females in a country can be noticed while working on the international survey. Further, (Barrera-Pedemonte, 2016)** research studied that young teachers are more involved in the professional development activities which explain that more experienced teachers show less interest in professional development as compared to less experienced ones. **Zey stated that the teachers can teach effectively and implement their teaching profession more precisely if they have attended training and induction programs, and improved students' learning is also provided by them (Capper,2018).**

Furthermore, there are many important activities included in the induction of a new teacher which includes an orientation session for them, periods for collaboration with faculty, supervisor's meetings, workshops for their development, some reduction in their workload and mentoring also. The guidance usually provided to the new teachers in the school by the

seasoned veterans is known as mentoring. A dominant form of teacher induction is teacher mentoring from the last few decades as stated in research. And these two terms are used for one another. As **stated by Zey in his teacher development theory, on the practice of teachers and the achievement of the students the preparation and induction of teachers had an impact (Crilly et al.,2020).**

The probability that teachers will remain in their profession is increased because of the high quality of professional development like in the form of mentoring and induction. Furthermore, many studies conflict with this study and argue that the direct impact of this mentoring and induction is not unlimited (Capper,2018). Some of the studies (Cooc,2018 , Opfer,2016, Zhang et al.,2020) also **stated that there is a drawback of mentoring as it affects the ability of teachers like managing time and managing workloads and also affects his management skills regarding classrooms**. The research states that the characteristics of the induction program had a strong impact on the influence experienced by the teachers on their professional development, these programs are good enough for the professional development of the beginning teachers, but it fails to do all this because there are some of the essential characteristics missing in this.

Some of the important elements of the induction programs are implemented in the induction programs (Liu & Liao,2019). Types of the offered facilities and induction program organization; beginning teachers challenged by the mentors in their professional development, and degree related to the professional development in which majors are related to his field mainly to teaching are some of the important points which have to be improved. With evidence in research regarding the development of important instructional skills that these skills are not supported by professional development the impact appeared to be varied in case of the professional development on classroom practices (Cooc, 2018).

2.4   Review of Related Literature

The impact of professional development on student learning is less as compared to its impact on the changes in the actual behaviour of the teacher and a great impact on the changes in teacher learning (Cooc,2018, Liu & Liao,2019). There is a positive association between teachers and teacher professional development. Changes in the practices in the classrooms and

community in the activities and time are seen as a result of the self-report and it also increases the knowledge and skills. The impact of teachers' professional development on teacher's instructional practices will be proven from the literature review stated above with the quantitative evidence.

Hence, international studies on literature have identified that the age of a teacher is the main determinant of professional development (Zhang et al.,2020). The study (Cooc,2018) has shown that the level of interest to get professional development usually gets decreased with the age. Further, the study (Opfer,2016) on teaching and learning international survey has explained the impact of professional development on teaching practices. Ultimately, teaching practices get improved and students receive more benefits from their teachers when they are professionally active and well developed. Generally, the study (Opfer,2016) has focused and explained some important features of teachers and their professional developmental areas. Many variables impacting professional development are discussed and highlighted in the survey report.

According to research, it is important to provide opportunities for the professional development of students in schools as it will lead to improving the quality of teachers and the learning power of students (Darling et al.,2017). According to the national council of staff development professional development is among the high standard and quality-based programs which further provide support to individuals in their jobs and help them in implementing their skills while dealing with financial problems (Suhairom, et al.,2019). According to research done by Hill and Beiseigel, the achievements and success of a student are directly related to his or her professional development. Professional development not only helps individuals in the development of different other skills such as it creates a positive work environment within schools, but it also makes them a responsible citizen and helps them in learning under peer pressure from their colleagues. The experience of a teacher is defined as the number of days, weeks, or years an individual has been working as a teacher within any educational institute (Merchie, etal.,2018). The experience of a teacher is directly linked to the success of the student.

According to a study based on 4000 different teachers in America, in reading and maths, the experiences of a teacher has a very positive impact which helps in skills development of students. The relation between the experience of a teacher and success of a student is very

intense and important at secondary level learning because during growing age, teachers are the role model of most students. According to a study conducted in England, the outcome of a student is being influenced by the habits of his teacher (Suhairom, et al.,2019). The outcomes of students are very high during the first few years of a teacher. Furthermore, it has been determined that additional years of experience of a teacher also help students in gaining more from their lecture which is beyond the initial years of their school learning. A teacher gains more experience by teaching students of the same grade for certain years which is more helpful in the success of students rather than experience gained by teaching students of different grades (Davies 2017).

Professional knowledge of a teacher is defined as the knowledge a teacher has regarding curricular activities, specific subject, or any specific topic. The professional knowledge is based on graduate, undergraduate or master level degrees a teacher has, his or her schooling, college, attended hours in college or in any learning space training program attended by the teachers and other opportunities of experience being availed by an individual during his or her growing age is the real definition of professional development (Hammerness, et al.,2017) According to the qualitative analysis of a research being conducted in America the number of certificates a teacher has and how well he or she prepared the lectures is very important in achievement of students specifically in reading and maths as it helps teachers in controlling and them improving the language skills, problem solving ability and creativity levels of students. Different researches have concluded that along with witty experience, advanced degrees, good schooling, specialization in a particular subject and involvement in different training programs has also a very intense impact in success of a teacher (Davies 2017).

Studies conducted in different countries have suggested that those degrees of a teacher play a very important role in the outcomes of students at a school. Furthermore, it has been observed that professional development can help teachers in improving their ability to communicate and to provide instructions, but these experiences have little association with the success or effectiveness of a teacher. However, in secondary school such as in mathematics teachers who have gained experience based on different training programs can affect outcomes of students in a positive way more than the teachers of higher grades. According to a study being conducted to determine the impact of professional development on overall success for students, it has been observed that there exists a positive relationship between the professional development and success of students (Merchie et al.,2018).

For teachers, the learning platform for their professional development process is to provide them with specific programs which can fulfil their needs (Gast et al.,2017). According to the theory of adult learning, professional development of teachers needs to develop a habit of adult learners which will continue throughout their lives. professional development needs contain several activities. These activities can be curricular or co-curricular. Some activities include managing the students within a classroom while others include scheduling the work. It can also include the management of budget (Asensio-Pérez et al.,2017). According to a study, for professional development teachers need to know about activities such as planning classes, managing a large number of students, and their behaviour during the initial stages of their professional life. Developing abilities in students such as sharing their personalities, making them understand the importance of empathy, how to talk to teachers is an important part of professional development (Ping et al.,2018). Teachers should also try to find their field of expertise, information regarding technology and new teaching standards being followed by teachers of international standards to improve their open teaching quality. A researcher conducted by two professionals, there are nine standards which should be followed by all the institutes of professional development. It includes quality of teaching, subject knowledge, strong research, ability to collaborate, intense needs to keep learning and exploring, updating the learning space of students, involving families of students, evaluating the performance, design based on data and continuous learning of teachers (Avidov et al.,2018).

2.5   Summary

In the summary it has been observed that previous year experiences of teachers are very beneficial for successful career development as a teacher of an individual (Sezgin,2020). The studies have revealed that to improve the learning of students, skills, knowledge, and attitudes there is a process of training and development. There are many factors in the training process of teaching some are more skill like, and some are only gained through the reflective strategies and the experiences. The range in practice at all levels of instructions is led by the training of teachers. As stated in a study, teacher training programs potentially affect some of the areas of outcomes. These areas include:
(i) knowledge of teacher
(ii) attitude and beliefs of teacher
(iii) practice of teacher in teaching

(iv) practice at school-level

(v) achievement of the student.

The ability, hard work and the dedication of the teacher had a direct impact on the quality of the education. A teacher is ineffective and inefficient if he fails to keep pace with the world and science. For the shaping of the quality of teaching many factors are there. The major factors affecting the practices of the teachers are the professional development program and training of the teacher. Another research (Zhang et al.,2020) on the survey explained that private educational institutes provided less professional development opportunities to the teaching staff than the public sectors because public sectors had more funds and training policies. Hence, the study reveals that there is a huge difference between the professional development level among the males and females, private and public sectors, and experienced or less-experienced teachers. Meanwhile, the impact on the learning would automatically be different on the students (Zhang et al.,2020).

<center>**Chapter: 3 Methodology**</center>

3.1   Overview of the chapter

Research methodology refers to how a person conducting the research designs is studied systematically to ensure reliability and validity in results that adequately address the research objective and aims. This involves certain aspects that the researcher has to decide before conducting any research, for example, the sampling design or in simple words, who the data should be collected from, what data to collect or ignore, how to collect the data, and how to analyse the data. A thesis, dissertation, and academic article or journal always includes a chapter about research methodology, including all aspects mentioned above (Mohajan, 2018). A good methodology chapter in any research is judged not only by what choices were made to collect or analyse the data but also clearly explains why these choices were made in the first place. In other words, research methodology always includes a clear and valid justification of the choices made while selecting the sample, collection of data, and other aspects of the methodology. A researcher can do this by showing that the chosen techniques or methods are the best desirable choices that fit perfectly to the research's objectives and aims. A research methodology should scientifically prove findings that make the research look credible, reliable, and valid. In this research of impact of professional development on the performance of teachers, the research methodology has been discussed under the following headings (Dodds & Hess, 2020).

3.2   Research Approach

A research design is a research approach is a well-organized and methodological procedure used by researchers and scientists to carry out a methodological, scientific, and factual study. It helps form comprehensive research of already identified components, including any other data or information that helps lead to a reasonable outcome or result. The research design requires to follow an already well-thought-out and pre-planned methodology that is in accordance with the type of research to be conducted, which is also selected beforehand. But all of this is done to come up with an authentic, error-free conclusion (Zangirolami-Raimundo, Echeimberg & Leone, 2018).

The purpose of using research design is that it provides the researcher with an objective and structured plan of study that helps the researcher to assess and analyse the cause and effect relationship between the independent and dependent variables. Using your research design in a study is necessary because it helps smooth sailing of the different research elements. There are four main types of research designs that make the research or study more efficient, flexible, and reliable. The four types of research designs include descriptive research, exploratory research, explanatory research, and evaluation research. These are only the major types of research designs because apart from them, many others but all of them are divided into two different categories of research, for example, quantitative and qualitative research. There are two kinds of research designs as discussed below:

The qualitative research approach is defined as a method that focuses on obtaining information or data through open-ended interviews or communication done in the form of a conversation. This approach is beneficial because it provides data that gives an insight into the 'why' in addition to the 'what.' Without a qualitative approach, we can know exactly what people are thinking but why we are thinking or why a particular phenomenon is taking place cannot be known. Qualitative research includes methods and techniques involving in-depth interviews and further questioning and probing of the interviewees and respondents based on their responses. Apart from using in-depth interviews to collect data, there are many other different types of methods like content analysis, case studies, and focus groups. Qualitative research methods and the research results are more comprehensive and descriptive, which allows the inferences from the results of the data obtained to be drawn very quickly (Ørngreen & Levinsen, 2017).

The quantitative research approach is a systematic analysis and assessment of phenomena by gathering quantifiable data and performing mathematical, statistical, and computational methods. Quantitative research involves collecting information from potential or existing sampling groups by using sampling techniques and sending out questionnaires, online polls, and service. The results that are concluded are mostly in a numerical form. The templates of quantitative research are elaborate, investigational, and objective; therefore, the results achieved by using this research method are statistical, unbiased, and logical. This is all due to the elaborate Data Collection method that happens by using the structured technique, which is conducted on large samples representing the entire population compared to the quantitative research method, which is conducted on smaller samples of a population. There are two

different kinds of methods for conducting quantitative research, and they are the primary and secondary quantitative research methods (Taherdoost, 2016).

The primary quantitative research method includes four different types: survey research, correlational research, causal-comparative research, and experimental research. The secondary quantitative research methods also include four types, such as the conjoint analysis, TURF analysis, cross-tabulation, and SWOT analysis. Quantitative research focuses on collecting numerical or quantitative data and then generalizing the results across the groups of people to help explain or understand a specific phenomenon. This study uses a quantitative research approach based on a survey questionnaire (Attia & Edge, 2017).

3.3   Data Collection Plan

Data collection is a method or a process where information on different variables of interest to the researcher is gathered and measured. It is done systematically, enabling the researcher or someone else to test the hypothesis, evaluate and assess various outcomes, and answer research-related questions. The data collection method is commonly used in different fields of studies like social and physical sciences, business, humanities, etc. The data collection methods might vary in terms of discipline. Still, the emphasis and importance of ensuring that the sample's data remain honest and accurate stay the same (Basias & Pollalis, 2018).

The two research methods, quantitative and qualitative research approaches, have different data collection methods. The data collection methods for quantitative research are usually standardized response sets or categories. Surveys are among the most common examples where respondents or participants are asked to choose among one of the responses presented in the surveys that best fit their opinions or knowledge, attitudes, and perceptions. The advantage of data collection methods used in quantitative research provides valuable information that efficiently measures people's different reactions, which enables the aggregation of the data and helps in comparing the different sub-groups from each other (Queirós, Faria & Almeida, 2017).

In contrast, the data collection methods in qualitative research usually produce data obtained from a smaller number of people compared to many people in quantitative analysis that is incredibly detailed and can provide insights that a researcher can't usually get when he or she does quantitative research. It is crucial to choose the right data collection technique because it

can make all the difference when a conclusion or the research findings are drawn. There are four different techniques for collecting information or data for research, including a questionnaire, focus group discussion, observation, and interview.

3.3.1 Context, Site, Population and Sample

This research includes the population of teachers working in UAE. The sample of this study will consist of the 150 teachers working in the private school sector of UAE. The data of the case is primary which will be collected using a structured questionnaire in this regard.

3.3.2 Sampling Techniques

Sampling is a method that enables researchers to get information about a population that they can achieve from the result of a small group or subset of the entire population. This is beneficial because one can collect all the required information without collecting data or investigating every individual of the population. There are various kinds of Sampling methods and techniques that are available for researchers, which they can choose or select according to the needs or requirements of their research. But all these various sampling techniques are subdivided into two groups of sampling, such as Probability and nonprobability sampling.

3.3.2.1 Probability Sampling

Probability sampling referrals to the Random selection of people or individuals that allows the researcher to make inferences that are statistical and logical about the whole group. In comparison, non-probability sampling refers to the non-random selection of people, which is based on several criteria, for example, convenience, preferences, or any other allowing the researcher to collect the initial information or data easily.

Probability sampling means that every individual or member of the population that a researcher wants to conduct the research on has an equal chance of getting selected to participate in the study. This type of Sampling method is mostly used for quantitative research. There are four significant types of probability sampling techniques that include simple random sampling, cluster sampling, stratified sampling, and systematic sampling (Fryer, Larson-Hall & Stewart, 2018).

3.3.2.2 Non-Probability Sampling

In non-probability sampling, people are selected based on criteria that are entirely non-random, which means that not every individual has an equal chance of being selected for the research. This kind of sampling method is much cheaper and easier to access, but it also has higher risks that might question the validity and reliability of not just the information that is collected but the conclusions that are drawn from the research. This is because there is a higher chance of Sampling bias, which does not allow the researcher to make a clear and honest statistical inference about the whole group or population (Almalki, 2016).

Non-probability sampling techniques are most appropriate for qualitative research and exploratory research. It is best for these kinds of researchers because it aims to develop an understanding of an under-researched or a very small population and not test a particular hypothesis about a big or broad population. There are four significant non-probability sampling types, which include voluntary response sampling method, convenience sampling, snowball sampling, and purposive sampling. In this research, non-probability sampling has been used (Rathore, Thakkar & Jha, 2017).

3.3.3 Data Collection Instrument

Whenever a researcher wants to conduct research about a phenomenon that involves having to collect information from a group of people or a particular population, it is impossible for them to collect data from every person of that group. Instead, a sample is selected. The sample involves a group of individuals who intends to participate in the study or research. For the researcher to draw reliable and valid conclusions from the results, he or she has to carefully decide how to select a particular sample that is representative of the population they want to conduct the research on. A sample needs to be drawn for specific research representing the group as a whole because it would typically be impractical and impossible to study an entire population, for example, when a researcher is doing a questionnaire survey. The data in this research is to be collected with the help of a structured questionnaire composed based on 5-point Likert scale.

3.4   Data Analysis Plan

Data analysis refers to the application of analytical and statistical techniques in a systematic form to describe and explain the scope of the data, condensing the representation of data, illustrating data with the use of tables, graphs, and images, modularizing the structure of data and evaluating statistical or logical inclinations to derive to meaningful results and conclusions.

These analytical and statistical procedures enable the researchers to induce the inferences underline in the data by eliminating unnecessary elements. Data analysis is a continuous process where the performing and collection of data analysis occur simultaneously. Apart from the fact that data analysis is used for research purposes, it is also used for various other situations and fields, for example, enhancing customer interaction, web search, transportation, fraud and risk detection, and digital advertisement. But before a researcher conducts data analysis, there are certain things that must be kept in mind. These are as follows:

- Ensuring the availability of required analytical skills.
- Ensuring that the data analysis is done correctly along with the right selection of data collection methods. But before analysis, the researcher must ensure that appropriate Data Collection methods are implemented.
- Ensure that the data sources, the data, data analysis methods, and the inferences derived in the end are valid and reliable.
- Everything starting from the Data Collection methods to the analysis should be double checked for any inappropriate analysis.

There are, in total, seven data analysis methods:

3.4.1 Quantitative Data Analysis

Generally, quantitative data analysis is done in the form of numbers and statistical representations of the information that is collected from the sample. The quantitative data analysis is presented in terms of statistical manipulation and measurement scales (Creswell, Fetters & Ivankova, 2004).

3.4.2 Text Data Analysis

Text data analysis is a method used to analyse descriptive information in the form of texts to extract machine-readable facts. This type of data analysis aims to create numerical or logical data that is structured out of the unstructured and free content. The process of text data analysis includes opening unstructured files so that they are easy to read, interpret, and manage.

3.4.3 Statistical Data Analysis

Statistics include validation, interpretation, and data collection. Statistical data analysis is a method where several statistical and mathematical operations are performed to be quantified and statistical analysis as applied.

3.4.4 Diagnostic Data Analysis

The Diagnostic data analysis is one step further to statistical data analysis because it provides an incredibly in-depth analysis and interpretation of the researcher's questions. Diagnostic data analysis helps determine causal relationships, drilling into the discovery of the Analytics, and identifying any kind of anomalies.

3.4.5 Predictive Data Analysis

Predictive data analysis uses historical data and puts it into the machine learning model, which helps find trends and patterns that are critical to find otherwise. This machine learning model is applied to the data that is existing or current, enabling the researcher to project what would most likely happen next. Many organizations and researchers prefer using this data analysis method because it has various advantages like cheaper and faster computers, type and volume of data, and more accessible software.

3.4.6 Prescriptive Data Analysis

This type of data analysis is used when the researcher needs various outlines and actions about the possible implications that could be reached after the analysis is done. This analysis method provides automated recommendations and decisions after using unique and specific algorithms that are a part of the analytical techniques involved in this type of data analysis. In this study, statistical data analysis has been used based on the data collected with the help of the survey questionnaire (McKim, 2017).

3.5   Ethical Consideration

Reliability is a concept that defines how consistent a method is in measuring something if the achieved result is always the same and consistent by using the same techniques under the same situations or circumstances that the measurement made or the result is considered reliable. On the other hand, the validity refers to how accurate a method is in measuring what it intends to measure in the first place. Suppose research or a study is conducted, which has a high validity. In that case, it means it has produced results that corresponds to the fundamental characteristics, variations, and properties in the social and physical world. High reliability of research indicates that investment made by the method used for the study is indeed valid. If a process is not reliable, then it means that the measurement and the results drawn from the data are also not valid, which means that the research is no longer valid.

Validity and reliability or both are mainly used in evaluating the quality of a particular study or research. This indicates how well a technique, test, or a method measures the variable that the researcher wants to measure. Reliability is about how consistent measurement is, and validity is about how accurate measurement is. It is very important for the researcher to consider the validity and reliability whenever he or she creates a research design, plants the methods to be used, and writes or conclude the results, especially when it comes to quantitative research. In case of this research, the reliability of the data has been performed using Cronbach's Alpha through IBM SPSS (Täuscher & Laudien, 2018).

3.6   Trustworthiness

Hence, from the above discussion and analysis it has been concluded that the nature and significance of research methodology in a research process is just like the blood in a human body. Without an effective methodology, one cannot perform the research process and obtain

the intended outcome. This study follows a quantitative research methodology for which discussion and outcomes have been discussed in the next chapter. Quantitative data is considered reliable due to certain reasons as it can be used to process data of large groups while performing a large-scale survey. In addition to it, the generalization of the results is more adequate due to the standardization of the questions. The trustworthiness of the quantitative research can be performed using techniques like external validity, internal validity, objectivity, and reliability.

Chapter 4: Results, Analysis and Discussion

4.1 Introduction

This chapter of the study incorporates a comprehensive data analysis performed based on the collected data in this regard. The main objective of this study is to explore the impact of professional development on the performance of teachers working in the private schools of the UAE. The other objectives of the study included to understand and improve the perception of leaders regarding professional development and highlight the significance of professional development for private sector teachers in UAE. This chapter contains a brief description of the research variables, model and the survey instrument used followed by the results of the study using descriptive statistics, correlation analysis, regression analysis and the reliability analysis. A sample of 150 private school teachers was used for the purpose of data collection.

4.2 Research Model, Variables and Research Instrument

While drawing the results of this study, the following variables were used:

Sr. No.	Name of Variable	Type
1	Teacher's Performance	Dependent Variable
2	Professional Development	Independent Variable
3	Perception of Professional Development	Independent Variable
4	Importance of Professional Development	Independent Variable

Table 1: List of Variables

Hence, this study contains one dependent and three independent variables. The research model based on the research objectives and hypothesis has been drawn as follows:

$$Y_{TP} = \alpha + \beta_1 X_{PD} + \beta_2 X_{PPD} + \beta_3 X_{IPD} + \epsilon_t$$

In the above model, TP is the Teacher's Performance, PD is the Professional Development, PPD is the Perception of Professional Development and IPD is the Importance of Professional

Development along with the Error Term. This study has been performed with the help of primary data, so a structured questionnaire was used for the purpose of data collection. The questions asked with the help of questionnaire has been given as follows:

Demographic Questions:

What is your gender?

1) Male
2) Female

What is your age group?

1) 20-25 Years.
2) 25-30 Years.
3) 30-35 Years.
4) 35-40 Years.
5) 45 Years and Above.

Sr. No. and Name of Variables	Questions
Variable: Teacher's Performance (DV)	
1	Do you think the performance of teachers is dependent on professional development?
2	Do you think the performance of teachers is dependent on the perception of professional development?
3	Do you think the performance of teachers is dependent on understanding the importance of professional development?
Variable: Professional Development (IV)	
4	Do you think professional development is a job motivator?
5	Do you think professional development is linked with job performance?
6	Do you think professional development can be a stress factor?
Variable: Perception of Professional Development (IV)	
7	Do your perception of professional development is a job motivator?

8	Do you think the perception of professional development is linked with job performance?
9	Do you think the performance of professional development can be a stress factor?
Variable: Importance of Professional Development (IV)	
10	Do you think the importance of professional development can be a stress factor?
11	Do you think the importance of professional development can be a stress factor?
12	Do you think the importance of professional development can be a stress factor?

Table 2: Survey Instrument

The responses were collected based on a five-point Likert scale containing the following options:

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

4.3   Results of the Study

The data analysis of the collected responses has been conducted using IBM SPSS based on 150 responses. This study uses techniques of data analysis like descriptive statistics, correlation analysis and regression analysis. The result based on the analysis are given as follows:

4.3.1 Demographic Analysis

The first type of data analysis performed in this case is the demographic analysis in which the key demographic dimensions of the population under study are observed. The demographic attributes include the gender, age, income level and religious affiliation etc. In the case of this study, the demographic analysis has been performed under the following two tables of Gender Analysis and the Analysis of Respondent Age.

Gender

		Frequency	Per cent	Valid Percent	Cumulative Percent
Val id	Male	78	52.0	52.0	52.0
	Female	72	48.0	48.0	100.0
	Total	150	100.0	100.0	

Table 3: Gender

The above table of gender states that a total of 150 individuals participated in the survey conducted for research purposes. The count of male participants is 78 whereas the count of female participants is 72. Hence, in this survey, 52% of the participants consists of male participants whereas 48% of the participants consists of female participants. This indicates that most of the population consists of male members working in the private school sector of the UAE.

Age

		Frequency	Per cent	Valid Percent	Cumulative Percent
Val id	20-25 Years	38	25.3	25.3	25.3
	25-30 Years	24	16.0	16.0	41.3
	30-35 Years	49	32.7	32.7	74.0
	35-40 Years	39	26.0	26.0	100.0
	Total	150	100.0	100.0	

Table 4: Age

The above table indicates the distribution of participants based on their age. The highest percentage of survey participants belongs to the age group of 30 years to 35 years. The second highest percentage is of participants belonging to the age group of 20 to 25 years followed by the participants of the age group of 35 to 40 years. The last age group of the case is the age group of 25 to 30 years having a percentage of 16%.

4.3.2 Descriptive Statistics

Descriptive statistics are used for describing some of the most basic characteristics or features of the data collected for a study. They are used for providing simple summaries about the measures and the sample. By using graphics analysis, it can easily provide the simple basis of almost every quantitative analysis that is required for a given data. Descriptive analysis is also used to present descriptions that are quantitative in nature in a form that is manageable and easy to analyse. It is often observed that a research study may include lots of measures or the researcher might have to measure or take data from a large number of people on different measures. In this case, descriptive analysis provides help by simplifying the large amount of data acquired by the researcher in a very sensible and simplistic way. Descriptive statistics done on any amount of data helps reduce the number of data that can be said to be the summary of the data. For example, if a number is considered to summarize how a batsman performs in a cricket match for his batting average then the considered number is simply the number of good hits divided by the number of times the batsman is given the chance to bat.

The descriptive statistics of this study has been determined using IBM SPSS and a total of 150 responses were processed. The key outcomes are minimum, maximum, mean, and standard deviation in this regard. In the case of TP, the minimum value is 2 and the maximum value is 5 whereas the mean value is 3.27 along with a standard deviation of 1.174. In the case of PD, the minimum value is 3 and the maximum value is 5 whereas the mean value is 3.69 along with a standard deviation of 0.9550. In the case of PPD, the minimum value is 3 and the maximum value is 4.3 whereas the mean value is 3.584 along with a standard deviation of 0.4869. In the case of IPD, the minimum value is 1 and the maximum value is 4 whereas the mean value is 2.711 along with a standard deviation of 1.2789. The results of the descriptive analysis are given as follows:

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
TP	150	2	5	3.27	1.174
PD	150	3.0	5.0	3.693	.9550
PPD	150	3.0	4.3	3.584	.4869
IPD	150	1.0	4.0	2.711	1.2789
Valid N (listwise)	150				

Table 5: Descriptive Statistics

4.3.3 Correlation Analysis

Correlational analysis is basically a method used in statistics for evaluating the strength of the relationship between two variables that are quantitative. A notable high correlation between two or more quantitative variables means that they have a strong relationship with each other and similarity a weak correlation means that the two variables are not related to each other. It can be said that it's also a process used by researchers to study the strength of the variables or the relationship between the variables with that of the available statistical or quantitative data. This statistical technique is very closely linked to Linear regression analysis which is a statistical method used for mainly modelling the relationship between one or more independent or explanatory variables and a dependent variable which is also called the response variable. Correlation analysis not only tells whether or not two quantitative variables are strongly related to each other, but it's also used to tell how exactly they are related or not related to each other. Some of the most common examples of correlational analysis that show a high correlation between two variables include a person's calorie intake and weight, the eye colour of a child and the eye colour of the relatives, the amount of time given to studies, and the GPA of the student.

The correlation analysis of this study which has been performed between the variables is reflected in the following table. In this case, the correlation between TP and PD is negative and significant. The correlation between TP and PPD is negative and insignificant and the

correlation between TP and IPD is positive and significant. The results indicate that the issue of multicollinearity doesn't exist between the variables in this regard.

Correlations

		TP	PD	PPD	IPD
TP	Pearson Correlation	1	-.169*	-.128	.322**
	Sig. (2-tailed)		.039	.119	.000
	N	150	150	150	150
PD	Pearson Correlation	-.169*	1	.624**	-.978**
	Sig. (2-tailed)	.039		.000	.000
	N	150	150	150	150
PPD	Pearson Correlation	-.128	.624**	1	-.720**
	Sig. (2-tailed)	.119	.000		.000
	N	150	150	150	150
IPD	Pearson Correlation	.322**	-.978**	-.720**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	150	150	150	150

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

**. Correlation is significant at the 0.01 level (2-tailed).

Table 6: Correlation Analysis

4.3.4 Regression Analysis

Regression analysis is a collection of statistical approaches or methods that are used to estimate the relationship between one or more independent variables and a dependent variable. This statistical approach is most used to align the strength of the relationship or association between the two kinds of variables and for modelling any kind of future relationship between the two variables. There are several variations of regression analysis for example multilinear, linear, and non-linear. The most common among these variations is multi-linear and simple linear regression analysis. Non-linear regression analysis on the other hand is most used for more complicated and complex data sets where did Independent and dependent variables display non-linear relationships. Regression analysis is used in various disciplines or areas of study among which also includes Finance, economics, and mathematics. Grisham analysis also offers

findings related to the various trends in data and its most used in statistics. One of the simplest examples of finding trends in data by regression analysis is if a researcher wants to confirm a connection between how much a person weighs versus how much a person eats then in this case regression analysis can help the researcher quantify that.

This study contained 1 dependent and 3 independent variables. Hence, multiple regression analysis techniques were used, and the model summary indicates a coefficient of determination of 1.00 which means 100% of the variation in the dependent variable is caused by independent variables. Based on the model summary, the relationship between the variables of this study is significant.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000ᵃ	1.000	1.000	.000

a. Predictors: (Constant), IPD, PPD, PD

Table 7:Model Summary

The ANOVA (Analysis of Variance) table has been given as follows which indicates the overall significance of the research model as the p-value (0.000 < 0.05) is less than the level of significance.

ANOVAᵃ

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	205.197	3	68.399	0.000	0.000ᵇ
Residual	.000	146	.000		
Total	205.197	149			

a. Dependent Variable: TP

b. Predictors: (Constant), IPD, PPD, PD

Table 8:ANOVA

The individual coefficient summaries have been presented as follows which indicates that all variables are significant as the individual coefficients are significant at 0.05.

Coefficients

Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	-46.417	.000		.	0.000
PD	6.583	.000	5.357	.	0.000
PPD	2.667	.000	1.106	.	0.000
IPD	5.833	.000	6.357	.	0.000

a. Dependent Variable: TP

Table 9: Coefficient Summary

4.3.5 Reliability Analysis

Reliability analysis is used to test or make sure that a scale used for measuring particular data from a sample consistently reflects what it accounts to measure. There are many situations and times that this statistical approach or method proves to be incredibly useful especially for a researcher who wants to make sure that what he or she is studying contains reliable and valid data and results. Reliability analysis allows researchers to study the features of the items and measurement scales that compose or make up the scales. The reliability analysis method is used to calculate the number of measures that are commonly used that determine the reliability of a scale along with providing the right information about the relationship between the separate units present in the scale. The results show whether or not the scale produces results that are consistent no matter how many times the analysis or the measurement is done. So, in easy words, reliability analysis is only determined when a proportion of systematic and equal variation that is found in the scale is obtained which can easily be done by determining the link between the different scores. The link between the different scores is also obtained from the varying administrations of the scale itself. This proves the strong reliability of the scale and the study that a researcher is doing.

In this study, Cronbach's Alpha has been used to perform reliability analysis. The results of reliability analysis are illustrated as follows:

Case Processing Summary

		N	%
Cases	Valid	150	100.0
	Excluded[a]	0	.0
	Total	150	100.0

a. Listwise deletion based on all variables in the

procedure.

Table 10: Case Processing Summary

The case processing summary illustrates that there are 150 individual responses being processed and the value of Cronbach's Alpha has been given below:

Reliability Statistics

Cronbach's Alpha[a]	N of Items
-.854	6

Table 11: Cronbach's Alpha

The value of Cronbach's Alpha is -0.854 based on 6 data sets which have been included in the analysis.

4.4   Discussion on Results

In this part, the discussion on the results of this study has been made. The objective of this study is to determine the impact of professional development and its related factors on the performance of private school teachers. Based on the findings of the study, it has been concluded that professional development is a significant predictor of the teacher's performance in the private school sector. This argument has been validated by the results of correlation analysis and regression analysis. All the three attributes of professional development (professional development, perception of professional development and the importance of professional development). These findings are consistent with the findings of the previous literature as indicated by Capper (2018) that to improve the delivery of quality education, the performance of the teachers must be improved by means of professional development.

In addition to the above, it has been validated by Bautista et al (2017) that professional development of the teachers is essential for the improvement of the performance of teachers in

this regard. The results are also validated by Santos and Miguel (2019) that the activities of professional development leave a positive impact on the performance of the teachers and they can do better in terms of improving the performance of the students in this regard. When the performance of the student is improved, then the performance of the private school sector is regarded improved in this context.

The findings of the study also answer the research questions as prescribed in the beginning. The first question was "how PDs affect the performance of a schoolteacher?" is answered with the significance of the model that impact of professional development and perception of professional development improves the performance of teachers. Similarly, the second and third research question has been answered accordingly that professional development will enhance the learning abilities of the students and that of the staff as well. The staff can come up with new teaching ideas which will help them to deliver higher standard education to the students of private schools in this regard.

The findings of the study also validate the objectives of the research as the first objective was regarding the need for a roadmap regarding the professional development of teachers. With the help of regression model, it has been stated that the professional development and its attributes significantly affects the performance of the teachers and educational institutes, especially private school teachers must be provided with necessary training so that they can professionally develop themselves and provide quality-oriented education to their students. When the performance of students will improve as a result of professional development activities, it will help to change or influence the perception of educational leaders (school leaders) in this regard as well.

4.5   Chapter Summary

Hence, the conclusion of this chapter has been made in a way that professional development does influence the performance of teachers working in private schools as it has been validated by the findings of this study. The objective of this study was to determine the influence of professional development and associated factors on the performance of private school teachers and it has been suggested that there is a strong relationship exist between professional development and teacher's performance. This study used data of 150 individuals working in the private school sector of Dubai and used techniques like demographic analysis, descriptive

statistics, correlation analysis and regression analysis in the given case. The findings provided by IBM SPSS analysis validates the proposition that there is a positive relationship between professional development and the performance of teachers. Based on the findings of this chapter, the recommendations along with limitations have been given in the last chapter of this study.

Chapter 5: Conclusion

5.1   Overview of the Chapter

The final chapter of this study presents a detailed conclusion regarding the research process performed. This study was performed to determine whether professional development is a predictor of the performance of teachers working in private schools in Dubai. The findings of the study validate the proposition of the study and in this chapter, the summary of major findings have been given followed by the recommendations regarding the improvement of professional development among teachers of private school sector. In addition to these, the key limitations of the study along with future implications have been explained as well in the research context (Mohajan, 2018).

5.2   Summary of Major Findings

The main objective of this study was to explore the role of professional development on the performance of teachers working in the private school sector of Dubai. The study used the data of 150 teachers working in the private schools of Dubai with the help of a structured questionnaire and using IBM SPSS as a tool of analysis. The key findings of the study have been summarized as follows:

1. This study included a sample size of 150 teachers and 52% of the participants were male and 72% of the participants were female. In addition to it, findings suggest that majority of the respondents belonged to the age group of 30 to 35 years in this regard.
2. The data analysis also revealed that the average values of study variables fall between 2.7 to 3.6 in this case. The range of standard deviation of the variables is between 0.48 to 1.27 in the given case.
3. The correlation analysis and the regression analysis indicate a strong association between the variables based on significant correlations and coefficient of determination.

The findings of the study are consistent with the findings of Opfer (2016) in which he indicates the positive impacts of classroom teaching practice related to better learning and better

outcomes by students. Further, that there is a direct connection between the learning outcomes of the students and the performance of teachers in the class. The findings also validate the argument of Capper (2018) that the teachers can teach effectively and implement their teaching profession more precisely if they have attended training and induction programs, and improved students' learning is also provided by them. Lastly, the findings also validate the research of Merchie et al (2018) that there exists a positive relationship between the professional development and success of students.

Hence, the findings can be summarized that the performance of teachers is influenced by professional development and its associated variables. So, with the help of the findings, in the following section, certain recommendations have been given.

5.3   Recommendations of the Study

Qualities student learning and teaching are tightly interconnected with each other. But another important factor that forms an integral part of quality teaching and student learning that is often overlooked is quality preparation and instruction for teachers. Unfortunately, it happens plenty of times that the children who can benefit the most from quality learning and teaching are the children who come from low-income, conflict, or crisis settings and they have little to no exposure to good teaching. And unfortunately, in the same settings the teachers who can benefit the most from professional development, helping the same students get the skills they need either take part in disorganized and unprofessional development or receive little to no quality professional development. There are various recommendations from various experiential and research practices that can provide the improvement these teachers need true professional development.

5.3.1 Focusing on Teachers from Crisis Affective and Low-Income Settings

Teachers are required to develop identities that are strong and evident as professionals who are working in an educational environment. In addition to the factors such as opportunities for advancement, Remuneration, and recruitment, the professionalism found in teachers is also majorly impacted by the access of effective professional development. It is very hard to feel competent and professional when you've got little to no support or training to teach children with severe emotional and academic needs and especially when the teachers have little to no

idea on how to address these issues. Therefore, it is compulsory that the professional development provided to teachers on helping them employ instructional practices such as clarity in their explanations, feedback, and formative assessment. These are a few of the factors that have to win to show a measurable amount of impact on student learning.

5.3.2 Developing, Applying, Measuring, And Institutionalizing Standards for The Professional Development of Teachers

Various researchers show clearly what constitutes quality professional development. Despite the amount of research and knowledge, there are still defining standards of quality professional development and they are for too few qualified PD providers. Without a qualified and shared understanding of what constitutes quality professional development, teachers are most commonly subjected to an effective professional development that in no way helps them or the students they teach but in return only wastes donor money and their time. Standards refer to a minimum competency level of professional development providers and improve the overall quality that promises good experiences and inputs. The quality of professional development for teachers and the standards can be contextualized and customized to adapt to different situations.

5.3.3 Creating Teacher's Professional Development Opportunities That Promote Collaboration

Collaborating with work colleagues and the culture of knowledge and trust that is the result of collaboration links to the increased effectiveness of the performance of teachers. Not only this but it has also shown increased levels of student test scores and the willingness of teachers to adapt to new ideas and innovations. But collaboration does not happen just like that it needs to be oriented in a way that everyone has a reason to collaborate with each other and be orientated on how to work as a more productive team. Teacher collaboration can be promoted by promoting classroom visits to get feedback, strengthening peer-to-peer instructions, and promoting effective teacher learning communities.

5.3.4 Provide the Teachers with Continuous Support

Teachers support includes various types of assistant that can help them eventually be successful in transferring learning from their professional development curriculum and training to a practical classroom setting. This support can be provided to them through various resources, instructional support, supervisory support, administrative support, and peer support. The various research done previously in this area including the ones that are still being conducted show that teachers who receive support on their jobs, get the required feedback and guidance from professional supervisors or an incredibly trained support person helps in applying new strategies and skills more appropriately and frequently. It has also introduced that receiving this kind of support helps them adopt a broader and comprehensive range of administrative and instructional practices compared to teachers who don't receive this kind of support. To address this factor more professionally, the school's administrative system can develop instructional coaching, provide the use of available and appropriate Technologies for ongoing support. support based interventions like observations, coaching, feedback, and modelling.

5.4   Limitations of the Study

Every research has limitations, and they are quite normal. However, it is essential for a researcher to work on minimizing the range of limitations throughout the entire process of the research. It is always better to acknowledge and identify the various shortcomings of research work than to have them being pointed out by the dissertation assessor. During the discussion of research limitations, it is not just important to describe and list the shortcomings but it's also important to explain exactly how these limitations impact the research data and findings. There may be plenty of research limitations, but it is essential that the research discusses only those limitations that directly affect or relate to the problems of the research. Research limitations in a particular study or dissertation may relate to the following factors (Snyder, 2019):

5.4.1 Formulating Research Objectives and Aims

The first limitation of the study is regarding the formulation of the objectives of the research. It is important for a researcher to formulate research objectives and aims not broadly but shortly specifying them in a way that they are not only narrowed down but they also increase the focus of the study.

5.4.2 Implementing the Right Data Collection Method

The second limitation of the study is regarding the choice of the data collection method. It is essential to focus on the technique of primary data collection which can be gathered by reading material online and through various books showing different methods of collecting data for research (Dodds & Hess, 2020).

5.4.3 Sample Size

The third limitation of the study is regarding the sample size of the study. The nature of the research problem that is being studied in research reflects the sample size to be used for the collection of data. If the sample size is very small, then the statistical tests will not be able to recognize or associated relationships present within the data set. Therefore, gathering a large sample size which ultimately results in larger or broader data helps in generating more reliable, valid, and accurate results. The sample size is more important in quantitative studies than qualitative studies.

5.4.4 Lack of Studies in The Area of Research

The fourth limitation of the study is regarding the literature review, which is one of the most important parts of any Research and because it helps in identifying the scope of research that has been done so far in the area related to the research that is being done on. Literature review findings provide the basis for the foundations of research and help in the research in achieving his or her study objective. However, as a researcher chooses the topic that has a narrow research problem or an evolving and contemporary research problem then it is highly likely that the research to find any prior research on the same topic (Basias & Pollalis, 2018).

5.4.5 Scope of Research Discussions

The fifth limitation of the study is regarding the scope of research discussions. This point can be added and as a limitation of any research regardless of whatever the choice of the research area is. The depth and scope of discussions in the research paper are mostly composed of many areas and levels that can be the cause of limitations in research compared to the work of scholars experienced after conducting various researches (Abutabenjeh & Jaradat, 2018)

5.4.6 Access to Research Data

The last limitation of the study is regarding the inadequate access to the research data. It's not easy with the research to go to and gather all the data they want to conduct the research since it takes a lot of time. They were not being able to do the research work might not cover every aspect of the area of study.

5.4.7 Future Implications

This chapter carries several future implications which can be used to cover the issues and limitations of the findings. This study can be replicated in a different sector of a country or for a different population and a comparison can be drawn that which sector needs the resources of professional development. In addition to it, the study can be replicated in a different demographic setting (in another country) and then the findings of two different countries can be compared. Thus, these different dimensions of professional development and its impact on the performance of teachers can help understand the importance of professional development for different sectors in this regard (Dźwigoł & Dźwigoł-Barosz, 2018).

5.4.8 Concluding Remarks

Hence, a brief conclusion from this chapter has been made that a research process is constrained by different limitations and the identified limitations of the case are difficulty while formulating research objectives, choice of data collection and processing method, size of the sample, lack of previous literature and access to the data of research. The key recommendations have been made regarding the improvement of professional development and it is expected that the findings will add significantly to the research literature.

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Demographic Questions:

What is your gender?

    3) Male

    4) Female

What is your age group?

    6) 20-25 Years.

    7) 25-30 Years.

    8) 30-35 Years.

    9) 35-40 Years.

    10) 45 Years and Above.

Sr. No. and Name of Variables	Questions
Variable: Teacher's Performance (DV)	
1	Do you think the performance of teachers is dependent on professional development?
2	Do you think the performance of teachers is dependent on the perception of professional development?
3	Do you think the performance of teachers is dependent on understanding the importance of professional development?
Variable: Professional Development (IV)	
4	Do you think professional development is a job motivator?
5	Do you think professional development is linked with job performance?
6	Do you think professional development can be a stress factor?
Variable: Perception of Professional Development (IV)	
7	Do your perception of professional development is a job motivator?

8	Do you think the perception of professional development is linked with job performance?
9	Do you think the performance of professional development can be a stress factor?
Variable: Importance of Professional Development (IV)	
10	Do you think the importance of professional development can be a stress factor?
11	Do you think the importance of professional development can be a stress factor?
12	Do you think the importance of professional development can be a stress factor?

The responses were collected on the basis of a five-point Likert scale containing the following options:

6. Strongly Disagree
7. Disagree
8. Neutral
9. Agree
10. Strongly Agree