

**TEACHING EFFECTIVENESS IN RELATION TO
PROFESSIONAL COMMITMENT AND SENSE OF
RESPONSIBILITY AMONG HIGHER EDUCATION TEACHERS
IN NAGALAND**



*Thesis Submitted to Nagaland University in Partial Fulfilment of the
Requirement for the Degree of Doctor of Philosophy in Education*

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NAGALAND UNIVERSITY

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DECLARATION

I, **Keneivi-u Rhatsu**, hereby declare that the Thesis entitled “**Teaching Effectiveness in relation to Professional Commitment and Sense of Responsibility among Higher Education Teachers in Nagaland**” is a result of my original research work prepared under the supervision of **Dr. T. Yolila Sangtam**, Assistant Professor, Department of Teacher Education, Nagaland University.

I further declare to the best of my knowledge that this thesis has not been submitted earlier in part or in full, for the award of any degree at any other university or institution.

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CERTIFICATE

This is to certify that **Ms. Keneivi-u Rhatsu**, bearing Registration No. **Ph.D./TED/00400** from the Department of Teacher Education, Nagaland University, has completed her Ph.D. Thesis entitled “**Teaching Effectiveness in relation to Professional Commitment and Sense of Responsibility among Higher Education Teachers in Nagaland**”, under my supervision and guidance in partial fulfilment of the requirement for the Degree of Doctor of Philosophy in Education.

This is her original work and has not been submitted earlier in part or in full, for the award of any degree at any other university or institution. The thesis is fit for submission for the award of the Degree of Doctor of Philosophy in Education.

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	LIST OF ABBREVIATIONS
NEP	National Education Policy
NCTE	National Council of Teacher Education
NU	Nagaland University
CDC	College Development Council
UNESCO	United Nations Educational, Scientific, and Cultural Organization
NEHU	North Eastern Hill University
SDG	Sustainable Development Goals
AISHE	All India Survey of Higher Education
IGNOU	Indira Gandhi National Open University
ICAR	Indian Council of Agricultural Research
NIT	National Institute of Technology
UGC	University Grant Commission
NIRF	National Institutional Ranking Framework
BSW	Bachelor of Social Work
MSW	Master of Social Work
B. ED	Bachelor of Education
HEI	Higher Education Institution
SPSS	Statistical Package for Social Sciences
N	Number of Samples
Df	Degrees of Freedom
S. D	Standard Deviation
ANOVA	Analysis of Variance
TESHET	Teaching Effectiveness Scale for Higher Education Teachers
PCSHET	Professional Commitment Scale for Higher Education Teachers

CHAPTER-I

INTRODUCTION

1.1 Introduction

Education is vital for attaining the full potential of an individual and promoting the development of a nation. Every nation requires education for its progress and growth. Education assists every individual and society to move forward to meet the challenging inevitable changes of any country. The importance of promoting lifelong learning through inclusivity and equitable education should be emphasized as mentioned in the “Sustainable Development Goals (SDGS) for the 2030 agenda under Goal 4”. There is a need for the education system to foster inclusivity, equity and equal education to sustain opportunities of learning that is lifelong for all. The National Education Policy, 2020, focused on lifelong learning for learners and has recommended reconfiguring and reconstructing the education system for the future of our nation (NEP, 2020).

The unforeseeable societal changes demand that all people deliver supreme weightage to the need for lifelong learning. The urge for lifelong learning should be reflected in the teaching profession and education. Lifelong learning has maximum influence on teachers and students, so for effective teaching-learning, every teacher should continuously learn and allow all learners to be continuous learners to improve our education system and the holistic development of students (Kumar, 2021). Holistic education can be received and imparted effectively through the combined efforts of committed, responsible and effective teachers. Teachers of all levels have a great impact on the educational domain. The teachers’ role is most important when educating people of a nation. Today, students should not just learn as teachers teach them, but students should learn how to learn, think, create, adapt, and solve problems. So, the teacher’s role has become critical and challenging in several aspects.

Within an educational institution, it is vital to possess effectiveness for the development of learners, the institution and the educators themselves. Educators have to inculcate several desirable teacher qualities in the teaching profession. In the

area of education, teachers face adversities during their performance, but the possession of desirable teacher traits will empower them to be productive and efficient in performing their duties effectively. Education must be universal to guarantee the needs of all children. The basic learning needs of children are demarcated in terms of the essential learning tools and content that children require to live and work with dignity and continue learning with quality education. However, education has been an area that needs attention. Education should be in terms of good education for all. To deliver basic education to students, many factors influence it. Teachers' instruction to students is one factor that influences or impacts student learning. The influence can be both positive and negative so it is imperative to check and maintain the quality of teachers and their teaching-learning process.

1.2 Teaching Effectiveness

Teaching is an active process involving complex phenomena. It is interactive and dynamic in nature. Teaching is an act of educating or imparting instructions to learners so that they receive the desired knowledge, understanding, skills and other desirable ways of living. It is a process where the teacher, learners, curriculum and other liable variables are arranged systematically to acquire the predetermined goals (Dictionary of Education, 2016). There are enormous teaching tasks in teaching. Teaching should be effective for all learners. Several studies on effective teaching have disclosed that no single teaching pattern fits all teaching situations. So, all teachers should put an effort into effective teaching-learning. Effective teaching cannot be defined appropriately because teaching patterns differ according to the situation, topic or area. Effective teaching is connected with unlimited teaching-learning tasks. Any teaching that promotes students learning outcomes to its maximum may be considered effective teaching. Effective teaching is the quality teaching that a teacher can bring about in his/her students' learning and desirable modification of one's behaviour. The effectiveness of teaching is evaluated by examining the modification of students' experiences and growth.

Teaching Effectiveness is an important feature of education. Teaching effectiveness is about the effectiveness of teachers' teaching. Teaching is primarily concerned with a system of actions that a teacher or an educator undertakes to induce the development of an individual. Effective teachers possess desirable teacher qualities

and competence in their teaching roles, responsibilities or functions, such as academic and professional knowledge, preparation and presentation, classroom management, interpersonal relationships, and teacher characteristics. Teaching effectiveness is an established range of competencies involved with teaching-learning plans, preparation, execution and learning support materials, classroom participation and management, interpersonal skills, and the learner's reinforcement reflected in the teacher's behaviour. The attainment of knowledge and skills required for teaching falls under the category of 'teacher competence', and the use of knowledge in any learning situation is known as 'teacher performance'. If the teacher's 'competence' and 'performance' are combined to achieve the instructional goals then it is referred to as 'teacher effectiveness' (Nagarajan, 2023).

Teaching effectiveness deals with the relationship between teachers, teaching-learning classroom practices, classroom learning situation and their effect on various students' learning growth and outcomes. Effective teaching-learning depends a lot on the emotional aspects of the educators like being kind, loving, warm, and compassionate, and the teacher's cognitive aspect such as the use of innovative teaching-learning devices, strategies and techniques, content mastery, and also the teacher's behavioural competence which includes patience, sincerity, punctuality, politeness and attentiveness. A teacher with desirable qualities is regarded as an effective teacher. An effective teacher acts as a bridge between the educational institution and the learner. He/she can employ various teaching skills to highlight the best potential of a student which in turn increases the teaching effectiveness of a teacher and the school's effectiveness in general. Furthermore, assessing the teaching effectiveness of a teacher is important as it helps in building the quality of teachers and the teaching-learning environment. The periodic assessment and genuine feedback of teachers and their teaching assist in identifying the loopholes in teaching. Numerous factors determine the effectiveness of teaching. So, recognising the internal and external factors that influence the teaching-learning process is required. So, it may be said that teaching effectiveness is an aspect of study or research that majorly concerns both academic and professional knowledge and the personal teaching competence of a teacher.

Teaching effectiveness includes the overall features of teachers, learners' environment, classroom management, practices, and the way they impact the

learners. In other words, it refers to the competence of educators to educate students so that they successfully achieve the desirable outcomes in the student's behaviour. It is the educators' temperaments which regulate a teacher's performance and quality. It is defined as a mixture of traits that can be cognitive and non-cognitive, such as qualification knowledge, clearness of thought, idea and expression, fluency, use of learning strategies, experience, delivery and socio-personal interaction (Kumari & Padhi, 2014).

Teaching effectiveness is the excellence of one's work, efficiency, and productivity of teaching. It is about teaching that allows a teacher to grow with his/her experiences and knowledge. The effectiveness of teaching makes teaching-learning a lot more meaningful, and productive (Dash & Barman, 2016). It examines a teacher's success in carrying out teaching responsibilities, institutional duties and other detailed works demanded by the nature of one's position (Habib, 2017). Teaching effectiveness consists of the teacher's behaviour affective, cognitive and psychomotor attributes (Cheng & Tsui, 1999). It largely relates to whether a teacher is efficient in one's teaching. Teachers are required to shape young minds and build the future of students. Teaching effectiveness can teach learners so they achieve in life and bring out the desirable positive changes. It is evaluated not only on academic performance but also on the other influences of effective teaching. The effectiveness of teaching is not only revealed in the presentation of his/ her content mastery or subject matter but the total environment of the real classroom for healthy learning to ensure the whole development of a child (Toor, 2014). It is said that teaching effectiveness is also influenced by the teacher's morale (Devamma, 2018). Moreover, effective teaching brings a lot of positive learning outcomes among learners. So, educators should possess the necessary educational and professional qualifications, desirable qualities of teachers, to deliver or execute their effectiveness in a real learning scenario. It may further be stated that the characteristics, qualifications, and instructional practices of teachers contribute towards teaching effectiveness.

Effective teachers demonstrate the possibilities for identifying the best with their subject knowledge and focus on academic responsibilities and instructions by carrying academic orientation to achieve learning goals. Effective teachers build their effectiveness by actively involving learners in real classroom discussions by

allowing them to construct their knowledge, raise questions and provide feedback on their learning and progress. Such teachers use relevant teaching-learning approaches to execute a variety of teaching content, approaches and pedagogical strategies so that learners actively participate and stay engaged for better performance. To make teaching-learning effective, they confidently put their faith in their students' working process and lead them with high expectations. Furthermore, they encourage independent and individual work by fostering self-regulation. Another factor of their effectiveness is Preparation for Planning and Teaching, Classroom Management, Knowledge of Subject Matter, Interpersonal Relations, and Teacher Characteristics (Kulsum, 2011).

Various approaches and techniques are required to assess the teaching effectiveness of teachers. Feedback, test, and ratings from peers, researchers, supervisors, students, and self-evaluation are some techniques to assess teaching effectiveness (Berk, 2005). Teaching effectiveness can be studied by measuring the attitude of teachers, students' knowledge, teachers' personal characteristics, level of motivation, and the teacher's academic and professional knowledge. Periodical examination of teaching effectiveness is essential to frame intervention programs to assist in enhancing teaching effectiveness (Stringer & Irwing, 1998). The measures useful in locating the teacher's strengths, weaknesses and behaviours are the knowledge or mastery of the subject matter and training to identify the effectiveness of teaching. For effective and productive teaching, educators should be unbiased, objective, and possess a well-defined framework of assessment and evaluation. However, taking into account the roles of teachers, it is not right to measure teaching effectiveness based on classroom teaching alone (Pagani & Seghieri, 2002).

1.3 Models of Teaching Effectiveness

A thorough review of related literature revealed various models of teaching effectiveness. It is said that teaching effectiveness cannot be measured or assessed by teachers' classroom teaching or the traditional way of teaching. Various teaching models to investigate the teaching effectiveness of teachers were introduced, and it has proved useful for teachers

The model of teaching effectiveness by Cheng & Tsui, 1999. And the details are

discussed below:

(i). The Goal and Task Model: This model states that the measurement of teaching effectiveness can be done by checking the goals and tasks achieved by the teacher. Also, the use of available resources, materials and energy determines the teaching effectiveness. This model is useful for the heads of the institutions, administrators and supervisors to evaluate teachers' performance.

(ii) The Resource Utilization Model: This model reveals that the evaluation of the teaching effectiveness of teachers assesses if a teacher sustainably utilises the centre's teaching-learning resources. The well-organised use of resources leads to the fulfilment of stated goals. It further motivates the teacher to think creatively and use low-cost materials whenever school resources are scarce. Therefore, a teacher is considered effective if he/she can utilise the resources and overcome barriers or difficulties to achieve the set targets.

(iii) The Working Process Model: The teaching effectiveness can be determined by observing and checking the teacher's behaviour and characteristics. It is recommended that the areas of the teaching process, such as teaching-learning style, teacher's attitude, interpersonal relationships, classroom management, and planning of lessons, should be supervised regularly to enhance the quality of teaching

(iv) The Accountability Model: In the teaching profession, teachers' accountability plays a vital role. Teachers are held accountable for professional growth, such as performance, teaching responsibilities, and relations with students, faculty, parents and the society or community. They are expected to give classroom approaches, work progress, resources, and the successes and failures of the school. The accountability model shows the checking of a teacher's effectiveness by stating that it can be measured in terms of his/her actions, competence, teaching responsibilities, skills, reputation, and other aspects of accountability.

(v). Absence of Problem Model: This model states that if a teacher fulfils the instructional objectives by showing a minimum level of shortcomings, failures, problems, and misbehaviours, then he/she should be considered effective. It means teaching effectiveness can be evaluated by assessing the number of weaknesses in the teaching process.

(vi) Continuous Learning Model: Teaching is a dynamic process that demands teachers' continuous learning. Here, it means that teachers should always learn new ways to improvise his/her teaching, adapt to difficult situations, bring new ideas, facilitate diverse classrooms, and help themselves with continuous learning for their professional growth and development. This model shows that environmental and societal changes are inevitable, and nothing remains the same. To be effective in teaching, a teacher should always be ready to cope with the various changes and expectations. Hence, teaching effectiveness can be determined by evaluating the teacher's level of adjustment and supervising the working process (Cheng & Tsui, 1999).

The fundamentals relating to teaching effectiveness are explained below:

(i). Professional Characteristics: Teaching effectiveness is connected with the professional features of teachers. Here, professional characteristics include leadership qualities, ability to connect or mingle with others, analytic and conceptual thinking skills, professionalism and expectations abilities.

(ii) Classroom Climate: The model on classroom climate is about the teaching effectiveness examined through interviews with learners that consist of their perceptions on the clarity of lessons, orderly climate, behaviour standards, teacher fairness, an opportunity for learners to be involved, emotional support, perception of safe classroom, comfortable, an interesting and exciting place, well organized and suitable environment.

(iii) Teaching skills: The teacher's teaching skills contribute towards the effectiveness of the teacher and his/her teaching. Teaching skills include time on task, high expectations, planning, variation in teaching, classroom and behavioural management and effective utilisation of assessment and homework.

The three main elements of a teacher's effectiveness significantly influence learners' growth and progress. Each element brings distinct and balancing ways to the contribution the teacher makes. The three factors are different, yet two factors, such as professional characteristics and teaching skills, are related to each other. (i). Professional characteristics are ongoing outlines of behaviour that integrate to drive things we usually do. (ii). Teaching skills are the micro-behaviours that an effective

teacher continuously displays when teaching in a class. (iii). Classroom climate is an output factor that contributes towards making a teacher effective. It enables teachers to understand how learners feel about the classroom climate created by them. It assists educators to achieve their impact and motivation to learn (McBer, 2000).

1.4 Professional Commitment

The power and quality of any profession largely rest on the commitment of each individual towards their profession. Commitment is vital for all. There is a need for Professional Commitment in all professions. The term 'Professional Commitment' consists of two words i.e., 'professional' and 'commitment'. The term 'Professional Commitment' is widely discussed in the National Policy of Education (NEP) 2020. The word 'Professional Commitment' means dedication to one's work, including personal development. It accentuates the responsibility of the individual and the institution (Kumar, 2021). Professional Commitment is the state of being committed towards one's profession. Professional Commitment is the extent to which one identifies with one's profession and accepts its values (Morrow & Goetz, 1988).

Professional Commitment is interrelated with quality education. They are regarded as complementary to each other in the field of education. They are terms that come under the same umbrella. It acts as an intermediate to bring quality for both students and teachers. Moreover, it accentuates teachers' role in building the growth of the nation and developing good citizens in the country (Goel & Dina, 2017). If the system of education is sound in any country, then its competence is increased, and more committed teachers subsequently assist to upgrade and lift the students and the nation. For quality teachers and quality education for students, teachers play a great role apart from their teaching obligations. They should stay committed not only in the process of assisting students to learn but also in research and other extended activities or work. Such engagement, contribution and obligations differ as per the teachers' social, psychological and physical characteristics, needs, tradition, culture, and the various forms of education. Commitment to one's profession is essential for all levels of education. The education of students does not only require teacher training and teacher education, but it also requires commitment to one's profession. The teachers' commitment is known to be linked to their job satisfaction and attitude. Teaching and its quality have a huge impact on students' learning, performance and

achievement (Darling-Hammond, 2000). Today's society expects high-quality teaching, learning or teaching-learning. They demand quality from teachers as professionals. Educators are expected to be accountable for all the learners' growth. Any untoward or anti-social activities and practices that arise in society depict the failure of teachers. In some extreme situations or cases, teachers are blamed for students' failures and unwanted discrepancies. Therefore, it is one's moral duty to eradicate all the wickedness of society through full involvement and commitment to producing quality learners in the institution. In this way, the commitment and the quality are interrelated to each other. Teachers are the link between school education and teacher education, thus acting as mediators between them. Teacher education has increasingly been considered a vital profession. More aspirants are attracted towards it, creating threats to quality concerns in teacher education. To ensure the quality of teachers and teacher education, to improve and maintain educational standards the international community (UNESCO, 2012; Goel & Dina, 2017) along with the Indian government are taking desirable steps. The government is quite committed and concerned for the quality of teachers and teacher educators through implementing various professional development programmes and schemes. For professional development, commitment to the profession is a prerequisite. The term committed teachers, is often used interchangeably with quality teachers or as a synonym for teachers with dedication (Frankenberg et al, 2010). Although the meanings of commitment are subjective and relative, this is generally felt as a desirable attribute of any profession. A committed teacher is considered to have an attribute of professionalism. To have a better understanding, one should first understand profession and commitment in separate lines.

There are several aspects of professional commitment. They are called affective, continuance and normative. The first component refers to the identification, involvement and emotional attachment to the profession. Such people remain strong in their profession. The second component is where employees' recognition is based in terms of the costs linked with their profession. Such employees are strongly committed to their profession as they are aware and can realise how much they have to lose without doing so (Meyer et al., 1993). The third component is based on the feeling of being responsible for the profession. This type of commitment is required as they remain a part of their profession with a clear intention to feel they have to do

so. It is regarded as a distinct component that arises or develops due to effective socialisation, healthy adjustments in society or the sacrifices and involvement of any profession (Meyer et al., 1993).

1.5 Dimensions of Professional Commitment

The National Council of Teacher Education supported the importance of teachers' competencies and commitment. It mentioned the need to come with transformation or improvement in preparing teachers. It highlighted the necessity to adopt strategies and behavioral improvement in learners. It is presumed that if a teacher acquires professional competencies and commitment, it will result in sound teacher performance. For Professional Development, NCTE identified five (5) dimensions. The identified five dimensions are commitment to the learner, society, profession, excellence and basic values.

(i). Commitment to the Learner: It is about the educator's concern and affection for student-teachers, being committed to one's progress, development, having concern for empowering one another and care for one's life quality.

(ii). Commitment to the Society: It is about the educator's serving the society consciously, responsibly, faithfully and with full commitment. This relates to having equity, contributing constructively and meaningfully to the full society's development with the help of social activities and other extended activities.

(iii). Commitment to the Profession: It is about dedicating oneself to one's work or profession. It means extending our support to our profession and also cooperatively following other educators, extending reverence to fellow faculty and even student-teachers.

(iv). Commitment to Achieve Excellence for Professional Actions: This refers to teacher educators' quest for knowledge and excellence and achieving the best through their performance as teacher educators in terms of acquisition and transmission of knowledge and skills through their words and actions.

(v). Commitment to Basic Values: It refers to certain common values, viz., honesty, cooperation, love, truth, objectivity, regularity, rationality, dignity of hard work, etc., by teacher educators for being a role model for their student-teachers.

In the functional sense, professional commitment essentially consists not only of doing their best but also of practically inspiring them to inculcate the values of the teaching profession.

1.6 Sense of Responsibility

Sense of responsibility from an ethical perspective refers to the sense of responsibility that a person considers in society. It is the process of self-development and emotional experience of one's moral actions to meet moral needs and activities (Duan, 2000). Teachers' sense of responsibility is about having an obligation or feeling responsible in one's work or society. It generally influences instructions and learning practices, psychological and mental well-being, and most importantly, facilitates students' performance and learning. It was found that the various conceptualisations of responsibility of the teacher are linked with students' previous knowledge to bring positive outcomes and attitudes in professional preparation and dedication (Halvorsen et.al, 2009). Teachers' satisfaction with their job is influenced by their characteristics, psychological states and dimensions (Winter et. al, 2006). A positive effect in the classroom brings success in effective teaching. The beliefs of teachers and their affective characteristics contribute towards the change of instruction. It is assumed that their ability to influence students enables new instructional effectiveness and practices (Guskey, 1984). The teachers' responsibility contributes to learning, and their learning leads to achievement (Lee & Smith, 1996). Further, it found an assumption about teachers regarding their personal responsibility. It is said that an individual is responsible for students' educational outcomes. It generally states that the primary performance is the core of the implementation of educational policies and accountability.

A sense of responsibility is a relatively a personality trait (Birhoff et al.,2005), and it is the same with the responsibility of teachers (Rose & Medway,1981). The sense of responsibility among teachers was surveyed (Lee & Smith, 1996) and found a link to career success (Winter, 2000). It can be perceived from different perspectives, and has been studied accordingly. It denotes several meanings and can be used in many contexts. Sense of responsibility also refer to a way of construing it as self-determined and self-critical, which is a character trait. It can be defined in moral expectations to examine specific performances, like academic or personal success

and failure. Moreover, there are insufficient critical analysis and empirical studies on certain questions, such as the different meanings of responsibility; their opinions on feeling responsible; whether teachers can feel responsible for making them accountable; and whether, under any circumstances, they feel responsible, even without being not accountable. Such questions can be addressed by providing the meaning of the responsibility of a teacher from the point of psychological construct and its implications in education. Henceforth, specific proposals were put up (a) to demonstrate the internal responsibility in contrast and addition to accountability, (b) to project a conceptual outline that integrates diverse perspectives of the responsibility of teachers, and (c) to define its connections to the prevalent psychological frameworks and research. The fast-changing world is allowing changes in all spheres of education. Likewise, the secondary education is transforming positively, enabling the teachers to change their roles to be more responsible. The emerging societal changes require new demands for education. The schools are expected to convert or improvise according to modern-day institutions. Teachers' qualities are expected to be ideal for all. Teachers are expected to fulfil their professional duties professionally and responsibly. Sense of responsibility and attitude towards teaching are the very heart of the teaching profession.

Sense of responsibility of teachers refers to how educators view their teaching performances and responsibilities, and the situations they accept as personal responsibility for any consequences. Similarly, teachers' attitudes toward teaching affect the nature and scope of teacher participation in education and related educational programs. By enhancing teachers' desired behaviour or by changing their attitude towards the desired, constructive and effective learning of students can be achieved. So, teachers have to attain a sense of responsibility and possess a healthy attitude towards teaching in the teaching profession to ensure the fulfilment of the expected assignments (Lauermann & Karabenick, 2013).

The complex concept of responsibility refers to the social power that binds in the modes of action that power demands. Responsibility means accountability or answerability in one's power, control or management; being able to understand and respond to the association; taking action relating to connection and responsibility to oneself and others. Responsibility is considered a variable attribute, and it is the process by which culture stimulates and learns (Gangor, 1993). In this regard, a sense

of responsibility is present in humans and is subject to change depending on the environment. In generally conceptualised educational settings, responsibility is manifested in diverse perspectives. A sense of responsibility is about possessing the right healthy attitude towards social persons, things and being responsible as independent individuals (Liu, 2001). A sense of responsibility refers to the psychological foundation and motivation of the subject when accepting and practising responsibility, and is a vital part of responsibility. Teachers are responsible not only for their own success, but they are sometimes held responsible for other causes of failure

1.7 Brief Account of Nagaland

Nagaland is a state that falls under North-East India, measuring 16,579 sq km (approx.). The Nagaland population is 1,980,602 (2011 census of India). It is one of India's smallest states. The state lies between the geographical coordinates of 25°6' and 27°4' North latitudes and 93°20 and 95°15 East longitudes. Arunachal Pradesh is a state that borders on the north, to the west is Assam, Manipur borders the south, and the east is bordered by Myanmar. It is the homeland of diverse tribes blessed with rich culture and traditions, varieties of flora and fauna, and surrounded by beautiful mountains and rivers. The original inhabitants of Nagaland are referred to as the Nagas, a generic name for the group of tribes who are distributed and settled in different parts of the state. Nagaland is popularly known as the "Land of Festivals", and each tribe has a unique festival that is observed throughout the year during various months. English is the official language of the state. Nagamese is an amalgamation of Hindi and Assamese and is commonly spoken by the inhabitants of Nagaland.

Nagaland got its statehood on 1st December 1963, and is marked as India's 16th state. It was officially inducted by Dr. S. Radhakrishnan (then India's President), with Mr. P. Shilu Ao as the first Chief Minister of Nagaland. At present, Nagaland comprises sixteen (16) districts inhabited by different indigenous tribes as presented in Figure 1.

Figure 1

Map of Nagaland



Source: https://www.burningcompass.com/countries/india/nagaland-district-map.html#google_vignette

Every tribe is known for its distinct customs and traditions, attire, festivals and speaks different languages and dialects. The state is mostly occupied by seventeen (17) major Naga tribes, namely- Ao, Angami, Lotha, Sumi, Chakhesang, Zeliang, Rengma, Konyak, Sangtam, Chang, Khiamniungan, Phom, Yimchunger, Pochury, Kuki, Dimasa Kachari and Tikhir. Kohima is the capital of Nagaland, and Dimapur is one of the largest cities of Nagaland and is considered the commercial hub of Nagaland.

Despite being a small state in India, it has a high-quality education system, and the rate of literacy is steadily rising. It is making progress in terms of educational advancement. The administration has been working hard so that everyone has access to education. It is India's 15th most literate state, with 79.55 per cent. According to the Census Report 2011 and the Nagaland Statistical Handbook, 2023 brought out by the Directorate, Economics and Statistics, the male population literary is 82.75 per cent, while the percent for female population is 76.11 which shows that 13, 42,434 many people are literate (Census Report, 2011 & Nagaland Statistical Handbook, 2023).

1.8 An Overview of Higher Education in Nagaland

The apex body of formal education is Higher Education. It is considered the concluding level of learning in a formal setup. Higher education generally includes all courses or programs at the tertiary level. It is education that empowers an individual with the necessary understanding and competence for realising goals that contribute to personal development and societal growth.

In olden times, formal schooling or education was not available in Nagaland. The American missionaries' arrival and the conversion of the Nagas to Christianity brought numerous changes, especially in education. The pioneers of Western/ formal schooling were the missionaries in the 1880s. After a gap of almost twenty (20) years, higher education formally began in Nagaland. There is no proper documentation on formal schooling or education at the higher level. However, the available records show that higher education was formally introduced with the formation of Fazl Ali College. In 1959, the state's first college started under the Mokokchung district, named Fazl Ali College. This was gradually followed by

another college in 1961, i.e., the college at Jotsoma named as Kohima Science College. Back then, it was the North Eastern Hill University (NEHU) that officially looked after the college. Immediately, colleges were not introduced. It was after the state was recognised in 1963 as a full-fledged state. The colleges introduced after the state recognition are Dimapur Government College and Kohima Arts College. The two (2) colleges have existed since 1966 and 1967, respectively, giving a new horizon. The history projected that during 1973-89, many institutions were set up. It was during this time that sixteen (16) colleges were set up or formally introduced. During the 90s alone, the establishment of twenty-three (23) colleges happened. Later, the formation of a central university on 6th September, 1994 took place. It has been named as Nagaland University (A Central University). Likewise, other universities were set up, such as the Global Open University, ICFAI University, North East Christian University, and St. Joseph University. There is a regional centre under the Indira Gandhi National Open University, and other national-level institutions like the National Institute of Technology (NIT) and Indian Council of Agricultural Research (ICAR). Apart from these, there are other colleges offering theological programs that help people in theological studies.

1.9 Higher Education Institutions in Nagaland

In Nagaland, there are five (5) Universities, one (1) National Importance Institute, seventy-one (71) Affiliated Colleges, three (3) Autonomous Colleges, and thirteen (13) Professional Colleges (Annual Administrative Report, 2024-25).

Table 1.1 presents the details of the various colleges, universities and institutes across Nagaland. Despite being a small state, it is making a lot of progress in terms of educational quality and advancement. Various institutions under higher education are offering diverse regular and specialised disciplines across Nagaland to improve education standards by implementing various schemes and initiatives under flagship projects. However, there are existing concerns that require facilitation. Some of the concerns are inadequate physical infrastructure, inadequate funds, lack of teaching credibility, lack of innovation and research, lack of guaranteed courses, and meagre remuneration (Kumar & Shobhana, 2021).

The details are furnished in Table 1.1.

Table 1.1*Details of Higher Education Institutions*

Sl. No	College/University/Institute	Type of Institution		Number
1	Universities	Central (1)		5
		Private (4)		
2	Institute of National Importance	National Institute of Technology	of	1
3	Affiliating Colleges (Nagaland University)	Government (17)		71
		Private (54)		
4	Autonomous Colleges	Government (1)		3
		Private (2)		
5	Professional Colleges	B. Ed	Govt- 2	13
			Private-2	
		Law	3	
		School of Nursing	1	

Source: *Annual Administrative Report (2024-25)***1.10 Colleges affiliated with Nagaland University**

Among the five (5) universities in Nagaland, Nagaland University is a university that is a central university. Nagaland University (NU), with its headquarters at Lumami, is marked as the 13th central university in India. It is designated with several campuses in the state of Nagaland. The campuses are at Kohima, Medziphema, and Dimapur. The NIRF rating band of NU is 151- 200 (Kumar & Shobana, 2021).

There are seventy (70) colleges from thirteen (13) different districts affiliated with

Nagaland University.

Table 1.2 shows the list of Nagaland University-affiliated colleges. It consists of the course(s) offered, status of affiliation, type of management, and establishment year (Status of Affiliation of Colleges, CDC, Nagaland University, 2022).

Table. 1.2

Nagaland University-affiliated Colleges

Sl. No	College	Year	Management	Affiliation	Streams/course(s)
1.	Fazl Ali College	1959	Government	Permanent	Arts/Science
2.	Kohima Science College	1961	Government	Autonomous	Science
3.	Dimapur Government College	1966	Government	Permanent	Arts/Commerce
4.	Kohima College	1967	Government	Permanent	Arts/Commerce
5.	Sao Chang College	1973	Government	Permanent	Arts/Science
6.	Patkai Christian College	1974	Private	Autonomous	Arts/Sc./Com./BCA/
7.	Mount Tiyi College	1974	Government	Permanent	Arts
8.	State College of Teacher Education	1975	Government	Permanent	B. Ed
9.	Kohima Law College	1978	Private	Provisional	LLB
10.	Zunheboto Government College	1980	Government	Permanent	Arts
11.	Mokokchung Law College	1981	Private	Provisional	LLB
12.	Phek Government College	1981	Government	Provisional	Arts/Science
13.	Pfütsero Government College	1982	Government	Provisional	Arts
14.	Baptist College	1982	Private	Permanent	Arts/Commerce
15.	Salesian College of Higher Education	1982	Private	Provisional	Arts
16.	Wangkhao Government College	1983	Government	Permanent	Arts
17.	People's College	1984	Private	Provisional	Arts
18.	St. Joseph's College	1985	Private	Autonomous	Arts/Sc./Com

19.	Public College of Commerce	1985	Private	Permanent	Commerce
20.	Peren Government College	1987	Government	Provisional	Arts
21.	Mountain View Christian College	1991	Private	Provisional	Arts
22.	Salt Christian College	1991	Private	Permanent	Arts
23.	Pranabananda Womens' College	1991	Private	Permanent	Arts/ Commerce
24.	Eastern Christian College	1991	Private	Permanent	Arts/ Commerce
25.	College of Arts & Technology	1991	Private	Provisional	Arts
26.	City College of Arts & Commerce	1992	Private	Provisional	Arts/ Commerce
27.	Alder College	1992	Private	Permanent	Arts
28.	Mount Olive College	1992	Private	Permanent	Arts/ Commerce
29.	Yingli College	1992	Government	Permanent	Arts
30.	S.D. Jain Girls College	1993	Private	Permanent	Arts/ Commerce
31.	Loyem Memorial College	1993	Private	Provisional	Arts
32.	Sakus Mission College	1994	Private	Permanent	Arts
33.	Immanuel College	1994	Private	Permanent	Arts/ Science
34.	Tetso College	1994	Private	Permanent	Arts/Com./ BBA
35.	City Law College	1994	Private	Permanent	LLB
36.	Salt Christian College of Teacher Education	1995	Private	Provisional	B. Ed
37.	Japfü Christian College	1996	Private	Permanent	Arts
38.	Oriental College	1996	Private	Permanent	Arts/Science
39.	Tuli College	1996	Private	Provisional	Arts
40.	Bailey Baptist College	1996	Private	Provisional	Arts
41.	Zisaji Presidency College	1997	Government	Provisional	Arts
42.	Modern College	1998	Private	Permanent	Arts

43.	Bosco College of Higher Education	2003	Private	Provisional	B. Ed
44	Capital College of Higher Education	2004	Private	Permanent	Arts
45.	St. Xavier College	2005	Private	Permanent	Arts
46.	Sazolie College	2005	Private	Permanent	Arts
47.	Sazolie College of Teacher Education	2005	Private	Provisional	B. Ed
48.	St. John College	2006	Private	Permanent	Arts/ Science
49.	National Institute of Electronics & Information Technology	2006	Government	Provisional	BCA
50.	Model Christian College	2007	Private	Permanent	Arts/Science
51.	Unity College	2007	Private	Permanent	Arts/Com.
52.	Modern Institute of Teacher Education	2009	Private	Provisional	Arts
53.	Kros College	2010	Private	Permanent	Arts/Com.
54.	Mount Mary College	2011	Private	Provisional	Arts/Com/B. Ed
55.	J.N. Aier College	2011	Private	Provisional	Arts
56.	C – Edge College	2012	Private	Permanent	Arts
57.	Unity College of Teacher Education	2012	Private	Provisional	B. Ed
58.	Mokokchung College of Teacher Education	2012	Government	Provisional	B. Ed
59.	Yemhi Memorial College	2013	Private	Provisional	Arts/Com.
60.	North East Institute of Social Science & Research	2014	Private	Provisional	BSW/MSW
61.	Cornerstone College	2014	Private	Provisional	Arts
62.	Ura College of Teacher Education	2014	Private	Provisional	B. Ed
63.	Don Bosco College	2015	Private	Provisional	Arts
64.	Jubilee Memorial College	2015	Private	Provisional	Arts
65.	Shamator College	2016	Private	Provisional	Arts
66.	Nagaland College of Music and Fine Arts	2016	Private	Provisional	B. Music

67.	M.G.M College	2017	Private	Provisional	Arts
68.	Livingstone Foundation International College	2021	Private	Provisional	Arts/Com.
69.	Mon Vale College	2021	Private	Provisional	Arts
70.	Norman Putsure College	2022	Private	Provisional	Arts

Source: *Status of Affiliation of Colleges, CDC, NU (December, 2022).*

1.11 District-Wise Distribution of Colleges in Nagaland

The details of the various functioning colleges are furnished below. The Table 1.3 indicates the district-wise distribution of colleges in Nagaland.

Table 1.3

District-Wise Distribution of Colleges

Sl.No	District	Total
1	Dimapur	21
2	Chumoukedima	07
3	Kohima	22
4	Mokokchung	06
5	Tuensang	02
6	Wokha	02
7	Mon	02
8	Peren	02
9	Phek	02
10	Kiphire	01
11	Longleng	01
12	Zunheboto	01
13	Shamator	01
	Total	70

Source: *Status of Affiliation of Colleges, CDC, NU (December, 2022)*

Table 1.3 projects the colleges district-wise. It shows twenty (21) colleges in Dimapur, seven (7) in Chumoukedima, twenty (22) in Kohima, six (6) in Mokokchung, two (2) in Tuensang, two (2) in Wokha, two (2) in Phek, two (2) in

Peren, two (2) in Mon, one (1) in Kiphire, one (1) in Longleng, one (1) in Zunheboto and one (1) in Shamator. The data disclosed that few districts such as Longleng, Kiphire, Phek, Shamator and Zunheboto have no private colleges (CDU, NU, 2022). The population of college teachers teaching in Nagaland University-affiliated colleges was not provided by the CDC, NU, or the department. Only the pupil-teacher ratio is given as 20:1 for universities and 18:1 for colleges. The total enrolment is estimated to be 51233, with 23557 males and 27666 females (AISHE, 2024).

1.12 Significance of the Study

An emerging need for today's learners is holistic quality education. So, teachers should develop professional excellence and empower each individual by improving the teaching standard and quality. Teaching should be effective and meet emerging challenges to serve the nation's needs. Teachers are an integral portion of the learners' educational spectrum and agents of change in any nation. Therefore, good teaching is needed for all categories of learners. They require teachers who are effective, committed and responsible to their teaching profession.

For any nation to possess quality education, it is necessary to provide quality teachers for effective teaching and to bring desirable changes in education. The teaching quality has a huge impact on students' learning, performance and achievement (Darling-Hammond, 2000). Teachers are considered the main source of educational reforms. The National Education Policy, 2020 reiterated empowering and re-establishing teachers. So, teachers should be effective in their teaching profession. Commitment is a major constituent of the effectiveness of all organisations, so teachers' commitment is required for improving learners and their learning outcomes. Similarly, teachers' sense of responsibility has an enormous influence in facilitating learners' psychological and mental well-being, which ultimately leads to students' learning, behaviour, performance and experience. Thus, a dire need is felt to determine the liable variables of effective teaching.

The increasing growth of institutions reflects the development in the education sector. However, with technological progress and advancement, emerging trends and approaches in education, and increasing autonomy, teaching effectiveness has

become a matter of concern. Therefore, higher education teachers should possess professional commitment and a sense of responsibility for good teaching and quality education. Hence, it is essential to understand and assess the teaching effectiveness, professional commitment and sense of responsibility of teachers in higher education.

Consequently, the concerned investigation aimed to examine the teaching effectiveness of teachers concerning professional commitment and sense of responsibility. It will enable higher education teachers and all stakeholders to contribute towards enhancing education and its quality in a greater and wider perspective. Hence, the selected area for study is pertinent and significant as it will help to know more about higher education teachers and their teaching effectiveness concerning liable variables for it.

1.13 Statement of the Problem

The main concern in studying Teaching Effectiveness is to examine whether there is any relationship and differences between Teaching Effectiveness, Professional Commitment and Sense of Responsibility. Hence, the study is stated as **“Teaching Effectiveness in relation to Professional Commitment and Sense of Responsibility among Higher Education Teachers in Nagaland”**.

1.14 Objectives of the Study

The following are the objectives of the study:

1. To assess the level of Teaching Effectiveness, Professional Commitment and Sense of Responsibility of Higher Education Teachers
2. To examine the relationship between Teaching Effectiveness and Professional Commitment of Higher Education Teachers
3. To examine the relationship between Teaching Effectiveness and Sense of Responsibility of Higher Education Teachers
4. To investigate the difference in Teaching Effectiveness based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream

5. To investigate the difference in Professional Commitment based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream

6. To investigate the difference in Sense of Responsibility based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream

1.15 Hypotheses of the Study

The following hypotheses are formulated for the study:

1. There is no significant relationship between Teaching Effectiveness and Professional Commitment of Higher Education Teachers.

2. There is no significant relationship between Teaching Effectiveness and Sense of Responsibility of Higher Education Teachers.

3. There is no significant difference in Teaching Effectiveness based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream.

3.1. There is no significant difference in Teaching Effectiveness concerning Gender.

3.2. There is no significant difference in Teaching Effectiveness concerning Age.

3.3. There is no significant difference in Teaching Effectiveness concerning Teaching Experience.

3.4. There is no significant difference in Teaching Effectiveness concerning Locality.

3.5. There is no significant difference in Teaching Effectiveness concerning Type of Management.

3.6. There is no significant difference in Teaching Effectiveness concerning Academic Stream.

4. There is no significant difference in Professional Commitment based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream.

4.1. There is no significant difference in Professional Commitment concerning Gender.

4.2. There is no significant difference in Professional Commitment concerning Age.

4.3. There is no significant difference in Professional Commitment concerning Teaching Experience.

4.4. There is no significant difference in Professional Commitment concerning Locality.

4.5. There is no significant difference in Professional Commitment concerning Type of Management.

4.6. There is no significant difference in Professional Commitment concerning Academic Stream.

5. There is no significant difference in Sense of Responsibility based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream.

5.1. There is no significant difference in Sense of Responsibility concerning Gender.

5.2. There is no significant difference in Sense of Responsibility concerning Age.

5.3. There is no significant difference in Sense of Responsibility concerning Teaching Experience.

5.4. There is no significant difference in Sense of Responsibility concerning Locality.

5.5. There is no significant difference in Sense of Responsibility concerning

Type of Management.

5.6. There is no significant difference in Sense of Responsibility concerning Academic Stream.

1.16 Operational Definitions of the Terms

The following are the operational definitions of the terms used

a) Teaching Effectiveness: Teaching effectiveness refers to teachers who have attained the needed effectiveness in their roles and functions in teaching, such as academic and professional knowledge, preparation and presentation, classroom management, interpersonal relationships, and teacher characteristics. Here, it represents the teaching effectiveness of higher education teachers.

b) Professional Commitment: Professional commitment refers to the commitments of higher education teachers, such as commitment to the learner, commitment to society, commitment to the profession, commitment to achieve excellence in professional actions, and commitment to basic values. Here, it represents the professional commitment of higher education teachers.

c) Sense of Responsibility: Sense of responsibility refers to the responsibility of higher education teachers towards students' behaviour, learning outcomes, student achievement motivation, providing support, enhancement of capacity building for students and social and national goals of education (Vidushy, 2020). Here, it represents the sense of responsibility of higher education teachers.

d) Higher Education Teachers: Higher education teachers are teachers who teach at the higher education level. For the present study, it refers to the higher education teachers teaching in colleges affiliated with Nagaland University.

1.17 Variables of the Study

In the present study, the investigator considered one (1) dependent variable, two (2) independent variables and the demographic variables liable for it.

I. Dependent Variable: A dependent variable is a variable that depends on an independent variable. It changes as a result of changes made to the other variables. Here, Teaching Effectiveness is the dependent variable.

II. Independent Variables: An independent variable is a variable that is not

influenced by any other variable in the study. The independent variables are a) Professional Commitment and b) Sense of Responsibility.

III. Demographic Variables:

Demographic variables are population statistics that are used in research to describe groups of people. Here, the demographic variables are gender, age, teaching experience, locality, type of management and academic stream.

The variables of the study are presented in the following Tables 1.4 and 1.5

Table 1.4

Major Variables of the Study

Sl.No	Type of Variable	Major Variables
1	Dependent Variable	Teaching Effectiveness
2	Independent Variable	Professional Commitment
		Sense of Responsibility

Table 1.5

List of Demographic Variables of the Study

Sl.No.	Variable	Groups
1	Gender	Male
		Female
2	Age	Below 30 years
		31-40 years
		Above 41 years
3	Teaching Experience	Below 5 years
		6-10 years
		11-20 years
		Above 21 years
4	Locality	Urban
		Rural
5	Type of Management	Government
		Private
6	Academic Stream	Arts
		Science

1.18 Delimitation of the Study

- a) The study is delimited to higher education teachers of Nagaland only.
- b) The study is delimited to colleges affiliated with Nagaland University.
- c) The study is delimited to three (3) districts of Nagaland, namely, Kohima, Dimapur and Chumoukedima.
- d) The study is delimited to two academic streams, i.e., arts and science.

CHAPTER -II

REVIEW OF LITERATURE

2.1 Introduction

This chapter deals with related literature on Teaching Effectiveness, Professional Commitment and a Sense of Responsibility.

A review of related literature is usually a highly synthesised analysis of the position of various literature that allows the investigator to perform the research clearly and precisely. A significant aspect of any sort of educational research is the review, as it provides rigorous knowledge of previous educational researchers and helps the investigator to find the research gap and extend the educational research problem. Related literature review enables the investigator to acquaint themselves with the current knowledge in the area of their study (Koul, 2020).

The review of related literature gives a strong foundation for the development of objectives and subsequent hypotheses for the area of study. It also assists in avoiding duplication of others' work and further helps in interpreting one's findings of the current study.

2.2 Classification of the Review of Related Literature

The investigator reviewed literature related to the three (3) concerned study variables .ie., Teaching Effectiveness, Professional Commitment and Sense of Responsibility. Hence, for better understanding and clarity, the review of related literature has been classified under the following three headings:

2.2.1 Studies related to Teaching Effectiveness

2.2.2 Studies related to Professional Commitment

2.2.3 Studies related to Sense of Responsibility

2.2.1 Studies related to Teaching Effectiveness

Studies conducted in the National Context

Begum and Vaidharani (2024) investigated the effectiveness of Chennai District, Tamil Nadu secondary school teachers. The investigation was in relation to their teaching attitude. It was an attempt to determine the status of teachers' effectiveness and to compare their effectiveness in terms of gender and locale. Another concern

was to bring the implications based on its findings and provide more suggestions to promote its effectiveness. Therefore, an intense study was carried out on the chosen respondents. Accordingly, the analysis and interpretation showed differentiation in effectiveness between female and male teachers. However, the locality of teachers did not differ in their effectiveness.

Kumar et al. (2024) investigated different school management types regarding teaching effectiveness of secondary school teachers. The study made a comparison of teaching effectiveness between private and government secondary teachers using purposive sampling from different regions of Ranchi. The study revealed a remarkable differentiation in teaching effectiveness, i.e., teachers and the two types of school management. Concerning teaching effectiveness, teachers belonging to the secondary stage of government schools were better than the other type of teachers, i.e., private secondary teachers. However, no differences were ascertained between teachers teaching at government as well as private schools regarding their gender.

Raju and Vijaya (2022) surveyed teacher effectiveness using a normative survey. One main aim of their survey was to identify teacher effectiveness among various teachers belonging to the secondary level. The normative survey proved a lot of differences based on various communities for teacher effectiveness. Some distinct differences in teacher effectiveness, such as social statuses, such as O.C., B.C, SC and S.T., were revealed. It indicated other differences in their effectiveness, namely, teachers involved in rural and urban areas, and married and unmarried secondary school teachers. Further, another distinct difference between teachers with experience in teaching was also identified. However, based on the mean score of the respondents, it was also discovered that it did not differ significantly with the type of school.

Shobha (2022) used descriptive survey methods to research teaching effectiveness and competency belonging to Mysore secondary teachers. Using a t-test, it tested the differences in liable variables such as gender and school management type. As per the findings, there discovered no significant impact was discovered on the selected variables, i.e., male and female, government, aided and private teachers belonging to the secondary level. It revealed a substantial positive relation on the variables, such as effectiveness and competency of teaching in terms of the level of

secondary.

Gupta and Verma (2021) conducted a study on the teaching effectiveness of school teachers from a theoretical perspective. The study discussed various models, such as the goal and task model, the resource utilization model, the working process model, the accountability model, the absence of problem model, and the continuous learning model, to study school teachers teaching effectiveness. It also elaborated on the general factors affecting teaching effectiveness. The appropriateness of the study method revealed that in-service training, teaching experience, work environment, adjustment of the teacher, interpersonal relationships, intrinsic and extrinsic rewards, students, etc., were some factors that affect the teaching effectiveness of teachers. Some of the suggestions for improvement of teaching effectiveness mentioned in the study are commitment to the profession, friendly and healthy relationships, in-service training programs, and the use of teaching strategies by teachers to fill the gaps in their teaching profession.

Hooda and Annu (2021) aimed to study the main effect on teachers' teaching effectiveness and its relation to locus of control and gender. The investigators assumed that there is a need to increase awareness of the causes of problems affecting the effectiveness of teaching. With the adoption of suitable research methods, tools and techniques, the study indicated the effect of both locus of control as well as gender on the teaching effectiveness of Haryana secondary school teachers.

Mehta and Gupta (2021) adopted the empirical research design and a multistage sample technique to examine the impact of locus of control on the effectiveness of higher education teachers concerning their teaching. The study comprised higher education teachers from AICTE-approved technical and management colleges of Punjab and Chandigarh, and it confirmed that those teachers have average effectiveness in their classrooms. The results of the study showed that the regression equation was significant when it comes to the impact of locus of control on teacher effectiveness. It confirmed that many teachers had a locus of control that is internal rather than an external one. Teachers with an internal locus of control had a higher positive impact on the effectiveness of their teaching than teachers with an external.

Paschal and Srivastava (2021) studied the difference and the relationship between two variables, namely self-efficacy and teacher effectiveness. The research goal was

to ascertain the effectiveness of teachers belonging to the secondary level living in Patna, Bihar. It demonstrated a significant difference in a particular variable, ie self-efficacy. The demonstrated differences in self-efficacy were due to gender, institution type experience of teaching. Pertaining to the type of institution with teacher effectiveness, it significantly varied. However, it proved that all variables, like gender and teaching experience, did not change significantly in their effectiveness. However, a strong relationship between variables, self-efficacy and teacher effectiveness was determined for teachers in secondary positions.

Sehjal (2021) researched the secondary teachers' effectiveness concerning their location, gender and school type. The idea of the research was to find the effectiveness with the help of a survey approach. To ascertain its effectiveness, a standardised teacher effectiveness scale was constructed by Puri and Ghakhar to receive responses from the selected teachers. Accordingly, the research tool was administered to a random sample of 130 teachers from the Jalandhar district of Punjab. To achieve the purpose of the study, statistical techniques were used to produce results. Hence, it proved no impact or difference between the two genders, i.e., male and female. However, the effectiveness of urban and rural secondary school teachers at both levels is significant, and a notable difference between the form of institution was revealed in the effectiveness of teachers.

Sumer and Syiem (2021) felt that most East Khasi Hills district secondary schools have good pass percentages and investigated the effectiveness of secondary school teachers in the East Khasi Hills district of Meghalaya using a stratified random sampling technique. The study discovered that most secondary school teachers fall within the moderate and above-average level of effectiveness. Moreover, male and female teachers, rural and urban teachers, government, government-aided, and private teachers differ significantly in teacher effectiveness.

Bawa and Varma (2020) made a study concerning the effectiveness of assistant professors. The investigators explored gender differentiation concerning the effectiveness of GLA University, teachers at Mathura. It consisted only the assistant professors representing the whole universe of the study. It adopted a descriptive survey method on a sample of 50 male and 50 female assistant professors through a convenience sampling technique. Based on the objectives and hypotheses of the study, an appropriate research scale was adopted to administer to the chosen

professors. Further, relevant analysis techniques were used to critically differentiate their gender effectiveness as teachers. The findings were discussed thoroughly. Hence, it indicated insignificant differences between the gender effectiveness of assistant professors.

Lalchhuanawma et al. (2020) conducted a correlational study on the Aizawl district teachers. The correlation study was based on their effectiveness and the satisfaction with their job. With the help of mean, standard deviation, t-test, and Pearson r, the comparison of teacher effectiveness based on age and the comparison of teachers' job satisfaction based on age were analysed. It was discovered that age did not differ significantly in the correlational study of the effectiveness and satisfaction of the job of teachers. However, it indicated a strong connection between teachers' job satisfaction and effectiveness.

Ahmad (2019) compared different dimensions regarding the effectiveness of teachers. The comparison was with the directly recruited and promoted teachers. 200 teachers from Kashmir were selected from both the directly recruited and promoted categories. The selection was randomly made, and a systematic process was followed to collect data for the study. Hence, the Kulsum teacher effectiveness scale was used by the researcher. To fulfil the objectives of the research, certain statistical techniques were used. The collected data analysis interpreted that those teachers who were directly recruited were more effective than those promoted.

Bashir (2019) studied the effect of professional commitment on the effectiveness of teaching. The main objective of this research was to explore and find out the effect of professional commitment on teaching effectiveness was ascertained through the collection of responses using a research tool. The results from collected samples and data revealed that one key factor in teaching effectiveness is the commitment of teachers. The findings proved that these two are enormously related to one another. It completed the discussion by acknowledging that teaching is effective when the commitment is high.

Kumar (2019) explored the predictors of teaching effectiveness in the Dimapur district of Nagaland. The exploration was purely for teachers of secondary schools. To fulfil the objectives of the research, a random sampling was adopted for the selected samples. The study's findings revealed that teaching effectiveness has no significant association with age and teaching experience. However, private school

teachers' teaching effectiveness was more effective than government school teachers. Urban teachers' teaching effectiveness was higher than compared with rural teachers.

Devamma (2018) investigated teaching effectiveness to examine the teachers of secondary schools. The effectiveness of teaching is about their morale. The study was guided by four major objectives with a sample of 200 teachers. Based on the four major objectives, the study consisted of four hypotheses. The investigator followed quota sampling procedure to fulfil the objectives and hypotheses. The respondents were teachers from the Tumkur Educational District. To analyse the study, two ready-made scales, such as the Teachers' Morale Inventory and the teaching effectiveness scale by Sudha, B.G. & Satyanarayana, B.S., were used. Based on the results, it concluded that teachers with high morale were better in their teaching effectiveness, and teachers belonging to the government schools were significantly better in the same. However, it came to light that gender differentiation does not affect or influence the effectiveness of teaching.

Garg and Islam (2018) examined teacher effectiveness as the main variable. The study of the concerned variable, teacher effectiveness, was conducted with emotional intelligence. The examination was mainly for teachers of secondary schools. The random sampling procedure was utilised to choose the respondents to represent the total population. The respondents consisted of 200 Aligarh school teachers. To achieve the goals of the study, a relevant scale-Teacher Effectiveness Scale by Kumar & Mutha, was selected as one scale to collect data. Further, it was analysed using statistical tools. Based on the tools, it interpreted no relation between the concerned variables. It indicated a significant variation concerning male and female secondary school teachers, but there were no prominent differences in teacher effectiveness between more experienced and less experienced secondary school teachers and also no significant difference in emotional intelligence of male and female teachers of secondary schools. Further, it found variation in teaching effectiveness in terms of the school type.

Sadhukhan (2018) studied the teaching effectiveness with the purpose of finding out the teaching effectiveness of secondary school teachers based on gender, locality, subject stream and teaching experiences. The investigator employed a purposive random sampling method and revealed no major differentiation based on gender or subject stream in connection to teaching effectiveness. It also found that the teaching

effectiveness differed on the basis of teaching experience as well as the locality of the school.

Chetia and Joseph (2017) investigated the factors of teacher effectiveness with special emphasis on selected schools in Nagaland, India. The investigation was based on a descriptive survey method. The sample selected through the stratified random sampling technique consisted of a total of 600 teachers. The stratified random sample included 351 urban teachers and 249 rural teachers. To ascertain the various factors, a questionnaire was prepared and distributed to collect data. After which, the data were analysed with the help of a t-test. The results of the investigation revealed that the effectiveness of senior teachers was higher than junior teachers; trained teachers' effectiveness was better than untrained teachers; more experienced teachers was more effective than the less experienced teachers; male teachers was slightly higher than female teachers; and teacher effectiveness of urban teachers was better than rural teachers.

Studies conducted in the International Context

Odit et al. (2023) explored teachers living in Lira District, Uganda. The intention was to find the effects of the existing internal factors of schools on teacher effectiveness. The target was at the secondary level. The investigators used interviews and questionnaires for data collection. The study observed and indicated a strong relationship between the internal factors of schools and teacher effectiveness. Using Pearson's product-moment correlation as an analysis tool, it discovered that the factors of the school were the predictors for their effectiveness.

Aucejo et al. (2022) diagnosed the effectiveness of teachers along with the composition of the classroom to understand the classroom match effects. The effectiveness of teachers and the composition of the classroom, found to have significant similarities regarding the achievement of math between the practice of teaching and the composition of the classroom. It supported the importance of classroom teaching practice and its composition for teacher-related policies. It stated that the match effects are related to several growing literature on teacher values.

Kokkinou and Kyriakides (2022) investigated the differential effectiveness of teacher behaviour in connection to classroom structure by finding the extent to which subject teachers display the same mathematics teaching skills in different classrooms. Multilevel structural equation modelling analysis revealed that prior achievement and

all teacher factors affected student achievement in mathematics subject.

Mastrokoulou et al. (2022) conducted a scoping review on teacher effectiveness for higher education. The study listed literature on teacher effectiveness, identified a teaching effectiveness framework and highlighted various teaching techniques and approaches for teaching effectively. The study showed no general or concrete definition of teaching for higher education. Rather, it is connected to suggested solutions in educational policies. Further, it has shown that learner-centred teaching-learning approaches are more engaging, enriching, performance-enhancing and effective as perceived by students.

Munna and Kalam (2021) conducted a study on the teaching-learning process to build or enhance its effectiveness. The explorers suggested the provision of positive, formative and also, the developmental feedback in effective teaching. They further suggested role-play in the teaching-learning process because of the positive influence on students' self-esteem and confidence. It discussed that an active, conducive learning style or environment enhances inclusiveness in the teaching-learning set-up and also their overall performance.

Simonson et al. (2021) conducted a study on establishing a framework. The framework was to assess the effectiveness of teaching. It studied the complexes of teaching-learning and the challenges of assessing teaching-learning. The study highlighted that teaching effectiveness is not a task that can be assessed easily. It mentioned that the difficulty is because many research tools or scales do not assess adequately or accurately. It said that it generally lacks standards. It stressed the need to develop frameworks and tools to assess facets of effective teaching.

Hu (2020) studied college students' perceptions of effective teaching and used a phenomenological approach to identify factors of effective teaching. The study revealed students' diverse backgrounds and common opinions on teaching effectiveness. Students from diverse disciplines commented on the importance of teachers' characteristics, teacher-student relationships, student engagement and real-world experiences, teaching-learning strategies, and the needs of learners.

Priscilla (2017) studied the teaching effectiveness of the teacher education faculty members at the University of Pangasinan State, Philippines. A questionnaire Checklist was used to gather data. To ascertain the faculty members' level of

teaching effectiveness, it studied whether there was any significant relationship between the faculty and their professional background. Based on the assessment, the relevant findings were disseminated: the teacher education faculty members possessed professional qualifications as well as educational qualifications to teach as faculty members of teacher education. It further disclosed that a few faculty members were graduates and underwent training and conferences at the national and international levels. Regarding the level of teaching effectiveness, it showed satisfactory effectiveness. Another factor that influences them to become effective teachers is the awards received by teachers.

Ogochi (2014) studied about teachers of Transmara, Kenya. It dealt with satisfaction with one's job and the effectiveness of the teacher. This study was based on a cross-sectional design. With the use of the technique of stratified random sampling, 130 respondents were selected from registered public schools. The use of questionnaires has enabled to collect data positively. Accordingly, it was analysed using two kinds of statistics, namely inferential and descriptive. The study found that the majority of them were male, and most of them had professional qualifications in Education. The result also indicated that the status of job satisfaction is very low. Whereas, for teacher effectiveness, it showed that the degree of teacher effectiveness was satisfactory.

Onyekuru and Josephat (2013) conducted a teaching effectiveness study for teachers in Nigeria. The research tool for the survey on teacher effectiveness was a checklist with 29-item of Measurement and Evaluation. Its reliability was determined through the test-retest procedure or method, and the Pearson product-moment correlation technique was 0.88. The data were projected using relevant research tools. Results indicated that the teaching effectiveness of teachers from secondary schools in Emohua Local Government Area was below average, and of the variables investigated, teaching experience and teachers' qualifications had a significant influence on teaching effectiveness of the secondary school teachers, while gender had no significant influence.

2.2.2 Studies related to Professional Commitment

The reviewed related literature on Professional Commitment has been presented below:

Studies conducted in the National Context

Parveen (2025) investigated the professional commitment of government and private secondary school teachers concerning values. One aim was to identify whether there is a difference in the type of school with respect to their professional commitment and values. Another aim was to find whether any relation exists between the professional commitment and the values of teachers. To determine the selected variables, a descriptive survey method was used on a sample of 200 secondary school teachers. The chosen samples comprised equal samples, i.e., 100 government and 100 private teachers from the district of Ludhiana. With the use of several statistical techniques, the received data were critically analysed and findings were drawn. The findings proved no differentiation in the school type. Further, it indicated that the type of institution does not have an influence on their professional commitment. However, a noteworthy distinction between government teachers and private teachers was observed with respect to values. Moreover, teachers teaching in government schools showed better levels. The objective to examine the relation was achieved with a significantly positive correlation between the two study variables.

Talukdar (2024) aimed to survey the relation between the professional commitment of school teachers towards the teaching profession. The aim of the survey was to reveal the professional commitment and the college teachers' continuous development in Assam. It was carried out by using various statistical techniques. The analysed data revealed a significant relationship between both variables concerning the college teachers.

Upadhyaya et al. (2024) compared the relation between job satisfaction and professional commitment among 100 teachers using a descriptive method of study. The samples of the study were taken from 10 senior secondary schools of the Prayagraj district. The professional commitment scale and teachers' job satisfaction scale were used as research tools to compare the relationship among the variables. The comparison between these two exposed the relation of the chosen variables in terms of male as well as female senior secondary school teachers. And also, exposed the relationship among urban as well as rural senior teachers.

Kumar and Shobha (2023) examined the effect of independent variables such as gender and management type on the dependent variable professional commitment. The study on professional commitment was conducted among 100 college teachers in

Himachal Pradesh. It examined the commitment of college teachers with the professional commitment tool prepared by Kaur et. al using random sampling. The study adopted various relevant statistical techniques to analyse the collected data, and it discovered that no variation exists between male and female college teachers as well as the type of management concerning the professional commitment of college teachers in Himachal Pradesh.

Sunitha and Kalaivani (2023) explored the professional commitment of teachers on their work motivation and self-efficacy, which attempts to compare the professional commitment of secondary school teachers and the self-efficacy of secondary school teachers. It attempted to explore the relationship between the various variables towards professional commitment. The study proved significant variations in professional commitment and self-efficacy among secondary teachers for a particular variable like gender but no difference in work motivation and type of management among higher secondary school teachers.

Vanlelfana and Fanai (2023) studied professional commitment in the District Institute of Education and Training (DIET), Aizawl and the District Institute of Education and Training (DIET), Lunglei. The samples were taken from the teacher educators working in these two training institutes. Their research aimed to evaluate their marital status, gender and age. It was carried out to find teacher educators' level of professional commitment. The study, however, discovered no significant difference in the level of professional commitment between the district training institutes of Aizawl and Lunglei.

Begum and Alam (2022) studied the professional commitment of teacher education, intending to research and differentiate their professional commitment. The teacher educators' professional commitment was based on their gender. After collecting the data, it was revealed that the teacher educators' professional commitment was inconsequential to their qualifications and gender. The findings revealed a notable disparity in the level of teacher educators' professional commitment.

Mahajan and Kauts (2022) aimed to understand and study the professional commitment among secondary teachers of Punjab for different types of schools. The study used a random sampling technique. Further, a standardized tool was used to collect data and identify the differences between government and private secondary school teachers. It was found that teachers of private secondary schools were

professionally highly committed in all dimensions compared with government secondary school teachers. The study concluded that private teachers were more committed to the learner, committed to society, committed to their teaching profession, committed to attaining excellence, and committed to basic human values as compared with government secondary school teachers.

Maity (2021) examined the influence of the professional commitment of 400 teacher-educators working in M.Ed./B.Ed. colleges of West Bengal. The research on professional commitment was a study with a particular variable - job values. The study used regression analysis to determine whether professional commitment is a significant predictor of job values among teacher-educators. The findings proved that professional commitment is enormous in predicting job values. The analysed data interpreted a distinct relationship between commitment and job values. It has been rightly predicted that job value significantly interprets the professional commitment of teacher-educators.

Shanthi and Renugadevi (2021) used a normative survey method and explored the professional commitment of primary school teachers. It demonstrated a significant discernible variation between professional commitment when conducted with the experience of teachers belonging to the primary level. The explored study found that teachers' gender and qualification had no bearing on their professional commitment to the teaching job.

Ali (2020) researched on professional commitment of teacher educators in colleges of education in Jammu District (J&K). One of the main aims of this research was to study and understand the professional commitment among teacher educators teaching in the college in Jammu District of the Union Territory of Jammu & Kashmir. The data collected from this research shows that female teacher-educators are better than male teacher-educators teaching in the College of Education of Jammu & Kashmir. The result also revealed that urban teacher-educators are better than those teacher-educators teaching in rural areas. When compared with the other types, it came to light that unmarried teacher-educators and non-net-qualified teacher-educators are better with their teaching than married teacher-educators and net-qualified teacher-educators.

Islam and Das (2018) intend to investigate professional commitment. The commitment of teachers of B.Ed to their professional accountability and

responsibility. Another focus of the investigation is regarding the technique or method. As per the study, no single technique or method should be used for their appraisal. It suggested an integration of students' ratings, administrator and peer ratings, systematic observation and performance tests. It showed that it should be employed for evaluating teacher educators' functioning.

Liegise and Rai (2018) surveyed the attitude of 50 secondary school teachers towards professional commitment using a stratified sampling technique. The study was conducted on several aspects like gender, institution type, years of experience, and professional qualification. The results found most respondents were committed to their profession and their attitudes varied with gender and type of Institution. The professional commitment differed in certain areas such as gender, institution type, and professional qualification. However, teachers with years of experience showed no notable differences in attitude towards professional commitment.

Devi and Attri (2017) explored the teacher educators' professional commitment. The research surveyed several dimensions to prove the commitment of teachers. The dimensions consist of their self-efficacy and work motivation in Himachal Pradesh. The main purpose of the study was to evaluate among teacher educators working in private B.Ed colleges based on two selected variables- self-efficacy and work motivation- as these two factors play a key role in the enhancement of teacher educators' professional commitment. After analysing the data with the help of a t-test, it was revealed that secondary school teachers with high self-efficacy have a higher professional commitment when compared with those school educators who have low self-efficacy.

Jamwal (2017) conducted an investigation to ascertain the commitment of teachers towards their teaching profession. The study's goals were to identify the differences and ascertain whether there exists any relation in professional commitment and teachers. The investigation revealed a strong and positive relation between professional commitment and teachers. Additionally, the investigation showed several differences in terms of a few aspects of commitment of teachers.

Ranju (2017) investigated professional commitment with a specific variable that concerns the same. The investigation was held on teachers as a sample of the study. The chosen samples were school teachers and it was done using a random sampling technique. With the right approach and research design, the investigation found a

significant disparity in their commitment towards their profession. It brought out a noteworthy distinction between male and female teachers in their commitment towards the profession.

Gupta and Jain (2013) evaluated the commitment of teacher-educators. The study underwent a lot of research design, and after adopting the appropriate research method, it analysed the collected data. The findings of the study indicated no discernible differences for locale and gender, but it showed significant variations in the academic qualification of the professional commitment of teacher-educators.

Uysal (2013) investigated the organisational climate and its effect on professional commitment and development. The investigation was for intern workers. As the main purpose was to check the influence of commitment to one's profession, relevant statistical tools were used to reveal the findings of the study. After a long and thorough investigation, the conducted research revealed that there is no connection or relationship between the development of intern-workers' professional commitment and their graduated high school.

Sood and Anand (2010) researched the teacher-educators professional commitment serving in Himachal Pradesh. It included the secondary teacher training institutions to understand the commitment of teacher-educators. The study was targeted to see the professional level of commitment and also other demographic variables that influence teacher-educators' commitment. The major findings of their research showed the level of B.Ed. educators' commitment. It was discovered that the level falls into the category of moderate when it comes to their professional commitment. And also revealed noteworthy distinctions in professional commitment of B.Ed educators concerning marital status, teaching experience, and gender.

Choudhury (2007) studied the awareness of job with another variable, i.e. the satisfaction of job at the level of higher secondary. There was an assumption that there is a link between job satisfaction and professional awareness. To find the relation between the awareness of profession and the satisfaction with the job, an investigation was carried out for the same. The conducted study showed certain findings which proved the assumption wrong. The results indicated that there is no link or relationship between professional awareness and job satisfaction. Other factors like institution type and teachers' educational qualifications do not have any bearing on the correlation between teachers' awareness and satisfaction in teaching.

Joseph (2003) researched the primary school teachers' professional commitment. The research was in connection with the working conditions and selected personal factors. The main objective was to ascertain the relationship of professional commitment with the other liable variables. The major findings found that there is a huge impact of the working conditions of primary school teachers towards their professional commitment. The impact included a positive and significant relation between the working conditions and their professional commitment. Another finding further proved a significant relation between the teachers' qualifications and commitment.

Studies conducted in the International Context

Peng et al. (2024) focused on the professional commitment of teachers to understand how teachers' professional commitment is built and designed within the local context. Data was collected through semi-structured interviews. It was based on the theoretical perspective with motivation, meaning, and perseverance using the positive psychology-informed model to be the three main areas that enable each other to jointly mould teachers' professional commitment. In particular, motivation is a prerequisite situation or a required condition, and perseverance in coping with difficulties or any sort of situation is the ultimate solution to teachers' professional commitment. Further, the professional commitment was examined at the level of culture, society and institution concerning the Chinese language. The study produces theoretical implications for understanding teacher professional commitment and proposes more practical insights for addressing the issue of erosion among Chinese language teachers in Myanmar and similar contexts.

Yazici and Ozan (2024) studied teachers' levels of professional commitment with the purpose of identifying the levels of teachers committed to the profession. It aimed to find the differences in professional commitment according to changeable situations. The results of the study showed insignificant distinctions in variables such as age, marital status, profession seniority, or graduated faculty. However, some of the findings showed significant distinctions in the variables of teaching level and gender. It was identified that female teachers have a greater level of commitment to their profession than male teachers, and primary school teachers have a greater level of commitment to their profession than high school teachers.

Low et al. (2022) studied the future of work in education for teachers' professional

commitment in a challenging world to recognize the features that push teachers' career-long commitment to their profession amid a rapidly changing educational landscape and workplace. The study aimed to provide an exemplar of a teachers' professional commitment and to understand the factors and levels that influence teachers' professional commitment. The study brought out five themes that influence teachers' professional commitment such as positive work relationships, professional dignity, opportunities for growth, workload, and a sense of safety.

Dorji and Wangchuk (2021) investigated professional commitment concerning different dimensions to determine the commitment among secondary school teachers in Bhutan. The investigation aimed to look into professional commitment in five dimensions: commitment to the learner, society, profession, excellence, and human values. The study used a descriptive survey method and found that teachers have a positive and strong commitment to their teaching profession, which shows the need for professional commitment for the growth and development of a person as well as the school in general. All five parameters concerning commitment revealed a high distribution of scores in average commitment. The distribution is negligible in other categories. Hence, the study proved the requirement of all five dimensions in the teaching profession to generate excellent teachers.

Meriç and Erdem (2021) investigated the predictors of professional commitment as an effect or influence of teachers' commitment. The aim was to predict job characteristics towards the teaching profession. The results indicated high levels of perception regarding teachers' professional commitment and their job characteristics. They showed a moderate level and a positive relation between job characteristics and professional commitment. They found commitment to the job and to students. They further indicated that the sub-parameters of job characteristics are substantial influencers or predictors towards professional commitment.

Mahdy et al. (2018) in their research, assessed the contribution of instructional leadership and teacher efficacy to teacher commitment and revealed a significant relationship and implication of instructional leadership and teacher efficacy for teacher attitudes and practises, such as the commitment and retention of teachers. It suggested that heads of educational institutions or the principals of schools should promote healthy beliefs in their teaching profession as it indirectly influences work attitudes, leadership behaviours, learning effectiveness and teacher effectiveness

among teachers. Thus, it was found that teacher commitment is linked with positive principal instructional leadership.

Mwesiga and Okendo (2018) studied teachers' commitment to their profession in secondary schools in the Kagera Region of Tanzania. The main purpose of the research was to determine whether secondary teachers were committed to one's profession. The researchers studied literature of similar content and highlighted the importance of teachers' roles in the teaching-learning process. After observing their teaching professional responsibilities, the report indicated a high level of commitment and stated that teachers' commitment was affected by several factors such as inadequate training or poor training, low salaries, incompetent heads of schools, lack of motivation, inadequate security, compensation, unhealthy working environment and interference of the government in the teaching profession. The study, therefore, recommended the involvement of various stakeholders in school education towards teachers' effective commitment.

Frelin and Fransson (2017) conducted a study on four dimensions that retain or prolong teachers' commitment to students. The four selected dimensions to examine the commitment in their profession were based on a model called the relational and temporal model. Using the components, the study asserted that teachers need to deal with values and morality in their communications with students. The investigators stated in their research that moral dilemmas presented by students to teachers can be more easily tackled when teachers are acquainted with different ways of addressing such problems.

Yildiz and Celik (2017) studied commitment to the teaching profession and stated that commitment is one of the most important characteristics of teaching. Professional commitment is of vital importance and necessary for the profession of teaching as it creates an authentic, effective teaching-learning system as well as the environment. The study discussed that committed teachers are those who are never satisfied with what they already have but are always ready to explore and learn new ideas. Committed teachers have passion and enthusiasm to learn, teach and find ways to contribute to the students. This study proved the effect of commitment on the teaching-learning process and shed light on committed teachers as teachers create a great impact on the teaching methodology in education.

Frankenberg et al. (2010) researched professional commitment. The investigators

felt the urgency to study the professional commitment related to urban teaching and their subsequent career decisions. They assumed that urban teaching and its subsequent career decisions support the teaching profession. So, based on such areas, the study was carried out, and it disclosed that the term committed teachers is often used interchangeably with quality teachers or as a synonym for teachers with dedication.

Bogler and Somech (2004) studied the distinctive influence and relationship of teachers' professional commitment with connection to involvement in decision making and behaviour of students' organisational citizenship. It was inferred that participation in the managerial domain is positively related to both professional and organisational commitment, and also participation in the technical domain was positively connected to the commitment of teachers. The study disclosed no notable distinction of gender variations of teacher educators concerning different dimensions, such as commitment to their learners, commitment to society, commitment to the profession and commitment to the basic human values.

2.2.3 Studies related to Sense of Responsibility

The reviewed related literature on Sense of Responsibility has been presented below:

Studies in the National Context

Kulal et al. (2022) researched the teachers' non-academic responsibilities. The intention was to find its impact on the teaching quality. To fulfil its objectives, a descriptive method of research and various statistical tools were adopted to analyse the perception of teachers regarding the effect of non-academic responsibilities on the quality of teaching. The data obtained from both primary and secondary sources revealed that teachers face difficulty in maintaining a balance between the responsibilities of personal and professional. It stated that additional responsibilities do not give any personal as well as professional recognition in the teaching career. Rather, it causes occupational burnout and stress-related health issues among teachers. The discussion, as per the results, showed the need for educational institutions as well as regulatory bodies to collaboratively provide educational policies, strategies, and measures to maintain a balance between the responsibilities of academic as well as non-academic nature towards the improvement of their quality.

Bhowmik et al. (2021) explored the secondary and college teachers' responsibility to understand several factors of the learning process and its success. The exploration constituted of both pre-service and in-service teachers as the sample of the study. To ascertain the key factors towards successful teaching, a sample of college teachers was taken as a target group. The collected data were analysed with the help of quantitative and qualitative approaches. Based on the different dimensions related to the teaching profession, it was found that the level of sense of responsibility among teachers is high. The results showed disparity regarding various moderate variables such as locality, gender, in-service and prospective teachers.

Vidushy and Kishor (2020) examined the sense of responsibility among in-service secondary school teachers with certain variables liable for it. The study aimed to find the relationship and the differences between a sense of responsibility and attitude towards teaching, sense of responsibility and type of institution, and sense of responsibility and teaching experience. The examination showed a strong connection amongst sense of responsibility and attitude towards teaching. It revealed that the sense of responsibility differs significantly concerning teaching experience and also differences in the type of institution, and in-service, private and government school teachers.

Sherpa and Bachhar (2018) focused on teachers' changing roles and responsibilities in the 21st century. The study discussed the roles and diverse responsibilities of teachers to meet the needs of learners, parents and society in the present era. It emphasised the requirement for more preparation and training of teachers to deliver their new roles to teach students efficiently. The study revealed that with the passage of time and various educational reforms, there is a strong need for teachers to possess pedagogical knowledge, skills, methodology of teaching subjects, child psychology, and the incorporation of ICT to achieve the aims of modern education.

Studies conducted in the International Context

Alyousef and Khalaf (2023) conducted a study on the sense of responsibility of science teachers towards students' learning intending to identify the sense of responsibility of science teachers towards the learning of students from teachers' perspective and to demonstrate the difference in the level of responsibility among teachers based on their gender, rank and their qualification. The study showed that

there were no statistical differences in the sense of responsibility among teachers based on their gender and rank. The study also, however, revealed that the sense of responsibility of the teacher with an educational qualification as compared with those without such qualification is higher and greater.

Habibi and Ganjali (2021) stated that responsibility is one concern of teachers involved in the process of teaching-learning. Therefore, the researchers studied the relation between teachers' sense of professional identity and their responsibility. To achieve the goals of the research, two different set of questionnaires which were valid and reliable were used to a group of 100 Iranian teachers. Hence, regression analysis was applied as a study instrument to analyse the response gathered from the selected respondents. The analysed result showed that the relation between responsibility and identity of teachers. Among the relation between this two, it was found that motivation and responsibility were indicators of teachers' professional identity and responsibility.

Berger and Girardet (2020) aimed to identify the relationship between the motivation to become a teacher, the sense of responsibility and the classroom management style of vocational teachers. The study brought out that the social utility value of teaching was one of the most consistent predictors of teachers' sense of responsibility. The intrinsic value was the key motivation that predicted teachers' endorsement of classroom management styles. It further stated that when vocational teachers felt more responsible for the teaching quality, they were inclined to recommend adaptive or beneficial classroom management styles.

Helker et al. (2018) studied university teachers' sense of responsibility for teaching with the purpose of exploring the sense of responsibility of university teachers for teaching at several hierarchical stages of teaching careers and in different academic situations to bring out qualitative and quantitative results. Based on the analysis of quantitative data, it indicated that all the teachers teaching at the university level feel a strong sense of responsibility in their teaching duties and in maintaining good relationships with all students. Also, the qualitative data analysis revealed the focus of the university teachers' sense of responsibility in their teaching careers.

Lu Tuanhua (2018) investigated college teachers' sense of responsibility concerning teaching responsibility. The investigation was mainly for teachers teaching English and was based on a certain model introduced by Schlenker. The model is called the

Triangle Model of Responsibility. Based on the chosen model, it was found that their sense of responsibility in teaching is determined by different factors. It identified three factors, namely, acknowledgement of identity, regulations and activities. The chosen model showed many areas for more extended studies regarding the sense of responsibility of college teachers. Overall, it has helped to explore the need for motivation among teachers to be responsible.

Saglam (2018) examined the primary students' sense of responsibility in terms of satisfaction and attachment in the school. The research consisted of a group of 844 students falling into the category of fourth grade. The chosen primary students included both boys and girls, i.e., 417 girls and 427 boys of Sakarya. With the help of the relational screening model, a quantitative research method, the data were collected using several strategies Responsibility Scale, . As per the responses from the chosen students, the research depicted a positive as well as a significant connection between the primary level students' responsibility levels and their satisfaction and attachment with their school. However, it revealed that the students' responsibilities differ according to perceptions and regulations of responsibilities.

Matteucci et al. (2017) aimed to study contextual and person-specific aspects of teachers' sense of responsibility and their associated approaches to educational outcomes and teachers' professional well-being. The perception of teachers towards the school's social climate, self-efficacy and beliefs of intelligence occurred as positive significant predictors of teachers' sense of responsibility. The study revealed that both the school's social climate and self-efficacy contribute a lot towards teachers' sense of responsibility. Further, it revealed a positive implication for various instructional methods or associated approaches and the well-being of teachers.

Gunduz (2016) studied the teaching responsibilities of a teacher with the aim of identifying the various kinds of learning responsibilities that have been formed in students when a teacher is aware of his or her responsibilities in the teaching profession. It examined how a person in the teaching position can affect a person in a learning position when he/she feels the responsibility of being able to teach himself/herself. The study used a mixed-method research design and revealed that learners need to trust their teachers in the teaching-learning process as well as in other educational activities. The discussion of the study proved that learners' trust in

the teacher improves the sense of responsibility for learning.

Frumos (2015) investigated the effects of self-efficacy and the responsibilities of teachers. It was targeted to check the effects of self-efficacy and responsibilities on the learning outcomes of students. The targeted group consisted of 60 teachers who teach the chemistry subject. The investigator adopted the Teachers' Responsibility for Student Achievement Scale. The participants included both male and female chemistry teachers. As per the collected information through the research scales, the findings were discussed, highlighting a positive relationship between the chosen variables, i.e., teacher efficacy, teacher responsibility towards student academic achievement. Further, self-efficacy and its predictive role on the teachers' responsibilities towards good outcomes of students were shown significantly.

Aliakbari and Kafshgar (2013) studied the bonding of Iranian high school teachers' sense of responsibility and satisfaction with their job among teachers. The research proved that a strong bond exists between the two major variables. It also found that because of several differences among individual, social, emotional and cultural aspects between male and female teachers, differences occur between the two groups. Teachers' sense of responsibility differed notably regarding school location, educational status, age, and graduation years. The findings unconcealed the differences in sense of responsibility aspects to average student number and graduation years, where 6-10 years of graduation possess higher responsibility for student achievement. However, teachers didn't differ significantly in their sense of responsibility about school type, school location, marital status, and educational level.

Lauermann and Karabenick (2013) discussed the meaning and assessed the measures of teachers' sense of responsibility for learning and educational outcomes of students. It identified four distinct dimensions of teacher responsibility, including responsibility for student achievement, student motivation, having positive relationships with students and the quality of their teaching. The research developed a Teacher Responsibility Scale to evaluate responsibility for students' motivation, achievement, relationship with students and relationship with teaching. It showed variation between teachers' responsibility and self-efficacy. And mentioned that teachers' responsibility is conceptually and empirically distinct from self-efficacy by the kind of educational outcome.

2.3 Summary of Review of Literature

For the present study, the researcher reviewed 76 works of literature related to Teaching Effectiveness, Professional Commitment and Sense of Responsibility. The various reviews have shown similar findings on the same variables and variations among them.

Reviews done on teaching effectiveness have shown variations among different variables. Studies on teaching effectiveness by Sumer and Syiem (2021) revealed that male and female teachers varied significantly. However, Kumar et al (2024), Shobha (2022), Paschal and Srivastava (2021), Bawa and Varma (2020), and Sadhukhan (2018) surveyed the same variable and disclosed insignificant differences.

Similar studies were conducted by Lalchhuanawma et al. (2020) and Kumar (2019) with the help of selecting age as the variable. The findings disclosed no link between age and teaching effectiveness. Age did not differ in any way in their effectiveness.

Raju and Vijaya (2022) and Sadhukhan (2018) studied teaching experience to determine the differences in teaching effectiveness and found that it differed significantly. Whereas, Paschal and Srivastava (2021) and Kumar (2019) stated that no variation exists in terms of teaching experience.

Researchers like Raju and Vijaya (2022), Sumer and Syiem (2021), and Sadhukhan (2018) revealed substantial variations in the effectiveness of rural and urban teachers. Kumar (2019) discussed that urban educators' effectiveness is greater than rural educators.

Kumar et al (2024) showed notable distinctions between government and private teachers, where government teachers were better than private teachers in their effectiveness. On the contrary, Kumar (2019) disclosed that private teachers possess higher effectiveness as distinguished from government teachers. Sumer and Syiem (2021) indicated that government and private teachers differ significantly in their effectiveness. On the other hand, Raju and Vijaya (2022) and Shobha (2022) reported no significant differences in the type of school in the effectiveness of teachers and their teaching.

Researchers like Upadhyaya et al. (2024), Sunitha and Kalaivani (2023), Liegise and Rai (2018), Ranju (2017), and Sood and Anand (2010) proved significant

variations in professional commitment between male and female teachers at the secondary level. Yazici and Ozan (2024) identified that female teachers have a greater commitment to their profession than male teachers. On the other hand, Kumar and Shobha (2023), Begum and Alam (2022), Shanthi and Renugadevi (2021), and Gupta and Jain (2013) indicated no discernible differences.

Shanthi and Renugadevi (2021) and Sood and Anand (2010) demonstrated a significant discernible variation between professional commitment with the experience of teachers. However, Legise and Rai (2018) stated that teaching experience showed no notable differences in attitude towards professional commitment.

Upadhyaya et al. (2024) exposed the relationship in professional commitment with respect to urban and rural senior secondary teachers. Ali (2020) discovered that urban educators were better than educators in rural areas. Whereas Gupta and Jain (2013) assessed the teacher-educators' professional commitment and indicated no discernible differences for locality.

Liegise and Rai (2018) and Choudhury (2007) disclosed that professional commitment differed in institution type. Mahajan and Kauts (2022) stated that teachers of private schools were professionally highly committed as compared with government schools. Whereas Kumar and Shobha (2023), Sunitha and Kalaivani (2023) showed no variation in the type of management concerning the professional commitment of teachers.

Related literature showed the need for teachers to possess an obligation or responsibility in the teaching profession. Bhowmik et al. (2021) found a high level of sense of responsibility among teachers and showed disparities in the teachers' sense of responsibility for in-service and prospective teachers. Aliakbari and Kafshgar (2013) unconcealed several differences among individual, social, emotional and cultural aspects regarding gender, school location, educational status, age, and graduation years. However, Alyousef and Khalaf (2023) and Bhowmik et al. (2021) showed no statistical differences in sense of responsibility based on gender and locality.

Aliakbari and Kafshgar (2013) stated that teachers' sense of responsibility is not defined by the school location. Vidushy and Kishor (2020) found noteworthy

distinctions according to the types of institutions and experience of teachers. However, Aliakbari and Kafshgar (2013) stated that their responsibilities didn't differ as per their marital status and educational level.

Kulal et al. (2022) showed an urgency to maintain a balance between the non-academic and academic responsibilities of teachers. Sherpa and Bachhar (2018) discussed the roles and diverse responsibilities of teachers to meet the needs of learners, parents and society in the present era. Gunduz (2016) discussion highlighted that learners' trust improves the sense of responsibility of teachers.

2.4 Research Gap

The review of related literature on teaching effectiveness, professional commitment, and sense of responsibility enabled the researcher to develop an extensive perspective on the interaction of the variables in this study. The related literature showed that studies on teaching effectiveness were conducted concerning teaching competency, self-efficacy, and locus of control. It showed differentiation among variables for teaching effectiveness. However, no attempt has been made to examine the relationship between teaching effectiveness and professional commitment or teaching effectiveness and sense of responsibility.

Based on the review of related literature, the researcher identified research gaps and found that the present study varies from other studies in numerous ways. No study comprising teaching effectiveness, professional commitment and sense of responsibility was jointly conducted on teachers. Moreover, it came to light that minimal effort has been made on demographic variables like gender, age, locality, type of management, and teaching experience to study teaching effectiveness, professional commitment and sense of responsibility.

Although studies have been conducted on the teaching effectiveness of teachers, it was found that most of them were carried on primary and secondary teachers. Only a few studies were undertaken on college teachers or teacher-educators. Likewise, studies on professional commitment in higher education is a less explored research area. Hence, the gap regarding the investigation of teaching effectiveness as well as professional commitment in higher education is genuine for the promotion of holistic education in the country.

An important determinant of teaching is teachers' possessing a great sense of responsibility. However, review has revealed that it has been ignored or gone unnoticed by many researchers and has not been studied much in the educational context. Although there exist studies concerning the responsibilities of teachers in the international context, the investigator found very less studies on teachers' sense of responsibility in the national and local context. The research gap between the international and national contexts made the investigator understand the need and significance of researching teachers' sense of responsibility in higher education.

Further, no work has been undertaken on the selected variables for teachers working in higher education in Nagaland. Therefore, the various research gaps made the researcher identify the need and scope to conduct a study on the selected variables, i.e., teaching effectiveness, professional commitment and sense of responsibility.

The review of relevant literature proves that the present study is not exactly equivalent to other studies. Hence, the present study is a relatively new and relevant study in the context of Nagaland.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Introduction

The core of every research is its methodology. The research methodology is a comprehensive blueprint of the systematic process of employing research tools to find an answer to a problem. It involves a systematic and relevant planning, selecting the method, sampling the universe, organizing, gathering data with suitable tools, and assessing the collected data for analysis and interpretation, considering the purpose of the research (Reddy et al., 2016). The purpose of any research design is to give an overview of the various methods, techniques and tools used to carry out research work, boost its efficiency, and produce optimal results.

This chapter provides a detailed overview of the research processes, including the population, sample and sampling technique, validity and reliability, standardisation of the scale, tool administration, and statistical technique used to conduct the present study of the problem.

3.2 Research Method

Descriptive research studies often result in the formulation of important principles of knowledge and solution of significant problems concerning local, state and international issues. It is more than just a collection of data; it involves measurement, classification, analysis, comparison, and interpretation. They provide information concerning variables of conditions in a situation, identify standards of norms to compare the present conditions and achieve goals by exploring possible ways and means based on the experiences of others or the opinions of experts (Koul, 2020).

The present study is concerned with the present phenomena in terms of conditions. It collected data from a relatively large number of subjects and is concerned with the characteristics of the whole population or sample. Therefore, the descriptive survey method is considered an appropriate method to achieve the study's goals. Hence, the researcher used the descriptive survey method for the study.

3.3 Population of the Study

Population is the aggregate or totality of individuals with one or more common characteristics that are of need and interest to the investigator (Koul, 2020). For any research, a population represents a specific group of people, objects, items, organisations, institutions, or any elements of analysis. Therefore, it is essential to understand and define the totality of any research so that it guides the investigator to identify the population to select appropriate representatives as samples.

Here, all the higher education teachers teaching in colleges affiliated with Nagaland University are the population of the study. The number of Nagaland University-affiliated colleges is given in Table 3.1.

Table 3.1

Number of Nagaland University-affiliated Colleges

Sl. No	Type of Colleges	No. of Nagaland University-affiliated colleges
1.	Government	16
2.	Private	54
Total		70

Source: CDC, NU: *Status of Colleges affiliated with Nagaland University*, (December, 2022).

3.4 Sample of the Study

A sample is a portion of the population that is chosen for observation, examination and analysis. To investigate a situation or a problem, it is essential to select samples using different techniques. The purpose of selecting a sample is to draw inferences about specific characteristics to represent the concerned population (Best et. al., 2020).

Therefore, the investigator used simple random sampling techniques to ensure that every characteristic or item of the population is represented properly with a fair or equal chance.

a) Selection of Colleges/ Samples

At present, thirteen (13) recognised districts of Nagaland have colleges affiliated

with Nagaland University. Out of which, there are seventy (70) Nagaland University-affiliated colleges as presented in Table 3.2.

Table 3.2

District-wise Number of Nagaland University-affiliated Colleges

Sl.No	District	Total
1	Dimapur	21
2	Chumoukedima	07
3	Kohima	22
4	Mokokchung	06
5	Tuensang	02
6	Wokha	02
7	Mon	02
8	Peren	02
9	Phek	02
10	Kiphire	01
11	Longleng	01
12	Zunheboto	01
13	Shamator	01
	Total	70

Source: CDC, NU: *Status of Colleges affiliated with Nagaland University (December, 2022)*

Based on the data provided by the College Development Council, N.U., 2022, the investigator selected the colleges using a simple random sampling technique (lottery method) from three (3) districts (approximately 20% of the total districts) The selected districts were Kohima, Dimapur and Chumoukedima, which fall in the category of districts with the highest number of Nagaland University-affiliated colleges (CDU, NU, 2022). The number of colleges in the selected districts: Kohima- 22, Dimapur- 21, and Chumoukedima -07, is approximately 70% of the total colleges.

Hence, the investigator prepared a list containing the names of colleges for selection. Based on the selected colleges, a sample of three hundred (300) teachers teaching in Nagaland University-affiliated colleges was selected using a simple random

sampling technique by lottery method. The details of the selected colleges and number of samples is presented in Table 3.3.

Table 3.3

Details of the Selected Colleges and Number of Samples

Sl.No	Name of the Colleges	District	No. of Samples
1	St. Joseph College, Jakhama	Kohima	40
2	Sazolie College, Jotsoma	Kohima	15
3	Kohima Science College, Jotsoma	Kohima	22
4	Don Bosco College, Kohima	Kohima	19
5	Oriental College, Kohima	Kohima	17
6	Kohima College, Kohima	Kohima	21
7	Modern College, Piphema	Chumoukedima	14
8	Patkai Christian College, Seithekema	Chumoukedima	54
9	St. Joseph University, Chumoukedima	Chumoukedima	08
10	M.G.M College, Dimapur	Dimapur	15
11	Dimapur Government College, Dimapur	Dimapur	10
12	Livingstone Foundation International, Dimapur	Dimapur	12
13	Unity College, Dimapur	Dimapur	45
14	Immanuel College, Dimapur	Dimapur	08
		Total	300

Accordingly, the sample distribution is presented in the following Table 3.

Table 3.4

Details of Sample distribution

Sl.No.	Variable	Groups	Sample Size	Total
1	Gender	Male	138	300
		Female	162	
2	Age	Below 30 years	84	300
		31-40 years	148	

		Above 41 years	68	
3	Teaching Experience	Below 5 years	138	300
		6-10 years	71	
		11-20 years	67	
		Above 21 years	24	
4	Locality	Urban	90	300
		Rural	210	
5	Type of Management	Government	92	300
		Private	208	
6	Academic Stream	Arts	168	300
		Science	132	

3.5 Tools of the Study

The investigator has employed three (3) research tools, namely i) Teaching Effectiveness Scale for Higher Education Teachers, ii) Professional Commitment Scale for Higher Teachers, and iii) Teacher's Sense of Responsibility Scale, to gather pertinent data necessary to achieve the specified objectives and hypothesis of the study. The research tools used for the study are presented below.

Table 3.5

Research Tools as per Variables of the Study

Variables	Tools Used	Remarks
Teaching Effectiveness	Teaching Effectiveness Scale for Higher Education Teachers (TESHET)	Constructed by the researcher
Professional Commitment	Professional Commitment Scale for Higher Education Teachers (PCSHET)	Constructed by the researcher
Sense of Responsibility	Teachers' Sense of Responsibility Scale (TSRS)	Developed by Vimal Vidhushy and Nand Kishor (2020).

3.6 Description of Teaching Effectiveness Scale for Higher Education Teachers (TESHET)

Teaching Effectiveness is the dependent variable of the study. So, the researcher examined various studies on Teaching Effectiveness so that the areas worth including in the tool should be developed. Understanding the need for the tool to be objective, comprehensive, valid, reliable, and feasible for the present study, a thorough review of available tools and related literature was done. And five (5) dimensions have been prepared for the Teaching Effectiveness Scale for Higher Education Teachers. Although there are studies conducted on Teaching Effectiveness, it is found that most of the tools were administered to school teachers.

Hence, the researcher has attempted to construct a tool on Teaching Effectiveness to assess the Teaching Effectiveness of Higher Education Teachers. The Teaching Effectiveness Scale for Higher Education Teachers (TESHET) is constructed based on five (5) dimensions i.e., (i) Academic and Professional Knowledge, (ii) Preparation and Presentation, (iii) Classroom Management, (iv) Interpersonal Relationship, (v) Personal Characteristics. The Teaching Effectiveness Scale for Higher Education Teachers (TESHET) comprised thirty- three (33) items and was constructed with a five (5) point rating scale such as (i). Strongly Agree, (ii). Agree, (iii). Neutral, (iv). Disagree and (v). Strongly Disagree.

3.6.1 Dimensions of the Scale (TESHET)

The dimensions of the Teaching Effectiveness Scale for Higher Education Teachers (TESHET) are given below:

(i). Academic and Professional Knowledge: This area includes the acquisition and transmission of information and knowledge related to academic subject matter, professional knowledge and the teaching profession.

(ii). Preparation and Presentation: This area includes statements pertaining to the ability of the teacher's preparation and execution of the lessons in accordance with the objectives of the course, and use of the available teaching-learning resources for effective teaching.

(iii). Classroom Management: This area includes statements regarding the teacher's

ability to manage the classroom successfully by employing different techniques and strategies in the teaching-learning process.

(iii). Interpersonal Relationship: This area includes statements pertaining to the ability of the teacher to adapt himself/herself to maintain and have a balanced healthy relationship with his/ her students, parents, colleagues, and the head of the institution.

(v). Teacher Characteristics: This area includes statements on Teacher characteristics. A teacher's characteristics influence the students learning and growth in the field of education. This area consists of statements concerning the ability of the teacher's characteristics which are considered important criteria for the teacher's personality.

3.6.2 Construction of the Scale (TESHET)

The researcher prepared a pool of items for the Teaching Effectiveness Scale for Higher Education Teachers (TESHET). Under the guidance of the supervisor, the investigator referred to relevant research tools and literature, considering the requirements and objectives of tool construction. Accordingly, a preliminary draft of sixty-five (65) items comprising positive and negative items was prepared for content validation. With the help of different experts in the field of higher education, a draft of forty-five (45) items was obtained based on the experts' opinions and ratings. Further, the researcher conducted a pilot study on a sample of eighty (80) teachers teaching in colleges under Higher Education, Nagaland, where a draft of forty-five (45) items was administered. The collected responses of the subjects were scored for item analysis, computing t-values for each item. The item were carefully analysed, and the final draft containing thirty-three (33) items was administered to the sample of the study. The dimension-wise items of the final draft is presented in Table 3.6

Table 3.6

Dimension-wise distribution of 33 items in the final draft of TESHET

Sl. No	Dimension	Items	No. of Items	Sub-Total	Total
1	Academic and Professional Knowledge	Positive	1,2,3,4,6,11	6	7
		Negative	15	1	
2	Preparation and Presentation	Positive	8,9,10,12,24,29	6	7

		Negative	7	1	
3	Classroom Management	Positive	17,22,23,26,27,30	6	8
		Negative	25,28	2	
4	Interpersonal Relationship	Positive	5,14,33	3	4
		Negative	16	1	
5	Personal Characteristics	Positive	13,18,21,31,32	5	7
		Negative	19,20	2	
Total		Positive- 26	Negative-7	33	

3.6. 3 Validity of the Scale (TESHET)

(i). Content Validity- Content validity of the scale was done based on expert opinion and rating of the items by ten (10) experts from different colleges and universities of Nagaland and outside Nagaland state. The items of the scale were categorized under two (2) heads such as 'Relevance' and 'Clarity'. The experts rated each item on a four (4) point rating scale. The experts' rating was given on the degree of 'Relevance' i.e., 'Not so Relevant', 'Somewhat Relevant', 'Quite Relevant' and 'Highly Relevant'. And on the degree on 'Clarity' i.e., 'Not Clear', 'Item need some revision', 'Clear but need improvement' and 'Very Clear'. The items which were rated 1 and 2 for 'Relevance' and 'Clarity' were dropped from the preliminary draft of the Scale. In accordance with the rating of the experts, twenty (20) items were rejected from the initial framework of the tool, consisting of sixty-five (65) items.

The items of the scale are fully adequate and relevant to assess the Teaching Effectiveness of higher education teachers, as it has been substantially supported by the literature. Further, the suggestions offered by various experts were considered for developing items of the scale. Thus, the scale possessed satisfactory content validity.

(ii). Item Validity- The responses of all items were computed with an independent sample t-test to check if an item discriminates between the upper and lower group. The retained items were significantly able to discriminate between two extreme groups, i.e. highly discriminating items having a t-value of 1.96 and above ($P < 0.05$). Table 3.7 reveals that twelve (12) items were rejected, and thirty-three (33) items were retained for the final draft of the Teaching Effectiveness Scale for Higher Education Teachers (TESHET). Hence, the items on the scale are valid for higher

education teachers, as the contained items in the final draft of the scale were selected based on a p-value at the 0.05 level of significance.

Table 3.7

One-sample t-test of Teaching Effectiveness Scale for Higher Education Teachers

Item	t-value	p-value	Remark	Item	t-value	p-value	Remark
1	3.365	P<0.05	Accepted	25	2.239	P<0.05	Accepted
2	6.495	P<0.05	Accepted	26	0.574	P>0.05	Rejected
3	3.498	P<0.05	Accepted	27	4.482	P<0.05	Accepted
4	3.106	P<0.05	Accepted	28	7.245	P<0.05	Accepted
5	4.016	P<0.05	Accepted	29	0.246	P>0.05	Rejected
6	4.329	P<0.05	Accepted	30	8.456	P<0.05	Accepted
7	5.603	P<0.05	Accepted	31	3.498	P<0.05	Accepted
8	3.900	P<0.05	Accepted	32	4.918	P<0.05	Accepted
9	4.589	P<0.05	Accepted	33	6.183	P<0.05	Accepted
10	8.293	P<0.05	Accepted	34	6.772	P<0.05	Accepted
11	4.824	P<0.05	Accepted	35	1.073	P>0.05	Rejected
12	5.648	P<0.05	Accepted	36	0.557	P>0.05	Rejected
13	2.387	P<0.05	Accepted	37	4.820	P<0.05	Accepted
14	4.209	P<0.05	Accepted	38	4.801	P<0.05	Accepted
15	1.890	P>0.05	Rejected	39	5.782	P<0.05	Accepted
16	0.415	P>0.05	Rejected	40	1.595	P>0.05	Rejected
17	0.139	P>0.05	Rejected	41	6.119	P<0.05	Accepted
18	4.543	P<0.05	Accepted	42	8.171	P<0.05	Accepted
19	0.727	P>0.05	Rejected	43	0.976	P>0.05	Rejected
20	7.906	P<0.05	Accepted	44	0.000	P>0.05	Rejected

21	5.237	P<0.05	Accepted	45	1.105	P>0.05	Rejected
22	2.891	P<0.05	Accepted				
23	2.975	P<0.05	Accepted				
24	4.561	P<0.05	Accepted				

(iii). Face Validity- The face validity of the scale was established by examining the reactions of teachers with regard to the relevance of various items in the scale. Their positive reactions and words of encouragement were indicators of the face validity of the scale.

3.6.4 Reliability of the Scale (TESHET)

(i). Split-half Reliability- The reliability of the scale was computed by using the split-half reliability method. For obtaining split-half reliability, the scale was administered to a sample of eighty (80) higher education teachers. The Spearman-Brown Coefficient is .911, and the Guttman Split-half Coefficient is .909 as presented in Table 3.8. It indicates that the scale is reliable to measure the Teaching Effectiveness of higher education teachers.

Table 3.8

Reliability Statistics of TESHET

Cronbach's Alpha	Part 1	Value	.912
		N of Items	17a
	Part 2	Value	.921
		N of Items	16b
		Total No of Items	33
Correlation between forms			.837
Spearman-Brown Coefficient		Equal Length	.911
		Unequal Length	.911
Guttman Split-Half Coefficient			.769

(ii) Internal Consistency—The internal consistency of the scale was done using Cronbach alpha through the SPSS 24.0 version. The internal consistency was computed with the coefficient of correlation between scores on each of the five (5) dimensions of the scale as well as the total score of eighty (80) teachers on the Teaching Effectiveness Scale. The coefficient of correlation of the total score is .95. Hence, the reliability of the scale can be considered as high. The correlation matrix showing internal consistency among five (5) different dimensions of the Teaching Effectiveness Scale is provided in Table 3.9.

Table 3.9

Internal reliability coefficients (Cronbach's alpha) of the scale and its sub-dimensions (N=80)

Sl.No	Dimension	'r' value
1	Academic and Professional Knowledge	.80
2	Preparation and Presentation	.85
3	Classroom Management	.86
4	Interpersonal relationship	.80
5	Teacher characteristics	.82
	Total	.95

3.6.5 Scoring Pattern of the Scale (TESHET)

The Teaching Effectiveness Scale for Higher Education Teachers (TESHET) is a five (5) point rating scale. It is Likert's method of summation to get a 5-point response on each item. The scoring system is presented in Table 3.10.

Table 3.10

Scoring Pattern of TESHET

Sl. No	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	5	4	3	2	1

The above table shows the scoring system of the Teaching Effectiveness Scale. Each item on the scale was rated on five consecutive points such as Strongly Agree-5, Agree-4, Neutral-3 Disagree-2 and Strongly Disagree-1.

3.6.6 Norms of Interpretation of the Level of Teaching Effectiveness

To interpret the level of Teaching Effectiveness, the researcher prepared the Z-score norms for interpretation. The norms of interpretation of the level of Teaching Effectiveness are presented in the tables below:

Table 3.11

Z-score Norms for Teaching Effectiveness

Mean:171.44 SD: 9.72 N: 80 Range of Scores: 40-200

Raw Score	Z-score	Raw Score	Z-score	Raw Score	Z-score
144	-2.2	170	-.14	188	1.70
154	-1.79	171	-.04	189	1.80
155	-1.69	172	.05		
157	-1.48	173	.16		
158	-1.38	175	.36		
159	-1.27	176	.46		
160	-1.17	177	.57		
161	-1.07	178	.67		
163	-.86	179	.77		
164	-.76	180	.87		
165	-.66	181	.98		
167	-.45	182	1.08		
168	-.35	183	1.18		
169	-.25	184	1.29		

Table 3.12*Norms for Interpretation of the Level of Teaching Effectiveness*

Sl.No	Range of Raw Score	Range of z-Score	Grade	Level of Teaching Effectiveness
1	176 above	+2.01 & above	A	Extremely High
2	159-175	+1.26 to +2.00	B	High
3	143-159	+0.51 to +1.25	C	Above Average
4	121-143	-0.50 to 0.50	D	Average
5	105-121	-1.25 to -0.51	E	Below Average
6	89-105	-2.00 to -1.26	F	Low
7	88 below	-2.01 & below	G	Extremely Low

3.7 Description of Professional Commitment Scale for Higher Education Teachers (PCSHET)

Professional Commitment is an independent variable of the study. So, after gaining an understanding of the concept of Professional Commitment and a deep review of the available tools from related literature, five (5) dimensions have been prepared to examine Professional Commitment in Higher Education Teachers. The tool consists of five (5) dimensions and covers fifty- seven (57) items. For assessing the Professional Commitment of Higher Education Teachers, the scale constructed in the present study more or less corresponded to the one developed by Vishal Sood (2011). The National Council of Teacher Education (NCTE) has identified five (5) major dimensions of the professional commitment of teachers. So based on the major dimensions (NCTE, 1998), the Professional Commitment Scale for Higher Education Teachers (PCSHET) is divided into five dimensions namely (i). Commitment to the Learner (ii) Commitment to the Society (iii) Commitment to the Profession (iv) Commitment to Achieve Excellence for Professional Actions (v) Commitment to Basic Values.

The Professional Commitment Scale for Higher Education Teachers (PCSHET) with fifty- seven (57) items was constructed with five (5) point ratings namely (i). Always, (ii). Frequently, (iii). Sometimes, (iv). Rarely and (v). Never.

3.7.1 Dimensions of the Scale (PCSHET)

The Professional Commitment Scale for Higher Education Teachers (PCSHET)

divided into five (5) dimensions, are enumerated below:

(i). Commitment to the Learner: It is about the educators' genuine love and affection for student-teachers, being committed to one's profession, development, concern for empowering one another and care for one's life quality. It includes self-analysis of teachers' behaviour and their individual experiences to understand their reactions and modify their behaviour accordingly.

(ii). Commitment to the Society: It is about the educators' serving the society consciously, responsibly, faithfully and with full commitment. This relates to having equity, contributing constructively and meaningfully to the full society's development with the help of social activities and other extended activities.

Teachers teaching at the higher education level are considered responsible towards society's growth and development. This dimension relates to developing equity among students of poor and illiterate parents, willingness to take initiative to advise the parents for the enrichment of their child, community mobilisation, involvement in activities related to the eradication of social evils, developing close coordination and relation among educational institutions and society.

(iii). Commitment to the Profession: It is about dedicating oneself to one's work or profession. It means extending our support to our profession and also cooperatively following other educators, extending reverence to fellow faculty and even student-teachers. This dimension involves the essential components of feeling pride in one's teaching profession.

(iv). Commitment to Achieve Excellence for Professional Actions: This refers to teacher educators' quest for knowledge and excellence and achieving the best through their performance as teacher educators in terms of acquisition and transmission of knowledge and skills through their words and actions.

It also includes teachers' involvement in various professional developmental activities, research activities and establishing contacts with teachers to know the realities of the field to overcome their shortcomings to become better teachers

(v). Commitment to Basic Values: It refers to certain common values, viz., honesty, cooperation, love, truth, objectivity, regularity, rationality, dignity of hard work, etc., by teacher educators for being a role model for their student-teachers. The observance of these values may be carried through different training activities, dealings with colleagues and students in the institution, respect for norms and

guidelines framed by statutory bodies and institutions and other personal behaviours or actions of teachers.

3.7.2 Construction of the Scale (PCSHET)

For the construction of the “Professional Commitment Scale for Higher Education Teachers (PCSHET)”, the researcher initially created an item pool with the help of different related research studies and literature under the supervisor’s guidance. A preliminary draft of seventy-five (75) items was prepared, and the drafted tool was given to ten (10) experts to critically judge and evaluate the content accuracy, relevance and coverage of the items. Based on the experts' responses and analysis, five (5) items were deleted, and certain items were modified and revised as per the comments and suggestions offered by the experts. Thus, seventy (70) items containing both positive and negative items were retained after content validation. Further, the draft was given to eighty (80) respondents. The raw scores received from the respondents were calculated for item analysis by computing t-values for each item. From the computed values, thirteen (13) items were rejected, and fifty-seven (57) items were retained. Thus, the Professional Commitment Scale for Higher Education Teachers (PCSHET) was considered final with fifty-seven (57) items.

The dimension-wise distribution of items is given in Table 3.13.

Table 3.13

Dimension-wise distribution of 57 items in the final draft of PCSHET

Sl. No	Dimensions	Items	No. of Items	Sub-Total	Total
1	Commitment to the Learner	Positive	1,2,3,4,11,21,29,37,40,48,51,56	12	12
		Negative	Nil	0	
2	Commitment to the Society	Positive	7,12,25,27,33,36,42,43,49,50,52	11	11
		Negative	Nil	0	
3	Commitment to the Profession	Positive	16,17,20,23,28,32,34,	7	9
		Negative	6,46	2	
4	Commitment to Achieve Excellence for Professional	Positive	5,10,13,15,18,19,22,30,31,41,45,47,55,57	14	14

	Actions	Negative	Nil	0	
5	Commitment to Basic Values	Positive	8,9,14,24,26,35,38,39,44,53,54	11	11
		Negative	Nil	0	
Total					57

3.7.3 Validity of the Scale (PCSHET)

(i). Content Validity- Content validity of the tool was done based on expert opinion and rating of the items by ten (10) experts from different colleges and universities of Nagaland and outside Nagaland state. The experts were given the scale to rate the items under two (2) heads categorized as ‘Relevance’ and ‘Clarity’. After getting the scale filled up from the respondents, the experts rating each item on a four (4) point rating scale were analyzed. The experts' rating was given on the degree of ‘Relevance’ i.e., ‘Not so Relevant’, ‘Somewhat Relevant’, ‘Quite Relevant’ and ‘Highly Relevant’. And on the degree on ‘Clarity’ i.e., ‘Not Clear’, ‘Item need some revision’, ‘Clear but need improvement’ and ‘Very Clear’. The items which were rated 1 and 2 for ‘Relevance’ and ‘Clarity’ were omitted from the preliminary draft of the scale.

The valuable suggestions and comments received were thoroughly discussed and carefully studied, and modified. Thus, the content validity was successfully validated with the assistance of experts’ ratings and opinions. Only five (5) items were removed and the remaining seventy (70) items were finalized after content validation.

The statements are suitable and applicable to measure the Professional Commitment of higher education teachers. The scale has been fully substantiated by related literature and strongly supported by experts' opinions and suggestions for constructing the “Professional Commitment Scale for Higher Education Teachers (PCSHET)”. Thus, the scale possessed acceptable content validity.

(ii). Item Validity- The computation of an independent sample t-test was done to check if an item discriminates between the upper and lower groups. Based on that, the item analysis was performed, and the significant items were retained as it can discriminate between two extreme groups of higher education teachers, i.e. highly discriminating items having a t-value of 1.96 and above ($P < 0.05$).

The given Table 3.14 reveals that thirteen (13) items were rejected, and fifty-seven

(57) items selected for the Professional Commitment Scale for Higher Education Teachers (PCSHET). Hence, it is valid for higher education teachers, as it is retained on a p-value at the 0.05 level of significance.

Table 3.14

One-sample t-test of Professional Commitment Scale for Higher Education Teachers

Items	t-value	P-value	Remark	Items	t-value	P-value	Remark
1	4.603	P<0.05	Accepted	36	0.881	P>0.05	Rejected
2	3.555	P<0.05	Accepted	37	2.273	P<0.05	Accepted
3	2.353	P<0.05	Accepted	38	4.947	P<0.05	Accepted
4	1.365	P>0.05	Rejected	39	2.596	P<0.05	Accepted
5	4.100	P<0.05	Accepted	40	0.862	P>0.05	Rejected
6	1.110	P>0.05	Rejected	41	3.958	P>0.05	Accepted
7	3.302	P<0.05	Accepted	42	2.561	P>0.05	Accepted
8	4.379	P<0.05	Accepted	43	3.850	P>0.05	Accepted
9	1.353	P>0.05	Rejected	44	5.247	P<0.05	Accepted
10	4.770	P<0.05	Accepted	45	4.121	P>0.05	Accepted
11	4.678	P<0.05	Accepted	46	5.879	P<0.05	Accepted
12	5.855	P<0.05	Accepted	47	4.935	P<0.05	Accepted
13	3.628	P<0.05	Accepted	48	4.618	P<0.05	Accepted
14	1.886	P>0.05	Rejected	49	4.828	P<0.05	Accepted
15	1.267	P>0.05	Rejected	50	5.814	P<0.05	Accepted
16	5.299	P<0.05	Accepted	51	3.059	P<0.05	Accepted
17	4.389	P<0.05	Accepted	52	6.337	P<0.05	Accepted
18	1.448	P>0.05	Rejected	53	1.413	P>0.05	Rejected
19	1.370	P>0.05	Rejected	54	2.819	P>0.05	Accepted

20	4.028	P<0.05	Accepted	55	2.828	P<0.05	Accepted
21	4.770	P>0.05	Accepted	56	1.267	P>0.05	Rejected
22	2.316	P<0.05	Accepted	57	3.403	P>0.05	Accepted
23	2.588	P<0.05	Accepted	58	2.146	P<0.05	Accepted
24	2.870	P<0.05	Accepted	59	3.561	P<0.05	Accepted
25	5.979	P<0.05	Accepted	60	3.799	P<0.05	Accepted
26	4.172	P<0.05	Accepted	61	4.228	P<0.05	Accepted
27	1.359	P>0.05	Rejected	62	5.424	P<0.05	Accepted
28	5.603	P<0.05	Accepted	63	2.657	P<0.05	Accepted
29	8.710	P<0.05	Accepted	64	7.862	P<0.05	Accepted
30	3.483	P<0.05	Accepted	65	3.764	P<0.05	Accepted
31	3.646	P<0.05	Accepted	66	2.982	P<0.05	Accepted
32	0.408	P<0.05	Accepted	67	3.058	P<0.05	Accepted
33	4.125	P<0.05	Accepted	68	0.771	P>0.05	Rejected
34	6.802	P<0.05	Accepted	69	4.745	P<0.05	Accepted
35	7.098	P<0.05	Accepted	70	2.874	P<0.05	Accepted

(iii)Face Validity- The face validity was established after studying the reactions of the respondents, considering their feedback on the relevance of the items. The positive feedback and encouraging views indicated its face validity.

3.7.4 Reliability of the Scale (PCSHET)

The scale's reliability was established by the split-half method. The details are given below:

(i). Split-half Reliability- The drafted tool was administered to higher education teachers to check the reliability of the scale. It was done using the split-half method on the data obtained from the sampled teachers. The Spearman-Brown coefficient is .933 as shown in Table 3.15. These values reveals that it is reliable for measuring the Professional Commitment of higher education teachers.

Table 3.15

Reliability Statistics of PCSHET

Cronbach's Alpha	Part 1	Value	.943
		N of Items	29a
	Part 2	Value	.936
		N of Items	28b
		Total N of Items	27
Correlation between forms			.875
Spearman-Brown Coefficient		Equal Length	.933
		Unequal Length	.933
Guttman Split-Half Coefficient			.933

(ii) **Internal Consistency**—The internal consistency of the scale was made by computing the coefficients of correlation between scores on 5 dimensions and the score of 80 teachers on the Professional Commitment Scale. The correlation matrix showing internal consistency among five (5) different dimensions of the Professional Commitment Scale is provided in Table 3.16.

Table 3.16

Internal reliability coefficients (Cronbach's alpha) of the scale and its sub-dimensions (N=80)

Sl.No	Area/Dimension	'r' value
1	Commitment to the learner	.89
2	Commitment to the Society	.87
3	Commitment to the Profession	.80
4	Commitment to Achieve Excellence for Professional Actions	.87
5	Commitment to basic values	.86
	Total	.96

3.7.5 Scoring Pattern of the Scale (PCSHET)

The Professional Commitment Scale for Higher Education Teachers (PCSHET) is

a scale with a five-point rating. It is Likert's method of summation to get responses against each item. The pattern of scoring is presented in Table 3.17.

Table 3.17

Scoring Pattern of PCSHET

Sl. No	Always	Frequently	Sometimes	Rarely	Never
1	5	4	3	2	1

The above table shows the pattern of scoring of the Professional Commitment Scale. The scale consisted of a five-point rating where each item on the scale was rated on points such as Always-5, Frequently-4, Sometimes-3, Rarely-2 and Never-1.

3.7.6 Norms of Interpretation of the Level of Professional Commitment

To interpret the level of Professional Commitment, the researcher prepared the Z-score norms for interpretation. The norms of interpretation of the level of Professional Commitment are presented in the tables below:

Table 3.18

Z-score Norms for Professional Commitment

Mean: 266.74 SD: 34.98 N: 80 Range of Scores: 57-285

Raw Score	Z-score	Raw Score	Z-score
116	-3.10	236	.49
146	-2.20	237	.52
155	-1.93	238	.55
187	-.97	240	.61
190	-.88	241	.64
191	-.85	243	.70
196	-.70	244	.73
199	-.61	245	.76
202	-.52	247	.82
205	-.43	248	.85
207	-.37	250	.91
209	-.31	258	1.15
216	-.10	279	1.78

235	.46		
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Table 3.19

Norms for Interpretation of the Level of Professional Commitment

Sl.No	Range of z-Scores	Grade	Level of Professional Commitment
1	+2.01 and above	A	Extremely High Commitment
2	+1.26 to +2.00	B	High Commitment
3	+0.51 to +1.25	C	Above Average Commitment
4	-0.50 to + 0.50	D	Average/ Moderate Commitment
5	-0.50 to -1.25	E	Below Average Commitment
6	-1.26 to – 2.00	F	Low Commitment
7	-2.01 and below	G	Extremely Low Commitment

3.8 Description of Teacher's Sense of Responsibility Scale (TSRS)

For the present study, Sense of Responsibility is an independent variable. So, the researcher adopted the Teacher's Sense of Responsibility Scale (TSRS) developed by Vidhushy & Kishor (2020). The scale consists of twenty- seven (27) items based on six (6) dimensions namely (i) Behaviour of Students (ii) Learning Outcomes (iii) Students' Achievement Motivation (iv) Providing Support (v) Enhancement of Capacity Building for Students (vi) Social and National Goals of Education. The Teacher's Sense of Responsibility Scale (TSRS) comprised twenty- seven (27) items and was constructed with a five (5) point rating scale i.e., (i). Completely Responsible, (ii). Mostly Responsible, (iii). Uncertain, (iv). Rarely Responsible and (v). Not at all Responsible.

3.8.1 Dimensions of the Scale (TSRS)

The dimensions of the Teacher's Sense of Responsibility Scale (TSRS) are given below:

(i). Behaviour of Students- This dimension includes the statements on teachers' feelings of responsibility for the behaviour of students. Their behaviours are absenteeism from school, not being punctual for school, showing disinterest in the subject, disobedience in the class, less respect for teachers and teasing their classmates during school hours

(ii). Learning Outcomes- This dimension is on the statements of teachers' feeling of

responsibility towards the learning outcomes of students. It includes low achievement in the class, poor performance in the class tests, disruptive behaviour in the class, loss of self-control during discussions in the class, failure to complete given assignments and failure to make excellent progress throughout the year

(iii). Student's Achievement Motivation- This dimension is on the statements of teachers' feeling of responsibility towards student achievement motivation when students get good marks in their subjects, feel satisfied while teaching new topics, enthusiastically participate in all learning activities, value your teaching, feel bored when giving subject assignments and feeling of discouragement during lessons etc

(iv). Providing Support- This dimension refers to those statements which show how much a teacher feels a sense of responsibility towards providing support to students like reward /incentive for good behaviour, faith in the teacher for caring attitude, distrust among students for not getting the right type of support in need inside or outside the school environment, not getting fair treatment in the class and faith among students in retaining the responsibilities for their own learning etc.

(v). Enhancement of capacity building for students- This dimension refers to those statements which show how much a teacher feels a sense of responsibility towards enhancement of capacity building for students like participation of students in classroom discussions, encouragement among students when the teacher assists them, feeling motivated when the teacher indicates their student's strengths and weaknesses and involvement in school matters etc.

(vi). Social and National Goals of Education- This dimension refers to those statements which show how much a teacher feels a sense of responsibility towards social and national goals of education like when students show sensitivity towards social issues during classroom discussions, work as a team, don't show the capacity to acquire the relevant knowledge and interpret social and national values and fails to make independent thinking etc.

3.8.2 Construction of the Scale (TSRS)

A draft of forty-four (44) items was given to one hundred (100) secondary school teachers. The responses were entered, and scoring was done. The scores were arranged in descending form, i.e., highest total scores to the lowest total scores. Then, the scores of each item were computed on t-values. Here, 27% high scores and 27% low scores were categorised, and the middle 46% slot was cleared (Kelley, 1939). The t-test was calculated item-wise. The values showed the subjects'

responses for items of twenty (20) as significant differences between the upper and lower groups. Hence, only twenty-seven (27) items were retained. The total item correlation was to check the internal consistency of the scale. The items showing lower values of r were weeded out as they lack consistency. It inferred that the calculated correlation values range from .043 to .590. It disclosed twenty-seven (27) items as significant, and seventeen (17) items did not measure the same construct that the whole scale is measuring. Hence, seventeen (17) items were discarded and twenty- seven (27) items were retained for Teacher's Sense of Responsibility Scale (TSRS). The twenty- seven (27) items were distributed dimension-wise, as shown in Table 3.20.

Table 3.20

Dimension-wise distribution of 27 items in the final draft of TSRS

Sl No	Dimension	Items	No. of Items	Sub Total	Total
1	Behaviour of Students	Positive	1	1	3
		Negative	2,3	2	
2	Learning Outcomes	Positive	5, 6, 7, 8,9,	5	6
		Negative	4	1	
3	Student's Achievement Motivation	Positive	10,11,12,13, 14,15	6	6
		Negative	Nil	0	
4	Providing Support	Positive	20	1	5
		Negative	16,17,18,19	4	
5	Enhancement of Capacity Building for Students	Positive	22,23,24	3	4
		Negative	21	1	
6	Social & National Goals of Education	Positive	Nil	0	3
		Negative	25,26,27	3	
		Positive-16	Negative-11	Total	27

Source: *Teachers' Sense of Responsibility Scale (TSRS), Vidhushy & Kishor (2020).*

3.8.3 Validity of the Scale (TSRS)

(i). Content Validity- The initial draft of forty- eight (48) items was validated by eleven (11) experts. The validators were experts from the “department of school

education, teachers from government and private schools, experts from colleges and research scholars. To validate the items of the tool, they were informed about the parameters of evaluation. Each validator was asked to give professional assistance and suggestions. The drafted items were considered in terms of technical and logical accuracy, relevance for the various dimensions for the construction of the “sense of responsibility scale”. The feedback and inputs of the validators were carefully analyzed, and necessary modifications were made. To do away with linguistic ambiguity, the experts from the language discipline or experts were consulted.

(ii)Face Validity- The face validity of the scale was established after studying the reactions of teachers on the basis of relevance. The positive feedback and encouraging views indicated the face validity of the scale.

3.8.4 Reliability of the Scale (TSRS)

Reliability is an essential characteristic of a test. It is the consistency of test scores.

(i). Split-half Reliability- The reliability of the scale was checked using the split-half method on the data obtained from the sampled teachers. The Spearman-Brown coefficient is .744, and the Guttman Split-half coefficient is .769, as given in Table 3.21. This shows that it is reliable for measuring the Sense of Responsibility of higher education teachers.

Table 3.21

Reliability Statistics of TSRS

Cronbach's Alpha	Part 1	Value	.797
		N of Items	14a
	Part 2	Value	.798
		N of Items	13b
		Total N of Items	27
Correlation between forms			.631
Spearman-Brown Coefficient		Equal Length	.744
		Unequal Length	.744
Guttman Split-Half Coefficient			.769

(iii) Internal consistency

The internal consistency of the scale was measured by computing the coefficients of correlation. The correlation matrix shows internal consistency among six (6) different dimensions as shown in Table 3.22.

Table 3.22

Internal reliability coefficients (Cronbach's alpha) of the scale (N=80)

Sl.No	Cronbach's Alpha	N of Items
1	.871	27

Taking the above values into consideration, it could be stated that the internal consistency of the scale as a whole is at an acceptable level. Thus, it can be concluded that it is reliable for the present study.

3.8. 5 Scoring Pattern of the Scale (TSRS)

Teacher's Sense of Responsibility Scale (TSRS) is a Likert's method of summation to get a 5-point response on each item. The scoring system is presented in the given Table 3.23

Table 3.23

Scoring Pattern of TSRS

Sl. No	Type of Items	Completely Responsible	Mostly Responsible	Uncertain	Rarely Responsible	Not at all Responsible
1	Positive	5	4	3	2	1
2	Negative	1	2	3	4	5

The above table shows the scoring pattern of Teacher's Sense of Responsibility Scale. The scale is supposed to be rated on five (5) points. For positive items, Completely Responsible-5, Mostly Responsible-4, Uncertain-3, Rarely Responsible-2 and Not at all Responsible-1. For negative items, Completely Responsible-1, Mostly Responsible-2, Uncertain-3, Rarely Responsible-4 and Not at all Responsible-5.

3.8.6 Norms of Interpretation of the Level of Teacher's Sense of Responsibility

To interpret the level of the Teacher's Sense of Responsibility, the researcher prepared the Z-score norms for interpretation. The norms of interpretation of the level of Teacher's Sense of Responsibility is projected in the table below:

Table 3.24*Norms for Interpretation of the Level of Teacher's Sense of Responsibility*

Sl.No	Range of Raw Scores	Range of z-Scores	Grade	Level of Teacher's Sense of Responsibility
1	108 & above	+2.01 & above	A	Extremely Responsible
2	98-107	+1.26 to + 2.00	B	Highly Responsible
3	87-97	+0.51 to +1.25	C	Above Average Responsible
4	73-86	-0.50 to +0.50	D	Average Responsible
5	63-72	-1.25 to -0.51	E	Below average Responsible
6	53-62	-2.00 to -1.26	F	Lowly Responsible
7	52& below	-2.01 & below	G	Extremely Not Responsible

3.9 Data Collection

The researcher personally visited various colleges of Higher Education in Nagaland to administer the relevant tools for the study. The research tools, namely the Teaching Effectiveness Scale for Higher Education Teachers (TESHET), Professional Commitment Scale for Higher Education Teachers (PCSHET) and Teacher's Sense of Responsibility Scale (TSRS), were administered to the sample of the study for the collection of data. The various tools used in the study are enclosed in the Appendix section.

The researcher collected the entire tools dually filed by the respondents, and the raw scores were entered variable-wise for analysis and interpretation. Every item score of the respondents was recorded using an Excel sheet and SPSS version 24.0.

3.10 Statistical Techniques Employed

Based on the objectives and hypothesis of the study, the researcher employed appropriate statistical techniques such as Percentage, Mean, Standard Deviation (SD), t-test and Analysis of Variance (ANOVA) to find the differences in Teaching Effectiveness, Professional Commitment and Sense of Responsibility based on the demographic variables. Pearson Product-Moment Correlation was used to test the relationship between the variables, Teaching Effectiveness, Professional Commitment and Sense of Responsibility as presented in Table 3.25.

The details of the analysis and interpretation using statistical techniques for descriptive,

differential, and correlation analysis are discussed in Chapter 4.

Table 3.25

Statistical Techniques Used

Sl. No	Type of Analysis	Statistical Techniques Used
1	Descriptive Analysis	Mean, Standard Deviation, Percentages
2	Differential Analysis (t-value & F-ratio)	Independent Sample t-test & ANOVA
3	Correlation Analysis	Pearson Product Moment Correlation

CHAPTER-IV

ANALYSIS AND INTERPRETATION OF DATA

4.1 Introduction

This chapter deals with the analysis and interpretation of data. The researcher used relevant research tools and appropriate statistical techniques to achieve the objectives, test the hypothesis, show results, and draw conclusions for the study. The raw scores were systematically entered variable-wise, and the SPSS 24.0 version was applied to compute all statistical calculations of the study.

To achieve the study's objectives and hypothesis, descriptive, differential, and correlation analyses were performed. The results were presented in tabular and graphical forms, and meaningful interpretations were drawn.

4.2 Objectives and Hypothesis Wise Analysis and Interpretation of Results

4.2.1 Descriptive Analysis

Objective 1: To assess the level of Teaching Effectiveness, Professional Commitment and Sense of Responsibility of Higher Education Teachers.

To assess the level of the various variables used in the study, the researcher prepared the z-score norms of each variable for interpretation. The tables depicting the levels of the respective variables with the interpretation are specified below:

Level of Teaching Effectiveness

To interpret the level of Teaching Effectiveness, the Z-score norms for interpretation were prepared. The level of Teaching Effectiveness is figured out and specified in Table 4.1.

Table 4.1

Level of Teaching Effectiveness

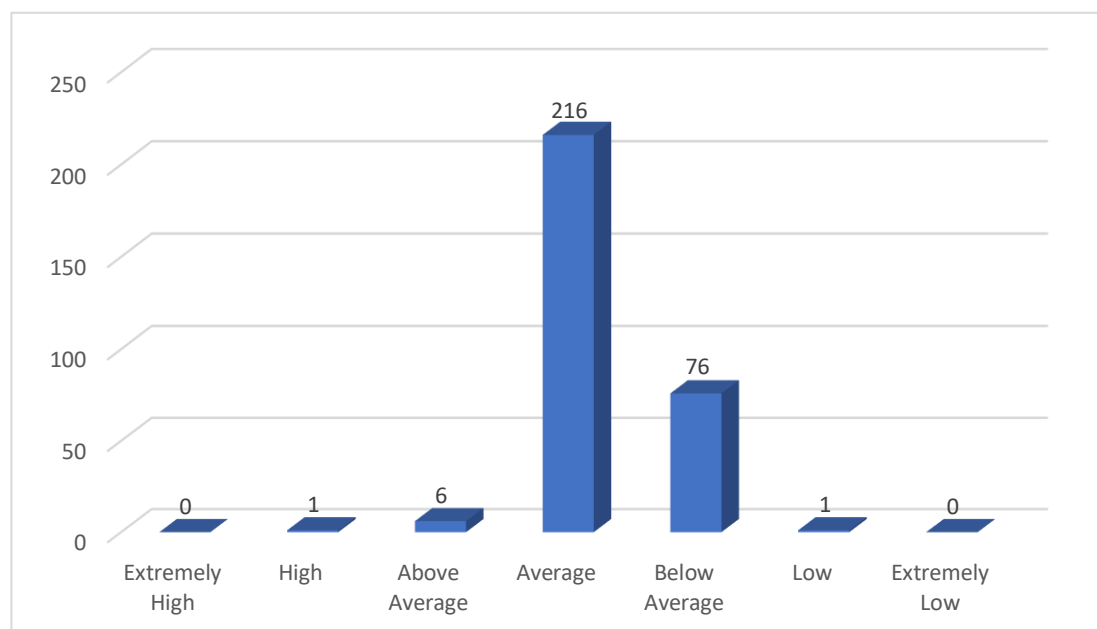
Range of Raw Score	N	Percentage	Grade	Level of Teaching Effectiveness
176 above	0	0.00	A	Extremely High
159-175	1	0.33 %	B	High

Range of Raw Score	N	Percentage	Grade	Level of Teaching Effectiveness
143-159	6	2.00 %	C	Above Average
121-143	216	72.00 %	D	Average
105-121	76	25.34 %	E	Below Average
89-105	1	0.33 %	F	Low
88 below	0	0.00	G	Extremely Low

From Table 4.1, out of 300 higher education teachers, 0.33% have high Teaching Effectiveness, 2% have above average Teaching Effectiveness, 72% have average Teaching Effectiveness, 25.34% have below average Teaching Effectiveness, and 0.33% have low Teaching Effectiveness. No higher education teacher has extremely high and extremely low Teaching Effectiveness.

Figure 4.1

Level of Teaching Effectiveness



Level of Professional Commitment

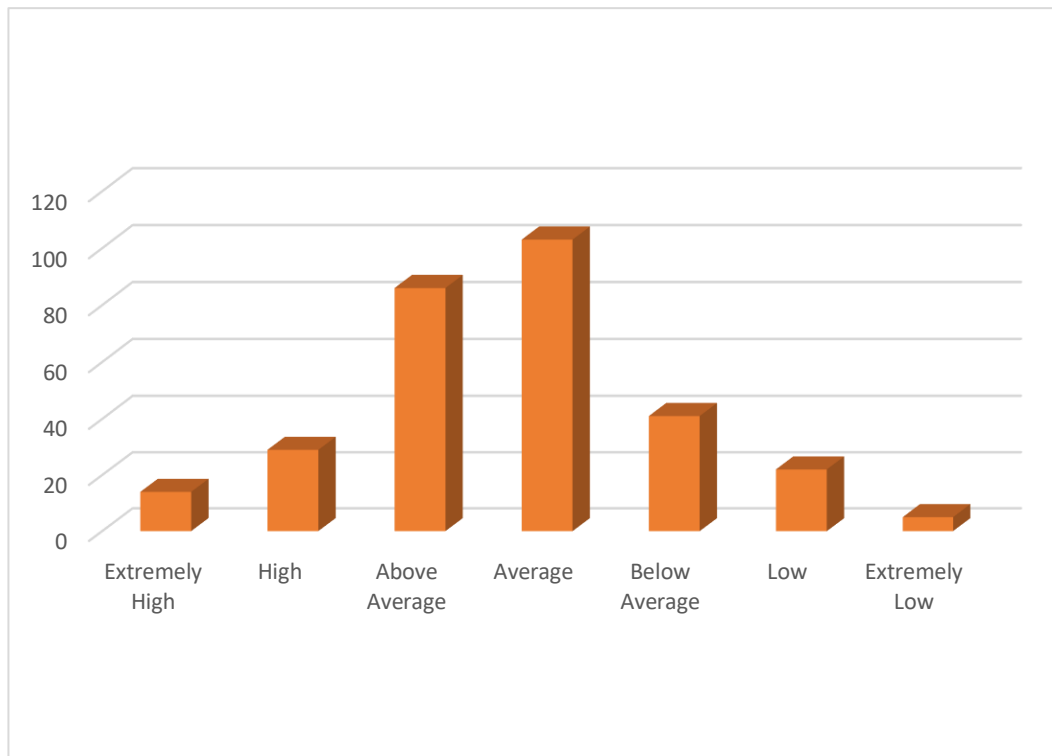
To interpret the level of Professional Commitment, the Z-score norms for interpretation were prepared and presented in the table 4.2:

Table 4.2*Level of Professional Commitment*

Range of Raw Score	N	Percentage	Grade	Level of Professional Commitment
263 & above	14	4.67 %	A	Extremely High
262-245	29	9.67 %	B	High
244-227	86	28.67 %	C	Above Average
226-203	103	34.32 %	D	Average
202-185	41	13.67 %	E	Below Average
184-167	22	7.33 %	F	Low
166 & below	5	1.67 %	G	Extremely Low

From the results presented in the table 4.2, out of 300 higher education teachers, 4.67% have extremely high Professional Commitment, 9.67% have high Professional Commitment, 28.67% have above average Professional Commitment, 34.32% have average Professional Commitment, 13.67% have below average Professional Commitment, 7.33% have low Professional Commitment, and 1.67% have extremely low Professional Commitment.

Figure 4.2*Level of Professional Commitment*



Level of Sense of Responsibility

To interpret the level of Sense of Responsibility, the Z-score norms for interpretation were prepared. The level of Sense of Responsibility is figured out and specified in Table 4.3

Table 4.3

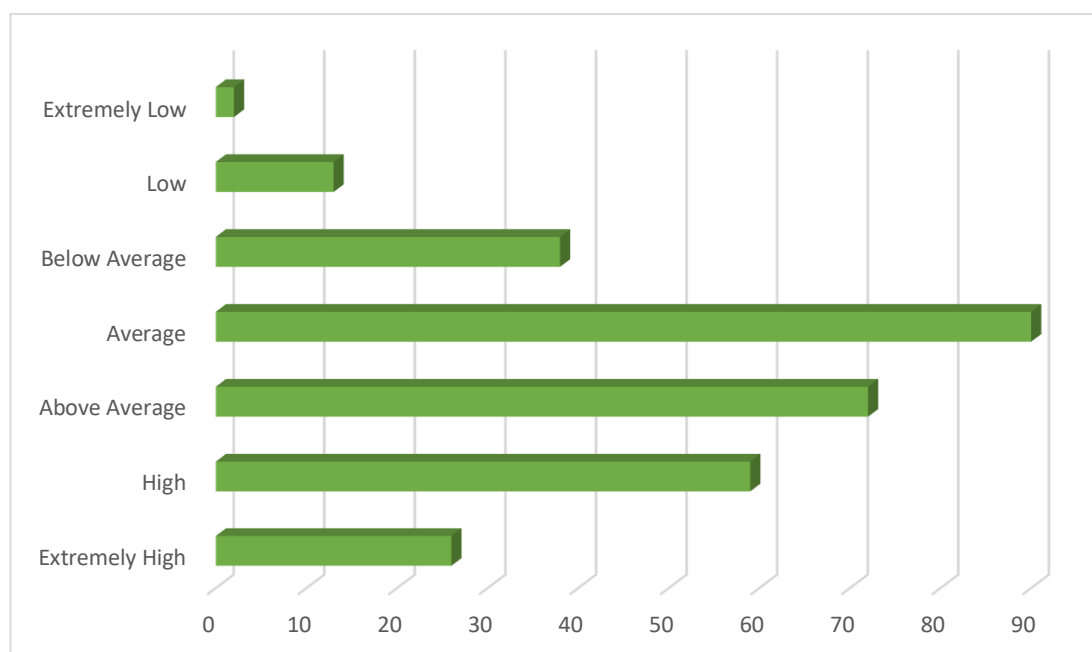
Level of Sense of Responsibility

Range of Raw Score	N	Percentage	Grade	Level of Sense of Responsibility
108 & above	26	8.67 %	A	Extremely High
98-107	59	19.67 %	B	High
87-97	72	24.00 %	C	Above Average
73-86	90	30.00 %	D	Average
63-72	38	12.67 %	E	Below Average
53-62	13	4.32 %	F	Low
52& below	2	0.67 %	G	Extremely Low

From the results presented in the table 4.3, out of 300 higher education teachers, 8.67% have extremely high Sense of Responsibility, 19.67% have high Sense of Responsibility, 24.00% have above average Sense of Responsibility, 30.00% have average Sense of Responsibility, 12.67% have below average Sense of Responsibility, 4.32% have low Sense of Responsibility, and 0.67% have extremely low Sense of Responsibility.

Figure 4.3

Level of Sense of Responsibility



4.2.2 Correlation Analysis

Objective 2: To examine the relationship between Teaching Effectiveness and Professional Commitment of Higher Education Teachers

Hypothesis 1: There is no significant relationship between Teaching Effectiveness and Professional Commitment of Higher Education Teachers.

The correlational analysis was performed and the Pearson Product moment correlation between Professional Commitment and Teaching Effectiveness is presented in table 4.4.

Table 4.4

Pearson's Correlation coefficient between Professional Commitment and Teaching Effectiveness

Independent Variable	Dependent Variable	r - value	Remarks
Professional Commitment	Teaching Effectiveness	.578**	Significantly

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

From the results mentioned in table 4.4, it is clear that Pearson's Correlation coefficient between Professional Commitment and Teaching Effectiveness is .578. It is significant at 0.01 level. Therefore, the null hypothesis is rejected at 0.01 level of significance. Hence, it is concluded that there is a significantly positive moderate relationship ($r = .578$) between Professional Commitment and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

The correlational analysis was performed and the Pearson Product moment correlation between the dimensions of Professional Commitment and Teaching Effectiveness is presented in table 4.5.

Table 4.5

Pearson's Correlation coefficient between the dimensions of Professional Commitment and Teaching Effectiveness.

Independent Variables	Dependent Variable	r – value	Remarks
Commitment to the Learner	Teaching Effectiveness	.516**	Significantly positive correlation
Commitment to the Society		.478**	Significantly positive correlation
Commitment to the Profession		.459**	Significantly positive correlation
Commitment to Achieve Excellence for Professional Actions		.534**	Significantly positive correlation
Commitment to Basic Values		.478**	Significantly positive correlation

From the results presented in table 4.5, the following inferences are drawn:

There is a significantly positive moderate relationship ($r = .516$) between the dimension Commitment to the Learner and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

There is a significantly positive moderate relationship ($r = .478$) between the dimension Commitment to the Society and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

There is a significantly positive moderate relationship ($r = .459$) between the dimension Commitment to the Profession and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

There is a significantly positive moderate relationship ($r = .534$) between the dimension Commitment to Achieve Excellence for Professional Actions and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

There is a significantly positive moderate relationship ($r = .478$) between the dimension Commitment to Basic Values and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

Objective 3: To examine the relationship between Teaching Effectiveness and Sense of Responsibility of Higher Education Teachers

Hypothesis 2: There is no significant relationship between Teaching Effectiveness and Sense of Responsibility of Higher Education Teachers.

The correlational analysis was performed and the Pearson Product moment correlation between Sense of Responsibility and Teaching Effectiveness is presented in table 4.6.

Table 4.6

Pearson's Correlation coefficient between Sense of Responsibility and Teaching Effectiveness.

Independent Variables	Dependent Variable	r - value	Remarks
Sense of Responsibility	Teaching Effectiveness	.676**	Significantly positive correlation

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

From the results mentioned in table 4.6, it is clear that Pearson's Correlation coefficient between Sense of Responsibility and Teaching Effectiveness is .676 and it is significant at 0.01 level. Therefore, the null hypothesis is rejected at 0.01 level of significance. Hence, it is concluded that there is a significantly positive moderate relationship ($r = .676$) between Sense of Responsibility and Teaching Effectiveness

of higher education teachers at 0.01 level of significance.

The correlational analysis was performed and the Pearson Product moment correlation between the dimensions of Sense of Responsibility and Teaching Effectiveness is presented in table 4.7.

Table 4.7

Pearson's Correlation coefficient between the dimensions of Sense of Responsibility and Teaching Effectiveness.

Independent Variables	Dependent Variable	r value	Remarks
Behaviour of Students	Teaching Effectiveness	.620**	Significantly positive correlation
Learning Outcomes		.674**	Significantly positive correlation
Student's Achievement		.642**	Significantly positive correlation
Providing Support		.655**	Significantly positive correlation
Enhancement of Capacity Building for Students		.578**	Significantly positive correlation
Social and National Goals of Education		.638**	Significantly positive correlation

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

From the results presented in table 4.7, the following inferences are drawn:

There is a significantly positive moderate relationship ($r = .620$) between the dimension Behaviour of Students and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

There is a significantly positive moderate relationship ($r = .674$) between the dimension Learning Outcomes and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

There is a significantly positive moderate relationship ($r = .642$) between the dimension Student's Achievement and Teaching Effectiveness of higher education

teachers at 0.01 level of significance.

There is a significantly positive moderate relationship ($r = .655$) between the dimension Providing Support and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

There is a significantly positive moderate relationship ($r = .578$) between the dimension Enhancement of Capacity Building for Students and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

There is a significantly positive moderate relationship ($r = .638$) between the dimension Social and National Goals of Education and Teaching Effectiveness of higher education teachers at 0.01 level of significance.

4.2.3 Differential Analysis

Objective 4: To investigate the difference in Teaching Effectiveness based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream

Hypothesis 3: There is no significant difference in Teaching Effectiveness based on Gender.

To test hypothesis 3, a t-test was performed on the Teaching Effectiveness scores of male and female higher education teachers, and the result is presented in table 4.8.

Table 4.8

Mean, SD and t-values of Teaching Effectiveness based on Gender

Variable	Group	N	Mean	SD	t-value	Remarks
Teaching Effectiveness	Male	138	129.79	8.619	4.513	**S
	Female	162	125.39	8.183		

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

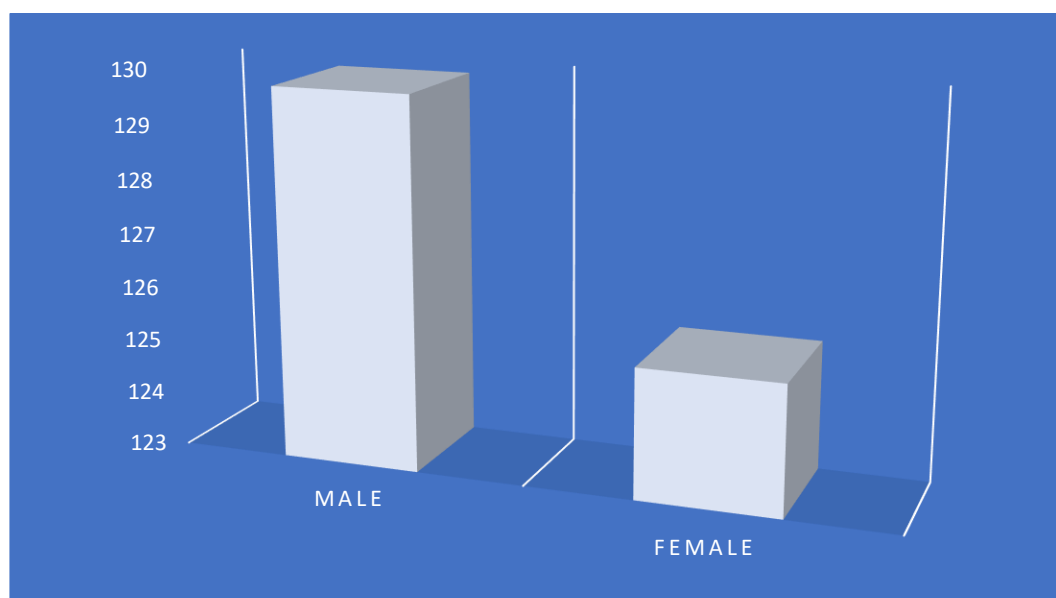
From the results shown in table 4.8, the t-value of Teaching Effectiveness based on Gender is 4.513, and it is significant at the 0.01 level. Therefore, the null hypothesis is rejected at 0.01 Level of Significance. Hence, there is a significant difference in Teaching Effectiveness between male ($M=129.79$, $SD=8.619$) and female ($M=125.39$, $SD=8.183$) higher education teachers at 0.01 Level of Significance ($t(298) = 4.513$).

The mean values show that male higher education teachers have better

Teaching Effectiveness than female higher education teachers at 0.01 Level of Significance.

Figure 4.4

Mean of Teaching Effectiveness based on Gender



The t-test was employed on the scores of the dimensions of Teaching Effectiveness based on Gender of higher education teachers, and the result is presented in table 4.9.

Table 4.9

Dimension-wise Scores of Teaching Effectiveness based on Gender

Variables		Male (1)	Female (2)	t- value	Remark
Academic and Professional Knowledge	Mean	27.95	26.78	3.807	**S
	SD	2.544	2.776		
Preparation and Presentation	Mean	28.38	28.07	1.052	*NS
	SD	2.325	2.774		
Classroom Management	Mean	30.78	29.02	5.436	**S
	SD	2.962	2.591		
Interpersonal Relationship	Mean	15.4	15.25	0.939	*NS

	SD	1.412	1.34		
Teacher Characteristics	Mean	27.18	26.07	4.219	**S
	SD	2.437	2.065		

From the results presented in table 4.9, the following interpretations for the dimensions of Teaching Effectiveness are drawn:

The t-value of the dimension, Academic and Professional Knowledge based on Gender is 3.807 and it is significant at 0.01 level of significance. Hence, there is a significant difference in Academic and Professional Knowledge between male and female higher education teachers at 0.01 Level of Significance. The mean values show that male higher education teachers have better Academic and Professional Knowledge than female higher education teachers at 0.01 Level of Significance.

The t-value of the dimension Preparation and Presentation based on Gender is 1.052 and is not significant even at 0.05 level. Hence, there is no significant difference in Preparation and Presentation between male and female higher education teachers at 0.05 level.

The t-value of the dimension Classroom Management based on Gender is 5.436 and it is significant at the 0.01 level. Hence, there is a significant difference in Classroom Management between male and female higher education teachers at 0.01 Level of Significance. The mean values show that male higher education teachers have better Classroom Management than female higher education teachers at 0.01 Level of Significance.

The t-value of the dimension Interpersonal Relationship based on Gender is 0.939 and it is not significant even at 0.05 level. Hence, there is no significant difference in Interpersonal Relationship between male and female higher education teachers at 0.05 level.

The t-value of the dimension Teacher Characteristics based on Gender is 4.219 and it is significant at the 0.01 level. Hence, there is a significant difference in Teacher Characteristics between male and female higher education teachers at 0.01 Level of Significance. The mean values show that male higher education teachers have better Teacher Characteristics than female higher education teachers at 0.01 Level of Significance.

Hypothesis 4: There is no significant difference in Teaching Effectiveness based on Age.

To test hypothesis 4, the higher education teachers were divided into groups i.e. below 30 years, 31- 40 years, and above 41 years. One-way ANOVA was employed on the Teaching Effectiveness scores concerning the age of higher education teachers and the results are presented in table 4.10.

Table 4.10

ANOVA scores of Teaching Effectiveness based on Age

Variable	Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.
Teaching Effectiveness	Between Groups	841.042	2	420.521	5.937	**Significant
	Within Groups	21037.958	297	70.835		
	Total	21879.000	299			

From the results presented in the table 10, the F-ratio of Teaching Effectiveness for Age is 5.937, and it is significant at 0.01 level. Therefore, the null hypothesis is rejected at 0.01 level. Hence, there is a significant difference in Teaching Effectiveness between higher education teachers based on age i.e., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

Post Hoc tests of Teaching Effectiveness

Since there exists a significant difference in Teaching Effectiveness based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the result is presented in table 4.11.

Table 4.11

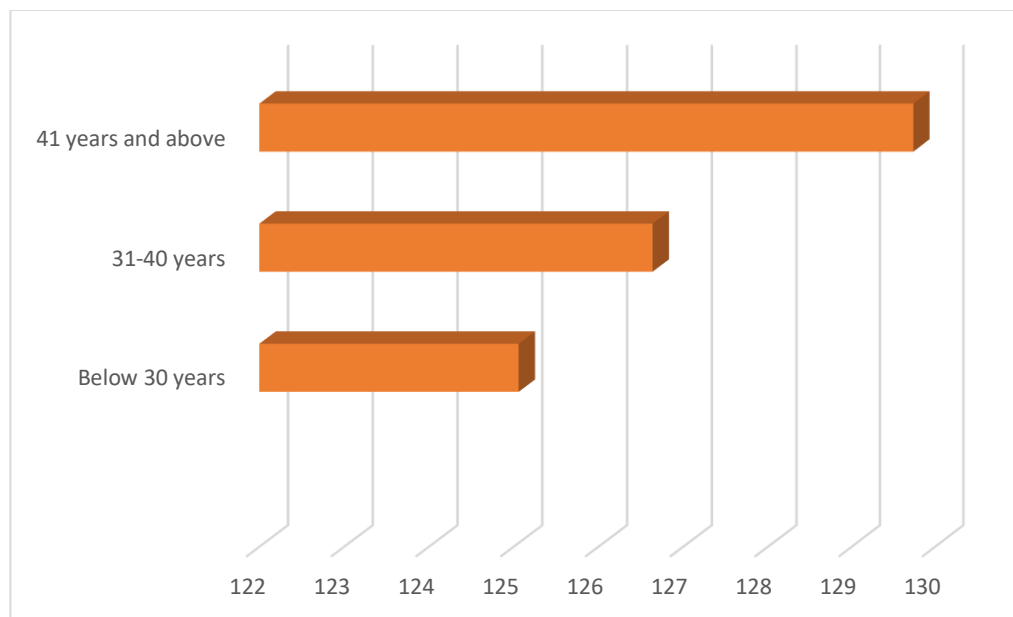
Homogeneous Subset of Post Hoc tests of Teaching Effectiveness based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	125.06	9.284	125.06	
31-40 years	148	126.64	8.151	126.64	
41 years and above	68	129.74	7.839		129.74
Sig.				.419	1.000

From table 4.11, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age 41 years and above differs in the Teaching Effectiveness with the higher education teachers below 30 years and 31-40 years. From the mean values of Teaching Effectiveness, it is clear that higher education teachers aged above 41 years have more Teaching Effectiveness than higher education teachers of age below 30 years and between 31-40 years.

Figure 4.5

Mean of Teaching Effectiveness based on Age



Dimension-Wise ANOVA Scores of Teaching Effectiveness based on Age

One-way ANOVA was employed on the scores of dimensions of Teaching Effectiveness based on the age of higher education teachers and the result is presented in table 4.12.

Table 4.12

Dimension-Wise ANOVA Scores of Teaching Effectiveness based on Age

Variable	Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.
Academic and Professional Knowledge	Between Groups	150.622	2	75.311	10.686	**S
	Within Groups	2093.175	297	7.048		
	Total	2243.797	299			
Preparation and Presentation	Between Groups	32.121	2	16.061	2.270	*NS
	Within Groups	2101.425	297	7.076		
	Total	2133.547	299			
Classroom Management	Between Groups	34.421	2	17.210	2.390	*NS
	Within Groups	2138.496	297	7.200		
	Total	2172.917	299			
Interpersonal Relationship	Between Groups	16.183	2	8.092	4.482	**S
	Within Groups	536.163	297	1.805		
	Total	552.347	299			
Teacher Characteristics	Between Groups	6.968	2	3.484	0.714	*NS
	Within Groups	1450.112	297	4.883		
	Total	1457.080	299			

From the results presented in table 4.12, the following interpretations for the dimensions of Teaching Effectiveness are drawn:

The F - ratio of the dimension, Academic and Professional Knowledge based on Age is 10.686 and it is significant at the 0.01 level. Hence, there is a significant

difference in Academic and Professional Knowledge based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

The F - ratio of the dimension Preparation and Presentation based on Age is 2.270 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Preparation and Presentation based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.05 Level of Significance.

The F - ratio of the dimension Classroom Management based on Age is 2.390 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Classroom Management based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.05 level.

The F - ratio of the dimension Interpersonal Relationship based on Age is 4.482 and it is significant at the 0.05 level. Hence, there is a significant difference in Teacher Characteristics based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.05 Level of Significance.

The F - ratio of the dimension Teacher Characteristics based on Age is 0.714 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Interpersonal Relationship based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.05 level.

Post Hoc tests of the dimension: Academic and Professional Knowledge

Since there exists a significant difference in the dimension, Academic and Professional Knowledge based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the result is presented in the table 4.13.

Table 4.13

Homogeneous Subset of Post Hoc tests of the dimension, Academic and Professional Knowledge based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	25.93	2.940	25.93	
31-40 years	148	27.07	2.667		27.07
41 years and above	68	27.90	2.220		27.90
Sig.				1.000	.093

From table 4.13, the Homogeneous Subset of Post Hoc tests reveals that the

higher education teachers with age below 30 years differs in the dimension Academic and Professional Knowledge with the higher education teachers 31-40 years and 41 years and above. From the mean values of Academic and Professional Knowledge, it is clear that higher education teachers aged 31-40 years and 41 years and above have more Academic and Professional Knowledge than higher education teachers of age below 30 years.

Post Hoc tests of the dimension: Interpersonal Relationship

Since there exists a significant difference in the dimension, Interpersonal Relationship based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the results is presented in the table 4.14.

Table 4.14

Homogeneous Subset of Post Hoc tests of the dimension, Interpersonal Relationship based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	14.95	1.241	14.95	
31-40 years	148	15.18	1.410	15.18	15.18
41 years and above	68	15.60	1.317		15.60
Sig.				.485	.092

From table 4.14, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age below 30 years differs in the dimension Interpersonal Relationship with the higher education teachers with age 41 years and above. From the mean values of Teaching Effectiveness, it is clear that higher education teachers aged 41 years and above have more Interpersonal Relationship than higher education teachers of age below 30 years.

Hypothesis 5: There is no significant difference in Teaching Effectiveness based on Teaching Experience.

To test hypothesis 5, the higher education teachers were divided into groups i.e. below 5 years, 6-10 years, 11-20 years and above 21 years. ANOVA was employed on the Teaching Effectiveness scores concerning the teaching experience of higher education teachers and the result is presented in the table 4.15.

Table 4.15

ANOVA scores of Teaching Effectiveness based on Teaching Experience

Variable	Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.
Teaching Effectiveness	Between Groups	1010.843	3	336.948	4.779	**Significant
	Within Groups	20868.157	296	70.501		
	Total	21879.000	299			

From the table 4.15, the F-ratio of Teaching Effectiveness for teaching experience is 4.779, and it is significant at 0.01 level. Therefore, the null hypothesis is rejected at 0.01 Level of Significance. Hence, there is a significant difference in Teaching Effectiveness between higher education teachers based on teaching experience.

Since there exists a significant difference in Teaching Effectiveness based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on Teaching Experience differ and the result is presented in table 4.16.

Table 4.16

Homogeneous Subset of Post Hoc tests of Teaching Effectiveness based on Teaching Experience

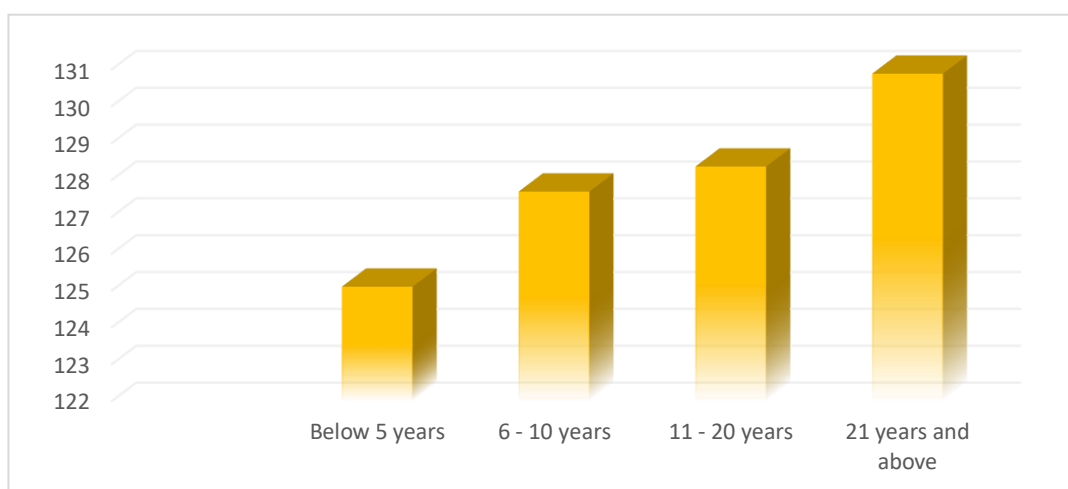
Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	125.1	8.972	125.10	
6 - 10 years	71	127.68	7.731	127.68	127.68
11 - 20 years	67	128.36	7.537	128.36	128.36
21 years and above	24	130.88	9.105		130.88
Sig.				.204	.218

Table 4.16, the Homogeneous Subset of Post Hoc tests, reveals that higher

education teachers with less than 5 years of teaching experience differ in Teaching Effectiveness from those with teaching experience of 21 years and above. From the mean values of Teaching Effectiveness, it is clear that higher education teachers with teaching experience of 21 years and above have more Teaching Effectiveness than higher education teachers with less than 5 years of teaching experience.

Figure 4.6

Mean of Teaching Effectiveness based on Teaching Experience



Dimension-Wise ANOVA Scores of Teaching Effectiveness based on Teaching Experience

One-way ANOVA was employed on the scores of dimensions of Teaching Effectiveness based on the Teaching Experience of higher education teachers and the result is presented in table 4.17.

Table 4.17

Dimension-Wise Scores of Teaching Effectiveness based on Teaching Experience

Variable	Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.
Academic and Professional Knowledge	Between Groups	181.489	3	60.496	8.683	**S
	Within Groups	2062.308	296	6.967		
	Total	2243.797	299			
Preparation and Presentation	Between Groups	26.713	3	8.904	1.251	*NS

	Within Groups	2106.834	296	7.118		
	Total	2133.547	299			
Classroom Management	Between Groups	75.994	3	25.331	3.576	**S
	Within Groups	2096.922	296	7.084		
	Total	2172.917	299			
Interpersonal Relationship	Between Groups	18.424	3	6.141	3.405	**S
	Within Groups	533.923	296	1.804		
	Total	552.347	299			
Teacher Characteristics	Between Groups	11.131	3	3.710	.760	*NS
	Within Groups	1445.949	296	4.885		
	Total	1457.080	299			

From the results presented in table 4.17, the following interpretations for the dimensions of Teaching Effectiveness are drawn:

The F - ratio of the dimension, Academic and Professional Knowledge based on Teaching Experience is 8.638 and it is significant at the 0.01 level. Hence, there is a significant difference in Academic and Professional Knowledge based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years, and above 21 years at 0.01 Level of Significance.

The F - ratio of the dimension Preparation and Presentation based on Age is 1.251 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Preparation and Presentation based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 level.

The F - ratio of the dimension Classroom Management based on Age is 3.576 and it is significant at the 0.05 level. Hence, there is a significant difference in Classroom Management based on Teaching Experience, viz., below 5 years, 6-10

years, 11-20 years and above 21 years at 0.05 Level of Significance.

The F - ratio of the dimension Interpersonal Relationship based on Age is 3.405 and it is significant at the 0.05 level. Hence, there is a significant difference in Teacher Characteristics based on Age, Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 Level of Significance.

The F - ratio of the dimension Teacher Characteristics based on Teaching Experience is 0.760 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Interpersonal Relationship based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 level.

Post Hoc tests of the dimension: Academic and Professional Knowledge

Since there exists a significant difference in the dimension, Academic and Professional Knowledge based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on Teaching Experience differ and the result is presented in table 4.18.

Table 4.18

Homogeneous Subset of Post Hoc tests of the dimension, Academic and Professional Knowledge based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	26.12	2.950	26.12	
6 - 10 years	71	27.37	2.445	27.37	27.37
11 - 20 years	67	27.82	2.249		27.82
21 years and above	24	27.92	2.263		27.92
Sig.				.079	.716

From table 4.18, the Homogeneous Subset of Post Hoc tests reveal that higher education teachers with less than 5 years of Teaching Experience differ in Academic and Professional Knowledge than higher education teachers with 11-20 years and 21 years and above. From the mean values of Academic and Professional Knowledge, it is clear that higher education teachers with Teaching Experience of 11-20 years and 21 years and above have more Academic and Professional

Knowledge than higher education teachers with less than 5 years of Teaching Experience.

Post Hoc tests of the dimension: Classroom Management

Since there exists a significant difference in the dimension of Classroom Management based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on age differ and the result is presented in table 4.19.

Table 4.19

Homogeneous Subset of Post Hoc tests of the dimension, Classroom Management based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	29.91	2.693	29.91	
6 - 10 years	71	30.18	2.41	30.16	
11 - 20 years	67	30.16	2.603	30.18	
21 years and above	24	31.83	3.293		31.83
Sig.				.952	1.000

From table 4.19, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with Teaching Experience of less than 5 years, 6 - 10 years, and 11 - 20 years differ in Classroom Management than the higher education teachers with Teaching Experience of 21 years and above. From the mean values of Classroom Management, it is clear that higher education teachers with Teaching Experience of 21 years and above have more Classroom Management than higher education teachers with less than 5 years, 6 - 10 years, and 11 - 20 years of Teaching Experience.

Post Hoc tests of the dimension: Interpersonal Relationship

Since there exists a significant difference in the dimension of Interpersonal Relationship based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on age differ and the result is presented in the table 4.20.

Table 4.20

Homogeneous Subset of Post Hoc tests of the dimension, Interpersonal Relationship based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	15.01	1.27	15.01	
6 - 10 years	71	15.23	1.495	15.23	15.23
11 - 20 years	67	15.39	1.359	15.39	15.39
21 years and above	24	15.88	1.227		15.88
Sig.				.478	.070

From table 4.20, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with Teaching Experience of less than 5 years differ in Interpersonal Relationship than with Teaching Experience of 21 years and above. From the mean values of Interpersonal Relationship, it is clear that higher education teachers with Teaching Experience of 21 years and above have more Interpersonal Relationship than higher education teachers with less than 5 years of Teaching Experience.

Hypothesis 6: There is no significant difference in Teaching Effectiveness based on Locality.

To test hypothesis 6, a t-test was used on the Teaching Effectiveness scores of urban and rural higher education teachers and the result is presented in table 4.21.

Table 4.21

Mean, SD, and t-values of Teaching Effectiveness based on Locality

Variable	Group	N	Mean	SD	t-value	Remarks
Teaching Effectiveness	Urban	90	128.65	8.065	2.366	**S
	Rural	210	126.18	8.770		

** S- significant at the 0.05 level

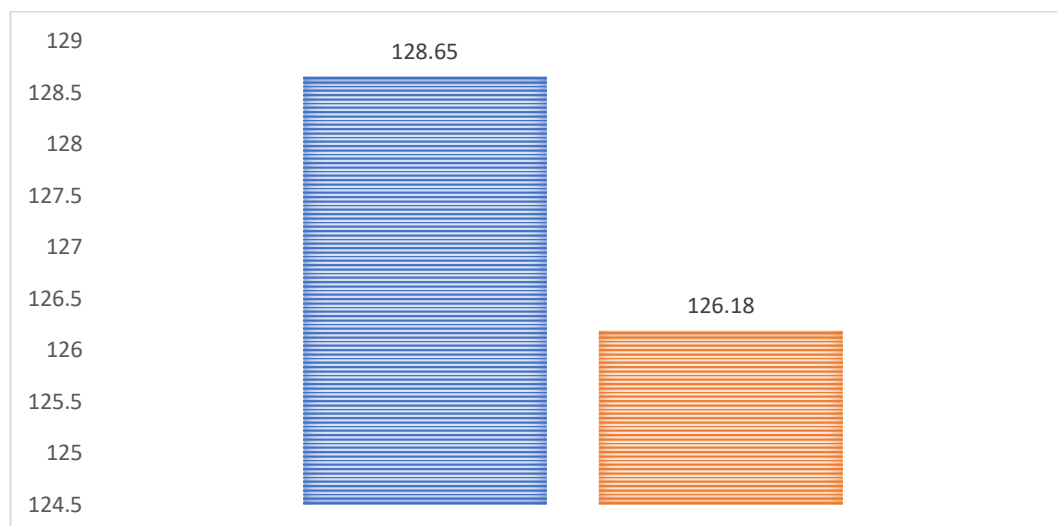
From the results shown in Table 4.21, the t-value of Teaching Effectiveness based on Locality is 2.366, and it is significant at 0.05 level. Therefore, the null hypothesis is rejected at the 0.05 Level of Significance. Hence there is a significant difference in Teaching Effectiveness between urban (M=128.65, SD=8.065) and rural (M=126.18, SD=8.770) teachers in higher education at the 0.05 Level of

Significance ($t(298) = 2.366$).

The mean values show that the urban higher education teachers have better Teaching Effectiveness than the rural teachers in higher education at 0.05 Level of Significance.

Figure 4.7

Mean of Teaching Effectiveness based on Locality



Dimension-Wise Scores of Teaching Effectiveness based on Locality

The t-test was employed on the scores of the dimensions of Teaching Effectiveness based on Locality of higher education teachers, and the result is presented in table 4.22.

Table 4.22

Dimension-Wise Scores of Teaching Effectiveness based on Locality

Variables		Urban (1)	Rural (2)	t- value	Remark
Academic and Professional Knowledge	Mean	27.12	26.83	0.934	*NS
	SD	2.631	2.803		
Preparation and Presentation	Mean	28.9	27.88	3.370	**S
	SD	2.619	2.672		
Classroom Management	Mean	30.82	29.94	2.904	**S
	SD	2.556	2.751		
Interpersonal Relationship	Mean	15.32	15.15	1.099	*NS
	SD	1.328	1.377		

Teacher Characteristics	Mean	26.49	26.38	0.744	**S
	SD	2.144	2.249		

From the results presented in the table 4.22, the following interpretations for the dimensions of Teaching Effectiveness are drawn:

The t-value of the dimension, Academic and Professional Knowledge based on Locality is 0.934 and it is not significant at the 0.05 level. Hence, there is no significant difference in Academic and Professional Knowledge between Urban and Rural higher education teachers at 0.05 level.

The t-value of the dimension Preparation and Presentation based on Locality is 3.370 and it is significant at the 0.01 level. Hence, there is a significant difference in Preparation and Presentation between Urban and Rural higher education teachers at 0.0 Level of Significance. The mean values show that the Urban higher education teachers have better Preparation and Presentation than the Rural higher education teachers at 0.01 Level of Significance.

The t-value of the dimension Classroom Management based on Locality is 2.904 and it is significant at the 0.01 level. Hence, there is a significant difference in Classroom Management between Urban and Rural higher education teachers at 0.01 Level of Significance. The mean values show that Urban higher education teachers have better Classroom Management than Rural higher education teachers at 0.01 Level of Significance.

The t-value of the dimension Interpersonal Relationship based on Locality is 1.099 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Interpersonal Relationship between Urban and Rural teachers in higher education at 0.05 level.

The t-value of the dimension Teacher Characteristics based on Locality is 0.744 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Teacher Characteristics between Urban and Rural teachers in higher education at 0.05 level.

Hypothesis 7: There is no significant difference in Teaching Effectiveness based on Type of Management.

To test hypothesis 7, a t-test was used on the Teaching Effectiveness scores of government and private higher education teachers and the result is presented in the

table 4.23.

Table 4.23

Mean, SD and t-values of Teaching Effectiveness based on Type of Management

Variable	Group	N	Mean	SD	t-value	Remarks
Teaching Effectiveness	Govt	92	127.63	8.312	3.284	**S
	Private	208	124.23	8.169		

** S- significant at the 0.01 level

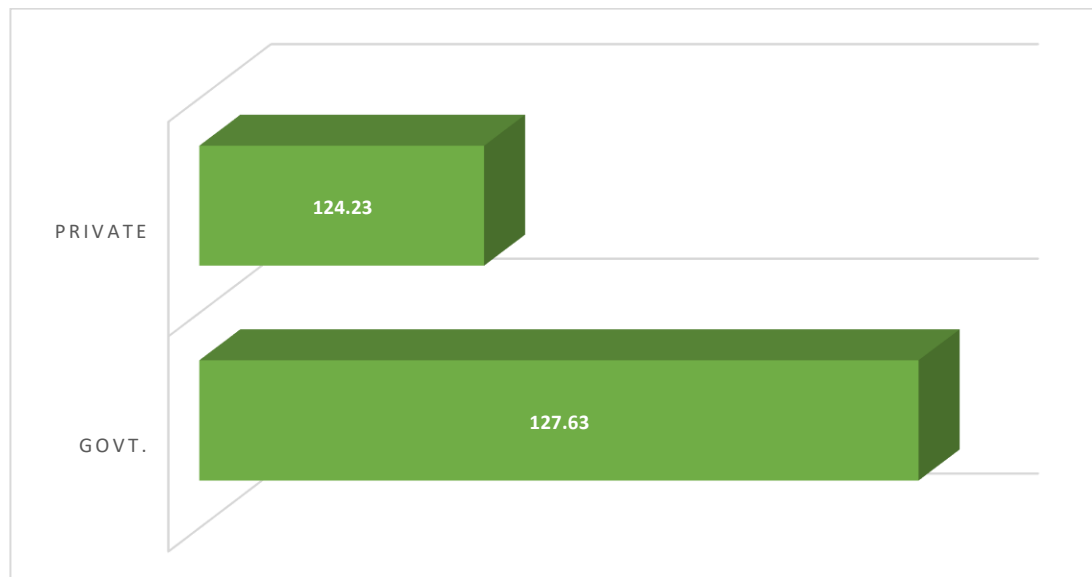
From the results shown in Table 4.23, the t-value of Teaching Effectiveness based on Type of Management is 3.284, and it is significant at 0.01 level. Therefore, the null hypothesis is rejected at the 0.01 Level of Significance.

Hence there is a significant difference in Teaching Effectiveness between government (M=127.63, SD=8.312) and private (M=124.23, SD=8.169) teachers in higher education at the 0.01 Level of Significance ($t(298) = 3.284$).

The mean values show that Government higher education teachers have better Teaching Effectiveness than Private higher education teachers at 0.01 level of significance.

Figure 4.8

Mean of Teaching Effectiveness based on Type of Management



Dimension-Wise Scores of Teaching Effectiveness based on Type of Management

The t-test was employed on the scores of the dimensions of Teaching Effectiveness based on Type of Management of higher education teachers, and the

result is presented in the table 4.24.

Table 4.24

Dimension-Wise Scores of Teaching Effectiveness based on Type of Management

Variables		Govt. (1)	Private (2)	t- value	Remark
Academic and Professional Knowledge	Mean	27.03	26.05	3.102	**S
	SD	2.451	2.677		
Preparation and Presentation	Mean	28.44	27.53	2.793	**S
	SD	2.632	2.531		
Classroom Management	Mean	30.42	29.55	2.613	**S
	SD	2.781	2.359		
Interpersonal Relationship	Mean	15.18	15.04	0.820	*NS
	SD	1.442	1.163		
Teacher Characteristics	Mean	26.56	26.06	1.859	*NS
	SD	2.141	2.162		

From the results presented in the table 4.24, the following interpretations for the dimensions of Teaching Effectiveness are drawn:

The t-value of the dimension, Academic and Professional Knowledge based on Type of Management is 3.102 and it is significant at the 0.01 level. Hence, there is a significant difference in Academic and Professional Knowledge between Government and Private higher education teachers at 0.01 Level of Significance.

The mean values show that the Government higher education teachers have better Academic and Professional Knowledge than the Private higher education teachers at 0.01 Level of Significance.

The t-value of the dimension Preparation and Presentation based on Type of Management is 2.793 and it is significant at the 0.01 level. Hence, there is a significant difference in Preparation and Presentation between Government and Private higher education teachers at 0.0 Level of Significance. The mean values show that Government higher education teachers have better Preparation and Presentation than Private higher education teachers at 0.01 Level of Significance.

The t-value of the dimension Classroom Management based on Type of Management is 2.613 and it is significant at the 0.01 level. Hence, there was a

significant difference in Classroom Management between Government and Private higher education teachers at 0.01 Level of Significance. The mean values show that the Government higher education teachers have better Classroom Management than the Private higher education teachers at 0.01 Level of Significance.

The t-value of the dimension Interpersonal Relationship based on Type of Management is 0.820 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Interpersonal Relationships between Government and Private higher education teachers at 0.05 level.

The t-value of the dimension Teacher Characteristics based on Type of Management is 1.859 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Teacher Characteristics between Government and Private teachers in higher education at 0.05 level.

Hypothesis 8: There is no significant difference in Teaching Effectiveness based on Academic Stream.

To test hypothesis 8, a t-test was used on the Teaching Effectiveness scores of Arts and Science higher education teachers and the results is presented in the table 4.25.

Table 4.25

Mean, SD and t-values of Teaching Effectiveness based on Academic Stream

Variable	Group	N	Mean	SD	t-value	Remarks
Teaching Effectiveness	Art	168	126.64	8.569	0.587	*NS
	Science	132	127.23	8.557		

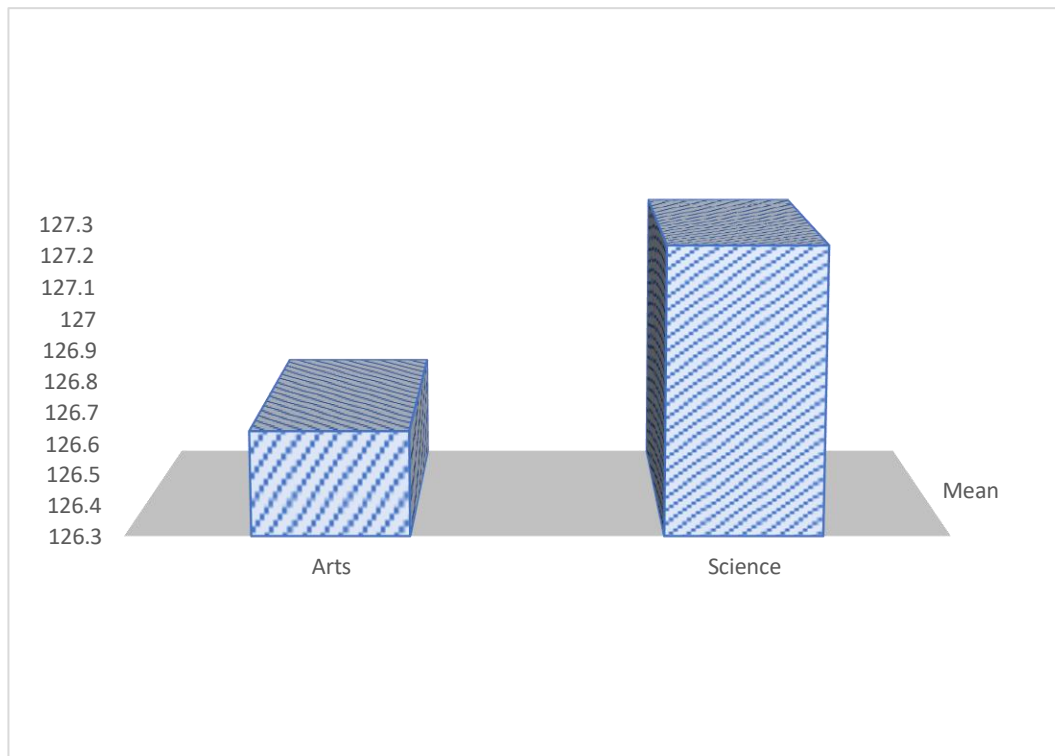
** S- significant at the 0.05 level

From the results shown in Table 4.25, the t-value of Teaching Effectiveness based on Stream is 0.587, and it is not significant at the 0.05 level. Therefore, the null hypothesis is accepted at the 0.05 level.

Hence there is no significant difference in Teaching Effectiveness between arts (M=126.64, SD=8.569) and science (M=127.23, SD=8.557) higher education teachers at the 0.05 Level of Significance ($t(298) = 0.587, p = .558$).

Figure 4.9

Mean of Teaching Effectiveness based on Academic Stream



Dimension-Wise Scores of Teaching Effectiveness based on Academic Stream

The t-test was employed on the scores of the dimensions of Teaching Effectiveness based on Academic Stream of higher education teachers, and the result is presented in table 4.26.

Table 4.26

Dimension-Wise Scores of Teaching Effectiveness based on Academic Stream

Variables		Arts (1)	Science (2)	t- value	Remark
Academic and Professional Knowledge	Mean	26.93	26.95	0.058	*NS
	SD	2.938	2.475		
Preparation and Presentation	Mean	28.31	28.31	0.942	*NS
	SD	2.711	2.621		
Classroom Management	Mean	30.13	30.25	0.379	*NS
	SD	2.728	2.663		
Interpersonal Relationship	Mean	15.23	15.20	0.185	*NS
	SD	1.339	1.389		
Teacher Characteristics	Mean	26.34	26.52	0.714	*NS
	SD	2.073	2.372		

From the results presented in the table 4.26, the following interpretations for the dimensions of Teaching Effectiveness are drawn:

The t-value of the dimension, Academic and Professional Knowledge based on Academic Stream is 0.058 and it is not significant at the 0.05 level. Hence, there is no significant difference in Academic and Professional Knowledge between Arts and Science higher education teachers at 0.05 Level of Significance.

The t-value of the dimension, Preparation and Presentation based on Academic Stream is 0.942 and it is not significant at the 0.05 level. Hence, there is no significant difference in Preparation and Presentation between Arts and Science higher education teachers at 0.05 Level of Significance.

The t-value of the dimension, Classroom Management based on Academic Stream is 0.379 and it is not significant at the 0.05 level. Hence, there is no significant difference in Classroom Management between Arts and Science higher education teachers at 0.05 Level of Significance.

The t-value of the dimension Interpersonal Relationship based on Academic Stream is 0.185 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Interpersonal Relationship between Arts and Science higher education teachers at 0.05 Level of Significance.

The t-value of the dimension Teacher Characteristics based on Academic Stream is 0.714 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Teacher Characteristics between Arts and Science higher education teachers at 0.05 Level of Significance.

Objective 5: To investigate the difference in Professional Commitment based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management, and Academic Stream

Hypothesis 9: There is no significant difference in Professional Commitment based on Gender.

To test hypothesis 9, a t-test was performed on the Professional Commitment scores of male and female higher education teachers, and the result is presented in table 4.27.

Table 4.27

Mean, SD, and t-values of Professional Commitment based on Gender

Variable	Group	N	Mean	SD	t-value	Remarks
Professional Commitment	Male	138	224.56	26.224	2.718	**S
	Female	162	216.61	24.092		

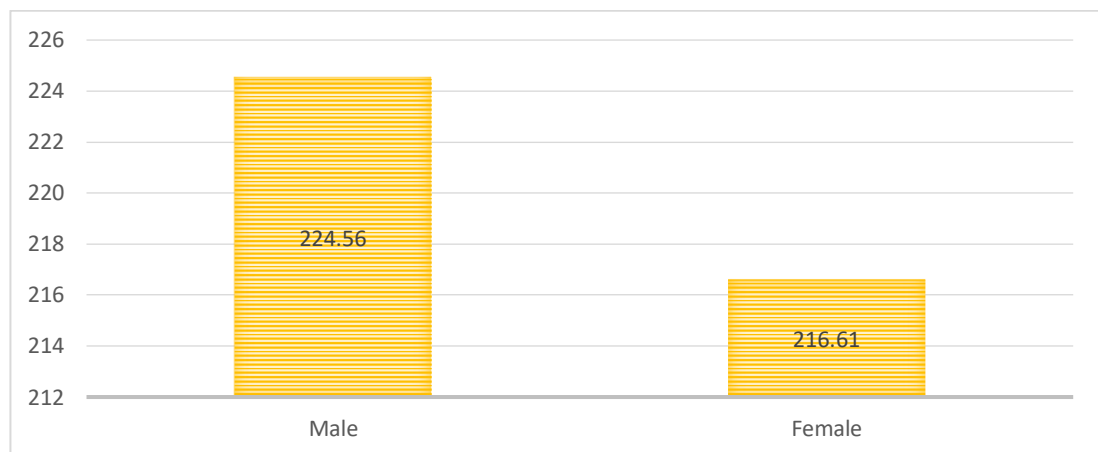
** S- significant at the 0.01 level

From the results shown in the table 4.27, the t-value of Professional Commitment based on Gender is 2.718, and it is significant at the 0.01 level. Therefore, the null hypothesis is rejected at 0.01 Level of Significance. Hence, there is a significant difference in Professional Commitment between male (M=224.56, SD=26.224) and female (M=216.61, SD=24.092) teachers in higher education at 0.01 Level of Significance ($t(298) = 2.718$).

The mean values show that the male teachers in higher education have more Professional Commitment than the female teachers in higher education at 0.01 Level of Significance.

Figure 4.10

Mean of Professional Commitment based on Gender



The t-test was employed on the scores of the dimensions of Professional Commitment based on Gender of higher education teachers, and the result is presented in table 4.28.

Table 4.28

Dimension-wise Scores of Professional Commitment based on Gender

Variables		Male (1)	Female (2)	t- value	Remark
Commitment to the Learner	Mean	49.03	48.09	1.392	*NS
	SD	5.731	5.939		
Commitment to the Society	Mean	37.88	37.17	0.884	*NS

	SD	7.43	6.309		
Commitment to the Profession	Mean	36.12	33.43	5.470	**S
	SD	4.463	3.982		
Commitment to Excellence for Professional Actions	Mean	54.35	53.4	1.201	*NS
	SD	7.173	6.414		
Commitment to Basic Values	Mean	47.19	44.52	4.121	**S
	SD	5.587			

From the results presented in the table 4.28, the following interpretations for Professional Commitment are drawn:

The t-value of the dimension Commitment to the Learner based on Gender is 1.392 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Commitment to the Learner between Male and Female teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Commitment to the Society based on Gender is 0.884 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Commitment to the Society between Male and Female teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension, Commitment to the Profession based on Gender is 5.470 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to the Profession between Male and Female teachers in higher education at 0.01 Level of Significance. The mean values show that the male teachers in higher education have better Commitment to the Profession than the female teachers in higher education at 0.01 Level of Significance.

The t-value of the dimension Commitment to Excellence for Professional Actions based on Gender is 1.201 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Commitment to Excellence for Professional Actions between Male and Female teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Commitment to Basic Values based on Gender is 4.121 and it is significant at the 0.01 level. Hence, there was a significant difference in Commitment to Basic Values between male and female teachers in higher education at 0.01 Level of Significance. The mean values show that the male

teachers in higher education have better Commitment to Basic Values than the female teachers in higher education at 0.01 Level of Significance.

Hypothesis 10: There is no significant difference in Professional Commitment based on Age.

To test hypothesis 10, the higher education teachers were divided into groups i.e. below 30 years, 31- 40 years, and above 41 years. One-way ANOVA was employed on the Professional Commitment scores concerning the age of higher education teachers and the result is presented in table 4.29

Table 4.29

ANOVA scores on Professional Commitment based on Age

Variable	Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.
Professional Commitment	Between Groups	10226.997	2	5113.499	8.504	**Significant
	Within Groups	178589.253	297	601.311		
	Total	188816.250	299			

From the results presented in the table 4.29, the F-ratio of Professional Commitment with respect to Age is 8.504, and the p-value is less than 0.01. Therefore, the null hypothesis is rejected at the 0.01 Level of Significance. Hence, there is a significant difference in professional commitment between the higher education teachers below 30 years, 31-40 years and 41 years and above at the 0.01 Level of Significance.

Post Hoc tests of Professional Commitment

Since there exists a significant difference in Professional Commitment based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the result is presented in the table 4.30

Table 4.30

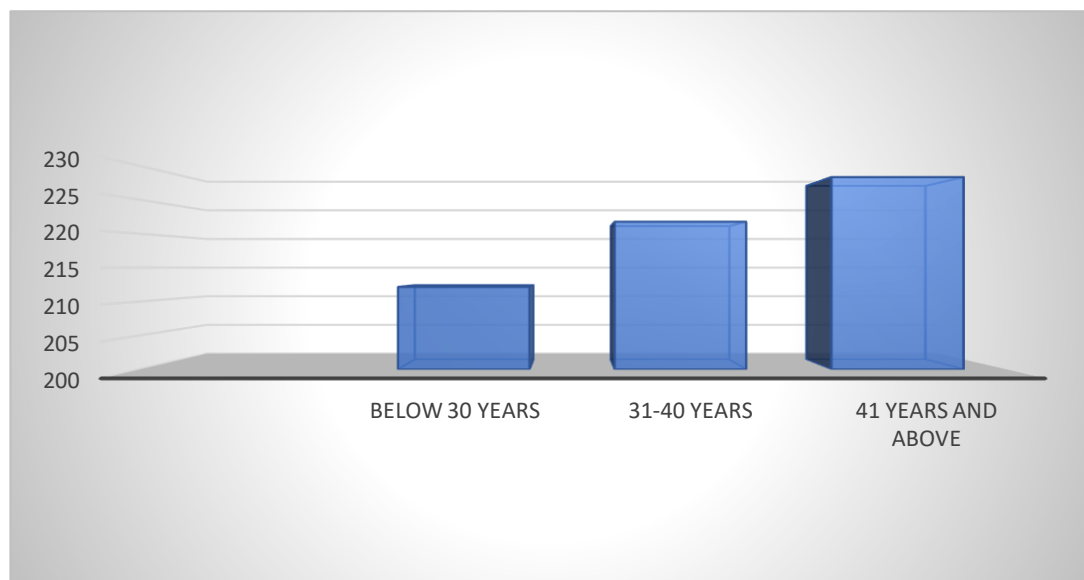
Homogeneous Subset of Post Hoc tests of Professional Commitment based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	212.15	28.740	212.15	
31-40 years	148	221.75	22.217		221.75
41 years and above	68	228.31	23.651		228.31
Sig.				1.000	.174

From table 4.30, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age 31-40 years and 41 years and above differs in the Professional Commitment with the higher education teachers with age below 30 years. From the mean values of Professional Commitment, it is clear that higher education teachers aged 31-40 years and above 41 years have more Professional Commitment than higher education teachers of age below 30 years.

Figure 4.11

Mean of Professional Commitment based on Age



Dimension-Wise ANOVA Scores of Professional Commitment based on Age

Table 4.31

Dimension-Wise ANOVA Scores of Professional Commitment based on Age

Variable	Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.
Commitment to the Learner	Between Groups	460.179	2	230.090	7.005	**S
	Within Groups	9755.487	297	32.847		
	Total	10215.667	299			
Commitment to the Society	Between Groups	483.017	2	241.509	5.300	**S
	Within Groups	13533.129	297	45.566		
	Total	14016.147	299			
Commitment to the Profession	Between Groups	325.972	2	162.986	9.692	**S
	Within Groups	4994.278	297	16.816		
	Total	5320.250	299			
Commitment to Excellence for Professional Actions	Between Groups	438.390	2	219.195	4.891	**S
	Within Groups	13309.930	297	44.815		
	Total	13748.320	299			
Commitment to Basic Values	Between Groups	417.143	2	208.571	6.911	**S
	Within Groups	8963.444	297	30.180		
	Total	9380.587	299			

From the results presented in the table 4.31, the following interpretations for

the dimensions of Professional Commitment are drawn:

The F - ratio of the dimension, Commitment to the Learner based on Age is 7.005 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to the Learner of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

The F - ratio of the dimension Commitment to the Society based on Age is 5.300 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to the Society of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

The F - ratio of the dimension Commitment to the Profession based on Age is 9.629 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to the Profession of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

The F - ratio of the dimension Commitment to Excellence for Professional Actions based on Age is 4.891 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to Excellence for Professional Actions of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

The F - ratio of the dimension Commitment to Basic Values based on Age is 6.911 and it is significant even at the 0.01 level. Hence, there is a significant difference in of higher education teachers Commitment to Basic Values based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

Post Hoc tests of the dimension: Commitment to the Learner

Since there exists a significant difference in the dimension, Commitment to the Learner based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the results are presented in the table 4.32

Table 4. 32

Homogeneous Subset of Post Hoc tests of the dimension, Commitment to the Learner based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	47.06	6.440	47.06	
31-40 years	148	48.64	5.445	48.64	48.64
41 years and above	68	50.56	5.401		50.56
Sig.				.155	.066

From table 4.32, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age below 30 years differs in the dimension Commitment to the Learner with the higher education teachers 41 years and above. From the mean values of Commitment to the Learner, it is clear that higher education teachers aged 41 years and above have more Commitment to the Learner than higher education teachers of age below 30 years.

Post Hoc tests of the dimension: Commitment to the Society

Since there exists a significant difference in the dimension, Commitment to the Society based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the results is presented in the table 4.33.

Table 4.33

Homogeneous Subset of Post Hoc tests of the dimension, Commitment to the Society based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	35.57	7.887	35.57	
31-40 years	148	38.09	6.076		38.09
41 years and above	68	38.82	6.629		38.82
Sig.				1.000	.749

From table 4.33, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age below 30 years differs in the dimension Commitment to the Society with the higher education teachers 31-40 years and 41 years and above. From the mean values of Commitment to the Society, it is clear that higher education teachers aged 31-40 years and 41 years and above have more

Commitment to the Society than higher education teachers of age below 30 years.

Post Hoc tests of the dimension: Commitment to the Profession

Since there exists a significant difference in the dimension, Commitment to the Profession based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the result is presented in the table 4.34.

Table 4. 34

Homogeneous Subset of Post Hoc tests of the dimension, Commitment to the Profession based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	33.45	4.598	33.45	
31-40 years	148	34.73	3.969	34.73	
41 years and above	68	36.40	3.714		36.40
Sig.				.094	1.000

From table 4.34, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age below 30 years and 31-40 years differs in the dimension Commitment to the Profession with the higher education teachers 41 years and above. From the mean values of Commitment to the Profession, it is clear that higher education teachers aged 41 years and above have more Commitment to the Profession than higher education teachers of age below 30 years and 31-40 years.

Post Hoc tests of the dimension: Commitment to Achieve Excellence for Professional Actions.

Since there exists a significant difference in the dimension, Commitment to Achieve Excellence for Professional Actions based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the result is presented in the table 4.35.

Table 4.35

Homogeneous Subset of Post Hoc tests of the dimension, Commitment to Achieve Excellence for Professional Actions based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05
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				1	2
Below 30 years	84	52.11	7.763	52.11	
31-40 years	148	54.08	6.044	54.08	54.08
41 years and above	68	55.46	6.623		55.46
Sig.				.120	.354

From table 4.35, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age below 30 years differs in the dimension Commitment to Achieve Excellence for Professional Actions with the higher education teachers with age 41 years and above. From the mean values of Commitment to Achieve Excellence for Professional Actions, it is clear that higher education teachers aged 41 years and above have more Commitment to Achieve Excellence for Professional Actions than higher education teachers of age below 30 years.

Post Hoc tests of the dimension: Commitment to Basic Values

Since there exists a significant difference in the dimension, Commitment to Basic Values based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the results is presented in the table 4.36.

Table 4. 36

Homogeneous Subset of Post Hoc tests of the dimension, Commitment to Basic Values based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	43.96	6.229	43.96	
31-40 years	148	46.20	5.043		46.20
41 years and above	68	47.07	5.470		47.07
Sig.				1.000	.538

From table 4.36, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age below 30 years differs in the dimension Commitment to Basic Values with the higher education teachers 31-40 years and 41 years and above. From the mean values of Commitment to Basic Values, it is clear that higher education teachers aged 31-40 years and 41 years and above have more

Commitment to Basic Values than higher education teachers of age below 30 years.

Hypothesis 11: There is no significant difference in Professional Commitment based on Teaching Experience.

To test hypothesis 11, the higher education teachers were divided into groups i.e. below 5 years, 6-10 years, 11- 20 years and above 21 years. ANOVA was employed on the Professional Commitment scores concerning the teaching experience of higher education teachers and the result is presented in the table 4.37.

Table 4. 37

ANOVA scores on Professional Commitment based on Teaching Experience

Variable	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Professional Commitment	Between Groups	8726.555	3	2908.852	4.781	**Significant
	Within Groups	180089.695	296	608.411		
	Total	188816.250	299			

From the results presented in the table 4.37, the F-ratio of Professional Commitment for Teaching Experience is 4.781, and it is significant at 0.01 level.

Therefore, the null hypothesis is rejected at 0.01 Level of Significance. Hence, there is a significant difference in Professional Commitment between higher education teachers based on teaching experience i.e., below 5 years, 6-10 years, 11-20 years and above 21 years.

Post Hoc tests of Professional Commitment

Since there exists a significant difference in Professional Commitment based on Teaching Experience, the Post Hoc test is employed to figure out which of the

groups based on Teaching Experience differ and the result is presented in the table 4.38.

Table 4.38

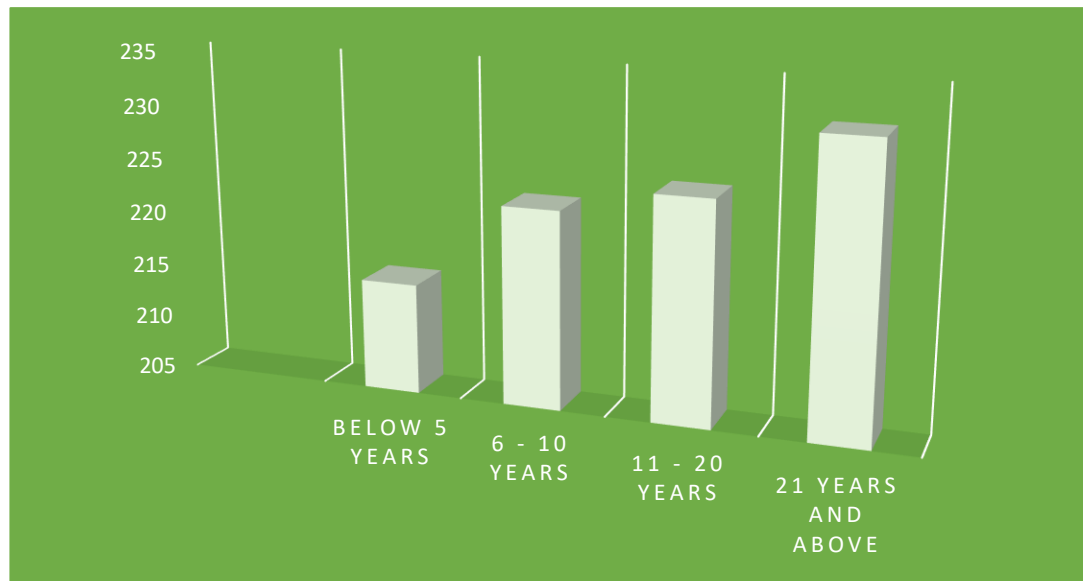
Homogeneous Subset of Post Hoc tests of Professional Commitment based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	215.12	26.717	215.12	
6 - 10 years	71	223.07	21.541	223.07	223.07
11 - 20 years	67	225.22	24.595	225.22	225.22
21 years and above	24	231.25	20.745		231.25
Sig.				.164	.336

From table 4.38, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with Less than 5 years of teaching experience differs in the Professional Commitment with the higher education teachers with teaching experience of 21 years and above. From the mean values of Professional Commitment, it is clear that higher education teachers with teaching experience of 21 years and above have more Professional Commitment than higher education teachers with Less than 5 years of teaching experience.

Figure 4.12

Mean of Professional Commitment based on Teaching Experience



Dimension-Wise ANOVA Scores of Professional Commitment based on Teaching Experience

One-way ANOVA was employed on the scores of dimensions of Professional Commitment based on the Teaching Experience of higher education teachers and the result is presented in the table 4.39

Table 4. 39

Dimension-Wise Scores of Professional Commitment based on Teaching Experience

Variable	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Commitment to the Learner	Between Groups	391.697	3	130.566	3.934	**S
	Within Groups	9823.970	296	33.189		
	Total	10215.667	299			
Commitment to the Society	Between Groups	435.200	3	145.067	3.162	**S
	Within Groups	13580.947	296	45.882		
	Total	14016.147	299			
Commitment to	Between	332.246	3	110.749	6.572	**S

the Profession	Groups					
	Within Groups	4988.004	296	16.851		
	Total	5320.250	299			
Commitment to Excellence for Professional Actions	Between Groups	469.050	3	156.350	2.485	*NS
	Within Groups	13279.270	296	44.862		
	Total	13748.320	299			
Commitment to Basic Values	Between Groups	202.044	3	67.348	2.172	*NS
	Within Groups	9178.542	296	31.009		
	Total	9380.587	299			

From the results presented in the table 4.39 the following interpretations for the dimensions of Professional Commitment are drawn:

The F - ratio of the dimension, Commitment to the Learner based on Teaching Experience is 3.934 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to the Learner based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.01 Level of Significance.

The F - ratio of the dimension, Commitment to the Society based on Teaching Experience is 3.162 and it is significant at the 0.05 level. Hence, there is a significant difference in Commitment to the Society based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 Level of Significance.

The F - ratio of the dimension, Commitment to the Profession based on Teaching Experience is 6.572 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to the Profession based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.01 Level of Significance.

The F - ratio of the dimension, Commitment to Excellence for Professional

Actions based on Teaching Experience is 2.485 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Commitment to Excellence for Professional Actions based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 Level of Significance.

The F - ratio of the dimension Commitment to Basic Values based on Age is 2.172 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Commitment to Basic Values based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 Level of Significance.

Post Hoc tests of the dimension: Commitment to the Learner

Since there exists a significant difference in Commitment to the Learner based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on Teaching Experience differ and the results is presented in the table 4.40

Table 4.40

Homogeneous Subset of Post Hoc tests of Commitment to the Learner based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	47.56	6.069	47.56	
5 - 10 years	71	49.03	5.286	49.03	49.03
11 - 20 years	67	49.46	5.801	49.46	49.46
21 years and above	24	51.33	5.113		51.33
Sig				.339	.180

From table 4.40, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with Less than 5 years of teaching experience differs in the Commitment to the Learner with the higher education teachers with teaching experience of 21 years and above. From the mean values of Commitment to the Learner, it is clear that higher education teachers with teaching experience of 21 years and above have more Commitment to the Learner than higher education

teachers with Less than 5 years of teaching experience.

Post Hoc tests: Commitment to the Society

Since there exists a significant difference in Commitment to the Society based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on Teaching Experience differ and the result is presented in the table 4.41.

Table 4. 41

Homogeneous Subset of Post-Hoc tests of Commitment to the Society based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	36.35	7.449	36.35	
6 - 10 years	71	38.35	5.599	38.28	38.28
11 - 20 years	67	38.28	6.826	38.35	38.35
21 years and above	24	40.08	5.555		40.08
Sig.				.439	.534

From table 4.41, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with Less than 5 years of teaching experience differs in the Commitment to the Society with the higher education teachers with teaching experience of 21 years and above. From the mean values of Commitment to the Society, it is clear that higher education teachers with teaching experience of 21 years and above have more Commitment to the Society than higher education teachers with Less than 5 years of teaching experience.

Post Hoc tests: Commitment to the Profession

Since there exists a significant difference in Commitment to the Profession based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on Teaching Experience differ and the result is presented in the table 4.42.

Table 4. 42

Homogeneous Subset of Post Hoc tests of Commitment to the Profession based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	33.72	4.284	33.72	
6- 10 years	71	35.04	3.860	35.04	35.04
11 - 20 years	67	35.84	4.270		35.84
21 years and above	24	36.79	3.148		36.79
Sig.				.361	.137

From table 4.42, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with Less than 5 years of teaching experience differs in the Commitment to the Profession with the higher education teachers with teaching experience of 11 - 20 years and 21 years and above. From the mean values of Commitment to the Profession, it is clear that higher education teachers with teaching experience of 11 - 20 years and 21 years and above have more Commitment to the Profession than higher education teachers with Less than 5 years of teaching experience.

Hypothesis 12: There is no significant difference in Professional Commitment based on Locality.

To test hypothesis 12, a t-test was used on the Professional Commitment scores of urban and Rural higher education teachers, and the result is presented in the table 4.43.

Table 4. 43

Mean, SD and t-values of Professional Commitment based on Locality

Variable	Group	N	Mean	SD	t-value	Remarks
Professional Commitment	Urban	90	226.64	23.755	2.781	**S
	Rural	210	217.94	25.304		

** S- significant at the 0.01 level

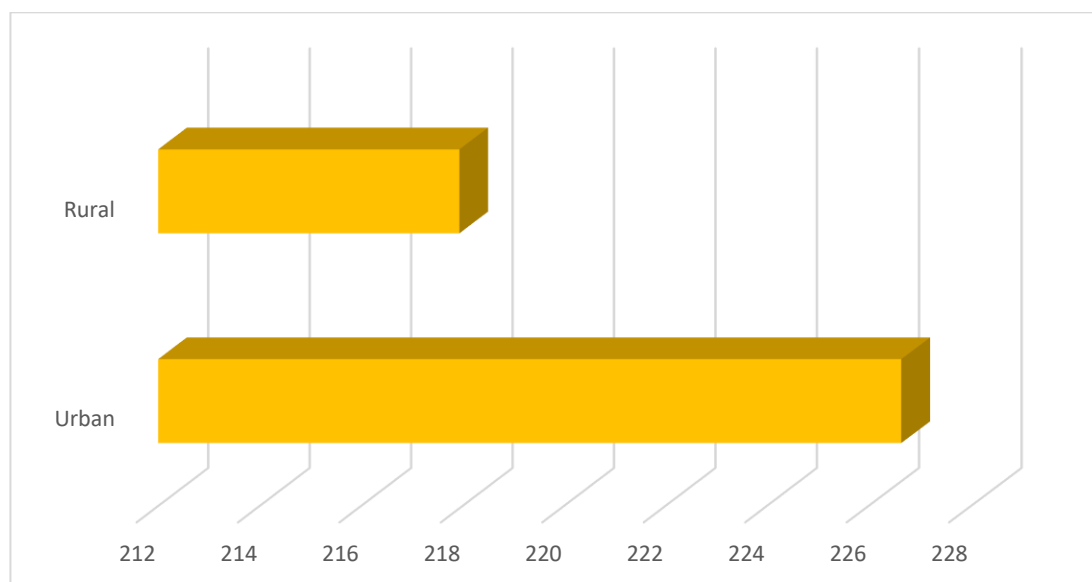
From the results shown in the table 4.43, the t-value of Professional

Commitment based on Locality is 2.781, and it is significant at the 0.01 level. Therefore, the null hypothesis was rejected at 0.01 Level of Significance. Hence, there is a significant difference in Professional Commitment between Urban (M=226.64, SD=23.755) and Rural (M=217.94, SD=25.304) teachers in higher education at 0.01 Level of Significance ($t(298) = 2.781$).

The mean values show that the Urban teachers in higher education have more Professional Commitment than the Rural teachers in higher education at 0.01 Level of Significance.

Figure 4.13

Mean of Professional Commitment based on Locality



Dimension-Wise Scores of Professional Commitment based on Locality

The t-test was employed on the scores of the dimensions of Professional Commitment based on Locality of higher education teachers, and the results is presented in the table 4.44.

Table 4.44

Dimension-wise Scores of Professional Commitment based on Locality

Variables		Urban (1)	Rural (2)	t- value	Remark
Commitment to the Learner	Mean	49.77	48.15	2.213	**S
	SD	5.611	5.889		
Commitment to the Society	Mean	39.34	36.79	3.006	**S

	SD	6.321	6.934		
Commitment to the Profession	Mean	35.11	34.60	0.971	*NS
	SD	4.239	4.210		
Commitment to Excellence for Professional Actions	Mean	55.54	53.11	2.885	**S
	SD	6.858	6.631		
Commitment to Basic Values	Mean	46.88	45.30	2.251	**S
	SD	4.998	5.787		

From the results presented in the table 4.44, the following interpretations for the dimensions of Professional are drawn:

The t-value of the dimension, Commitment to the Learner based on Locality is 2.213 and it is significant at the 0.05 level. Hence, there is a significant difference in Commitment to the Learner between Urban and Rural teachers in higher education at 0.05 Level of Significance. The mean values show that the Urban teachers in higher education have better Commitment to the Learner than the Rural teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension, Commitment to the Society based on Locality is 3.006 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to the Society between Urban and Rural teachers in higher education at 0.01 Level of Significance. The mean values show that the Urban teachers in higher education have better Commitment to the Society than the Rural teachers in higher education at 0.01 Level of Significance.

The t-value of the dimension Commitment to Profession based on Locality is 0.971 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Commitment to Profession between Urban and Rural teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Commitment to Excellence for Professional Actions based on Locality is 2.885 and it is significant at the 0.01 level. Hence, there was a significant difference in Commitment to Excellence for Professional Actions between Urban and Rural teachers in higher education at 0.01 Level of Significance. The mean values show that the Urban teachers in higher education have better Commitment to Excellence for Professional Actions than the Rural teachers in higher education at 0.01 Level of Significance.

The t-value of the dimension Commitment to Basic Values based on Locality is 2.251 and it is significant at the 0.05 level. Hence, there was a significant difference in Commitment to Basic Values between Urban and Rural teachers in higher education at 0.05 Level of Significance. The mean values show that the Urban teachers in higher education have better Commitment to Basic Values than the Rural teachers in higher education at 0.05 Level of Significance.

Hypothesis 13: There is no significant difference in Professional Commitment based on Type of Management.

To test hypothesis 13, a t-test is used on the Professional Commitment scores of Government and Private higher education teachers, and the result is presented in the table 4.45.

Table 4. 45

Mean, SD and t-values of Professional Commitment based on Type of Management

Variable	Group	N	Mean	SD	t-value	Remarks
Professional Commitment	Govt.	92	227.90	26.869	3.653	**S
	Private	208	215.95	24.364		

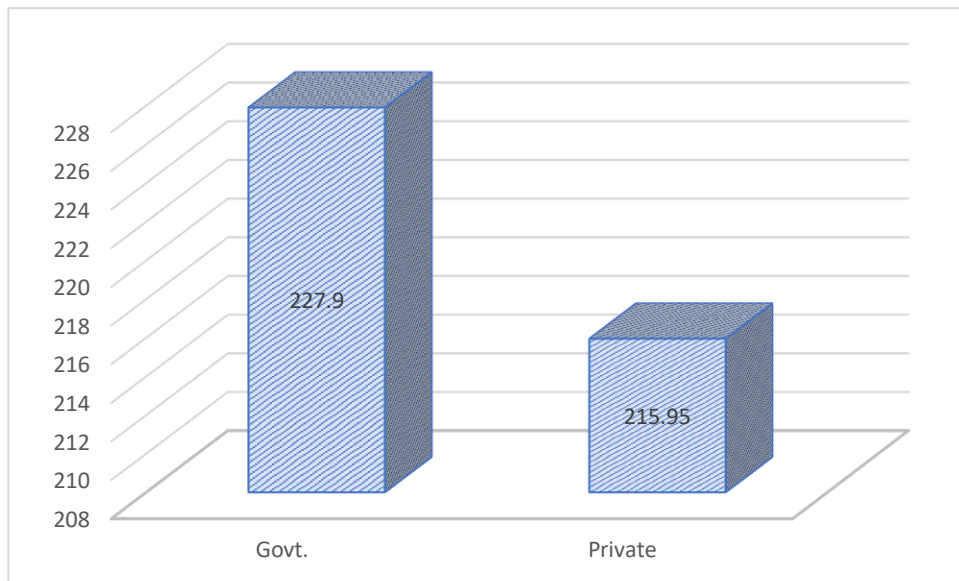
** S- significant at the 0.01 level

From the results shown in the table 4.45, the t-value of Professional Commitment based on Type of Management is 3.653, and it is significant at the 0.01 level. Therefore, the null hypothesis is rejected at 0.01 Level of Significance. Hence, there is a significant difference in Professional Commitment between Government (M=227.90, SD=26.869) and Private (M=215.95, SD=24.364) teachers in higher education at 0.01 Level of Significance ($t(298) = 3.653$).

The mean values show that the Government teachers in higher education have more Professional Commitment than the Private teachers in higher education at 0.01 Level of Significance.

Figure 4.14

Mean of Professional Commitment based on Type of Management



Dimension-wise Scores of Professional Commitment based on Type of Management

The t-test is employed on the scores of the dimensions of Professional Commitment based on Type of Management of higher education teachers, and the results were presented in the table 4.46.

Table 4.46

Dimension-wise Scores of Professional Commitment based on Type of Management

Variables		Govt. (1)	Private (2)	t- value	Remark
Commitment to the Learner	Mean	50.02	47.46	3.385	**S
	SD	6.184	5.696		
Commitment to the Society	Mean	40.18	37.72	2.778	**S
	SD	7.238	6.678		
Commitment to the Profession	Mean	35.72	33.32	4.328	**S
	SD	4.618	3.966		
Commitment to Excellence	Mean	56.33	52.63	4.386	**S

for Professional Actions	SD	6.698	6.822		
Commitment to Basic Values	Mean	45.65	44.83	1.087	*NS
	SD	6.329	5.263		

From the results presented in the table 4.46, the following interpretations for the dimensions of Professional Commitment are drawn:

The t-value of the dimension, Commitment to the Learner based on Type of Management is 3.385 and it is significant at the 0.05 level. Hence, there is a significant difference in Commitment to the Learner between Government and Private teachers in higher education at 0.05 Level of Significance. The mean values show that the Government teachers in higher education have better Commitment to the Learner than the Private teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension, Commitment to the Society based on Type of Management is 2.778 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to the Society between Government and Private teachers in higher education at 0.01 Level of Significance. The mean values show that the Government teachers in higher education have better Commitment to the Society than the Private teachers in higher education at 0.01 Level of Significance.

The t-value of the dimension Commitment to Profession based on Type of Management is 4.328 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to Profession between Government and Private teachers in higher education at 0.01 Level of Significance. The mean values show that the Government teachers in higher education have better Commitment to Profession than the Private teachers in higher education at 0.01 Level of Significance.

The t-value of the dimension Commitment to Excellence for Professional Actions based on Type of Management is 4.386 and it is significant at the 0.01 level. Hence, there is a significant difference in Commitment to Excellence for Professional Actions between Government and Private teachers in higher education at 0.01 Level of Significance. The mean values show that the Government teachers in higher education have better Commitment to Excellence for Professional Actions than the

Private teachers in higher education at 0.01 Level of Significance.

The t-value of the dimension Commitment to Basic Values based on Type of Management is 1.087 and it is not significant at the 0.05 level. Hence, there is no significant difference in Commitment to Basic Values between Government and Private teachers in higher education at 0.05 Level of Significance.

Hypothesis 14: There is no significant difference in Professional Commitment based on Academic Stream.

To test hypothesis 14, a t-test is used on the Professional Commitment scores of Arts and Science higher education teachers, and the result is presented in the table 4.47.

Table 4.47

Mean, SD and t-values of Professional Commitment based on Academic Stream

Variable	Group	N	Mean	SD	t-value	Remarks
Professional Commitment	Arts	168	220.74	25.446	0.306	*NS
	Science	132	220.31	24.816		

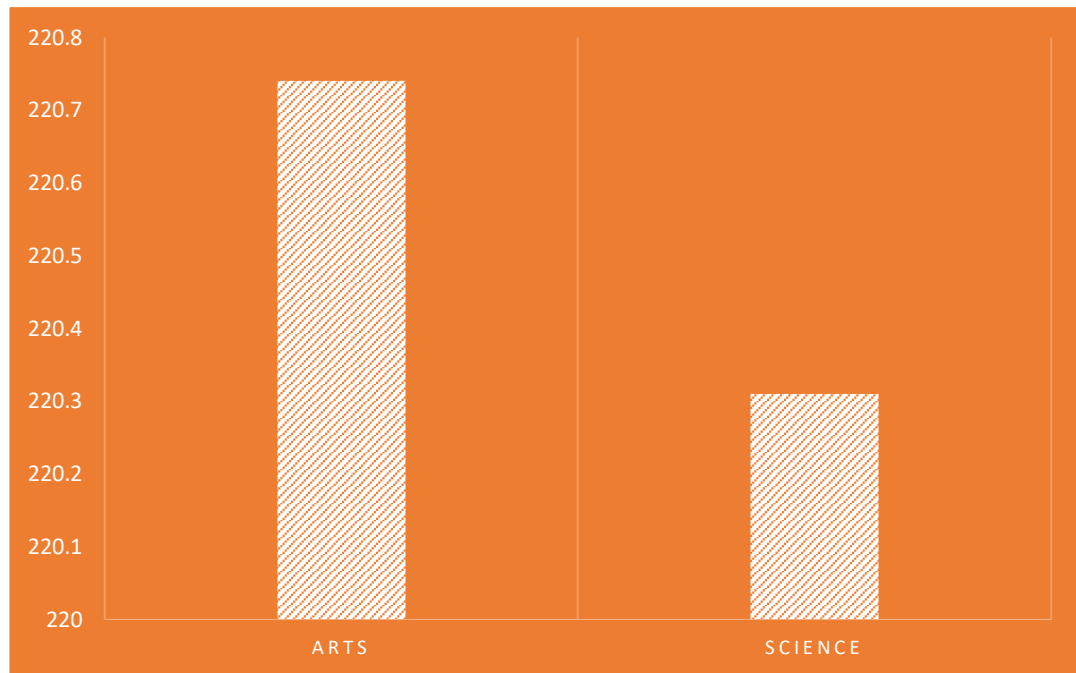
** S- significant at the 0.05 level

From the results shown in Table 4.47, the t-value of Professional Commitment based on Academic Stream is 0.306, and it is not significant at the 0.05 level. Therefore, the null hypothesis is accepted at the 0.05 Level of Significance.

Hence, there is no significant difference in Professional Commitment between Arts (M=220.74, SD = 25.446) and Science (M=220.31, SD=24.816) teachers in higher education at the 0.05 Level of Significance ($t(298) = 0.306$).

Figure 4.15

Mean of Professional Commitment based on Academic Stream



Dimension-wise Scores of Professional Commitment based on Academic Stream

The t-test is employed on the scores of the dimensions of Professional Commitment based on Academic Stream of higher education teachers, and the result is presented in the table 4.48

Table 4. 48

Dimension-wise Scores of Professional Commitment based on Academic Stream

Variables		Arts (1)	Science (2)	t- value	Remark
Commitment to the Learner	Mean	48.54	48.75	1.482	*NS
	SD	6.011	5.648		
Commitment to the Society	Mean	38.07	36.89	1.214	*NS
	SD	6.692	7.008		
Commitment to the Profession	Mean	34.49	35.08	0.019	*NS
	SD	4.268	4.146		
Commitment to Excellence for Professional Actions	Mean	53.83	53.85	0.105	*NS
	SD	6.886	6.671		
Commitment to Basic Values	Mean	45.80	45.73	0.146	*NS
	SD	5.455	5.803		

From the results presented in the table 4.48, the following interpretations for the dimensions of Professional Commitment are drawn:

The t-value of the dimension Commitment to the Learner based on Academic Stream is 1.482 and it is not significant at the 0.05 level. Hence, there is no significant difference in Commitment to the Learner between Arts and Science teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Commitment to the Society based on Academic Stream is 1.214 and it is not significant at the 0.05 level. Hence, there is no significant difference in Commitment to the Society between Arts and Science teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Commitment to Profession based on Academic Stream is 0.019 and it is not significant at the 0.05 level. Hence, there is no significant difference in Commitment to Profession between Arts and Science teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Commitment to Profession based on Academic Stream is 0.105 and it is not significant at the 0.05 level. Hence, there is no significant difference in Commitment to Excellence for Professional Actions between Arts and Science teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Commitment to Basic Values based on Academic Stream is 0.146 and it is not significant at the 0.05 level. Hence, there is no significant difference in Commitment to Basic Values between Arts and Science teachers in higher education at 0.05 Level of Significance.

Objective 6: To investigate the difference in Sense of Responsibility based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream

Hypothesis 15: There is no significant difference in Sense of Responsibility based on Gender.

To test hypothesis 15, a t-test was performed on the Sense of Responsibility scores of male and female higher education teachers, and the result is presented in the table 4.49.

Table 4.49

Mean, SD and t-values of Sense of Responsibility based on Gender

Variable	Group	N	Mean	SD	t-value	Remarks
Sense of Responsibility	Male	138	94.04	15.871	4.259	**S
	Female	162	86.83	14.524		

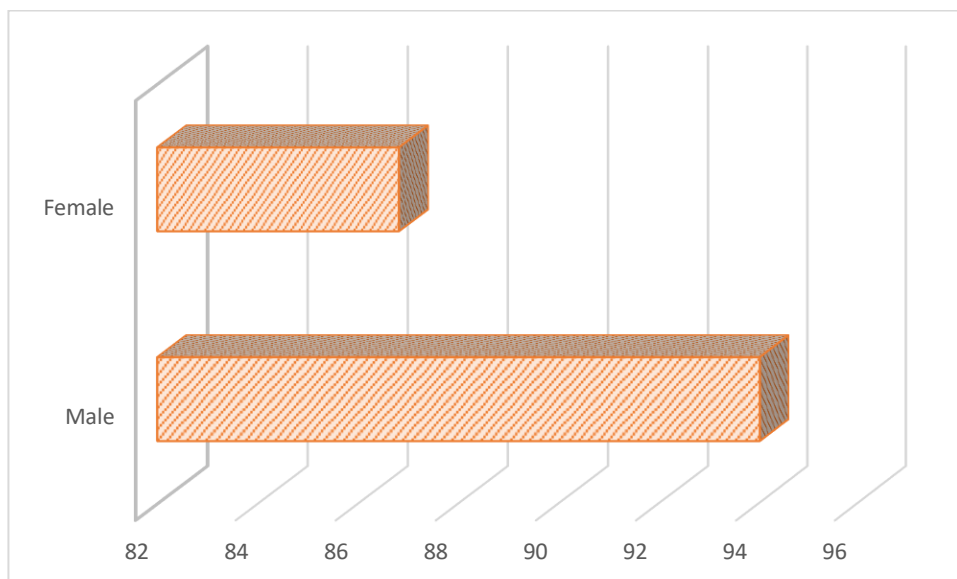
**S - Significant at the 0.01 level (2-tailed)

From the results shown in the table 4.49, the t-value of Sense of Responsibility based on Gender is 4.259, and it is significant at the 0.01 level. Therefore, the null hypothesis is rejected at 0.01 Level of Significance. Hence, there is a significant difference in Sense of Responsibility between male (M=94.04, SD=15.871) and female (M=86.83, SD=14.524) teachers in higher education at 0.01 Level of Significance ($t(298) = 4.259$).

The mean values show that the male teachers in higher education have more Sense of Responsibility than the female teachers in higher education at 0.01 Level of Significance.

Figure 4.16

Mean of Sense of Responsibility based on Gender



The t-test was employed on the scores of the dimensions of Sense of Responsibility based on Gender of higher education teachers, and the result is presented in the table 4.50.

Table 4.50

Dimension-wise Scores of Sense of Responsibility based on Gender

Variables		Male (1)	Female (2)	t- value	Remark
Behaviour of Students	Mean	12.32	9.59	9.790	**S
	SD	2.465	2.341		
Learning Outcomes	Mean	18.62	18.19	0.826	*NS

	SD	4.663	4.271		
Student's Achievement	Mean	21.06	18.98	4.859	**S
	SD	3.902	3.445		
Providing Support	Mean	17.32	16.65	1.680	*NS
	SD	3.487	3.471		
Enhancement of Capacity Building for Students	Mean	15.48	13.96	5.453	**S
	SD	2.424	2.388		
Social and National Goals of Education	Mean	9.24	9.46	0.737	*NS
	SD	2.726	2.394		

From the results presented in the table 4.50, the following interpretations for the dimensions of Sense of Responsibility are drawn:

The t-value of the dimension, Behaviour of Students based on Gender is 9.970 and it is significant at the 0.01 level. Hence, there is a significant difference in Behaviour of Students between Male and Female teachers in higher education at 0.01 Level of Significance. The mean values show that the male teachers in higher education have better Behaviour of Students than the female teachers in higher education at 0.01 Level of Significance.

The t-value of the dimension Learning Outcomes based on Gender is 0.826 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Learning Outcomes between Male and Female teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension, Student's Achievement based on Gender is 4.859 and it is significant at the 0.01 level. Hence, there is a significant difference in Student's Achievement between Male and Female teachers in higher education at 0.01 Level of Significance. The mean values show that the male teachers in higher education have better Student's Achievement than the female teachers in higher education at 0.01 Level of Significance.

The t-value of the dimension Providing Support based on Gender is 1.680 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Providing Support between Male and Female teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Enhancement of Capacity Building for Students

based on Gender is 5.435 and it is significant at the 0.01 level. Hence, there was a significant difference in Enhancement of Capacity Building for Students between male and female teachers in higher education at 0.01 Level of Significance. The mean values show that the male teachers in higher education have better Enhancement of Capacity Building for Students than the female teachers in higher education at 0.01 Level of Significance.

The t-value of the dimension Social and National Goals of Education based on Gender is 0.737 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Social and National Goals of Education between Male and Female teachers in higher education at 0.05 Level of Significance.

Hypothesis 16: There is no significant difference in Sense of Responsibility based on Age.

To test hypothesis 16, the higher education teachers were divided into groups i.e. below 30 years, 31- 40 years, and above 41 years. One-way ANOVA was employed on the Sense of Responsibility scores concerning the age of higher education teachers and the result is presented in table 4.51.

Table 4.51

ANOVA scores on Sense of Responsibility based on Age

Variable	Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.
Sense of Responsibility	Between Groups	1002.368	2	501.184	2.193	** Not Significant
	Within Groups	67876.469	297	228.540		
	Total	68878.837	299			

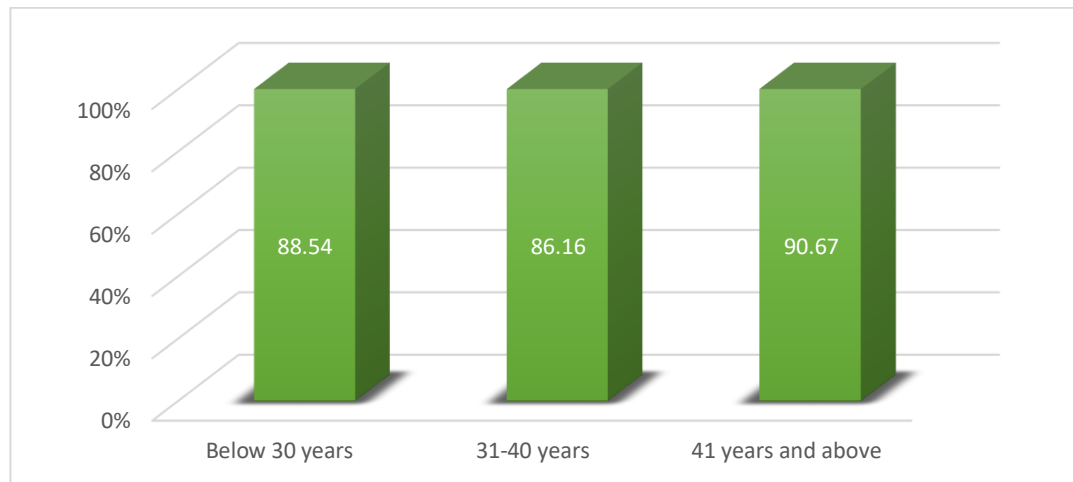
From the results presented in the table 4.51, the F-ratio of Sense of Responsibility with respect to age is 2.193, and it is not significant at 0.05. Therefore, the null hypothesis is accepted at the 0.05 Level of Significance.

Hence, there is no significant difference in Sense of Responsibility between the higher education teachers below 30 years, 31-40 years; and 41 years and above at

the 0.05 Level of Significance.

Figure 4.17

Mean of Sense of Responsibility based on Age



Dimension-Wise ANOVA Scores of Sense of Responsibility based on Age

One-way ANOVA was employed on the scores of dimensions of Sense of Responsibility based on the age of higher education teachers and the result is presented in the table 4.52.

Table 4. 52

Dimension-Wise ANOVA Scores of Sense of Responsibility based on Age

Variable	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Behaviour of Students	Between Groups	71.807	2	35.904	6.333	**S
	Within Groups	1683.723	297	5.669		
	Total	1755.530	299			
Learning Outcomes	Between Groups	36.362	2	18.181	0.916	*NS
	Within Groups	5897.008	297	19.855		
	Total	5933.370	299			
Student's Achievement	Between Groups	102.167	2	51.084	3.891	**S

	Within Groups	3898.750	297	13.127		
	Total	4000.917	299			
Providing Support	Between Groups	49.169	2	24.584	2.050	*NS
	Within Groups	3562.468	297	11.995		
	Total	3611.637	299			
Enhancement of Capcity Building for Students	Between Groups	26.993	2	13.496	2.335	*NS
	Within Groups	1717.007	297	5.781		
	Total	1744.000	299			
Social and National Goals of Education	Between Groups	4.798	2	2.399	.367	*NS
	Within Groups	1940.038	297	6.532		
	Total	1944.837	299			

From the results presented in the table 4.52, the following interpretations for the dimensions of Sense of Responsibility are drawn:

The F - ratio of the dimension, Behaviour of Students based on Age is 6.332 and it is significant at the 0.01 level. Hence, there is a significant difference in Behaviour of Students of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

The F - ratio of the dimension, Learning Outcomes based on Age is 0.916 and it is not significant at the 0.05 level. Hence, there is no significant difference in Learning Outcomes of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

The F - ratio of the dimension, Student's Achievement based on Age is 3.891 and it is significant at the 0.05 level. Hence, there is a significant difference in Student's Achievement of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.05 Level of Significance.

The F - ratio of the dimension, Providing Support based on Age is 2.050 and

it is not significant at the 0.05 level. Hence, there is no significant difference in Providing Support of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

The F - ratio of the dimension, Enhancement of Capacity Building for Students based on Age is 2.335 and it is not significant at the 0.05 level. Hence, there is no significant difference in Enhancement of Capacity Building for Students of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

The F - ratio of the dimension, Social and National Goals of Education based on Age is 0.367 and it is not significant at the 0.05 level. Hence, there is no significant difference in Social and National Goals of Education of higher education teachers based on Age, viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance.

Post Hoc tests of the dimension: Behaviour of Students

Since there exists a significant difference in the dimension, Behaviour of Students based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the result is presented in the table 4.53.

Table 4.53

Homogeneous Subset of Post Hoc tests of the dimension, Behaviour of Students based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	10.00	2.162	10.00	10.00
31-40 years	148	9.51	2.476	9.51	
41 years and above	68	10.75	2.427		10.75
Sig.				.358	.089

From table 4.53, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age 31-40 years differs in the dimension Behaviour of Students with the higher education teachers 41 years and above. From the mean value of Behaviour of Students, it is clear that higher education teachers aged 41 years and above are better with Behaviour of Students than higher education teachers

of age 31-40 years.

Post Hoc tests of the dimension: Student's Achievement

Since there exists a significant difference in the dimension, Student's Achievement based on Age, the Post Hoc test is employed to figure out which of the groups based on age differ and the result is presented in the table 4.54.

Table 4.54

Homogeneous Subset of Post Hoc tests of the dimension, Student's Achievement based on Age

Age	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 30 years	84	19.61	3.174	19.61	
31-40 years	148	19.76	3.568	19.76	
41 years and above	68	21.09	4.217		21.09
Sig.				19.61	

From table 4.54, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with age below 30 years and 31-40 years differs in the dimension Student's Achievement with the higher education teachers 41 years and above. From the mean values of Student's Achievement, it is clear that higher education teachers aged 41 years and above have got more Student's Achievement than higher education teachers of age below 30 years and 31-40 years.

Hypothesis 17: There is no significant difference in Sense of Responsibility based on Teaching Experience.

To test hypothesis 17, the higher education teachers were divided into groups i.e. below 5 years, 6-10 years, 11-20 years, and above 21 years. ANOVA was employed on the Sense of Responsibility scores concerning the teaching experience of higher education teachers and the result is presented in table 4.55.

Table 4.55

ANOVA scores of Sense of Responsibility based on Teaching Experience

Variable	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Sense of	Between	2007.106	3	669.035	2.96	**Significa

Responsibility	Groups				1	nt
	Within Groups	66871.730	296	225.918		
	Total	68878.837	299			

From the results presented in the table 4.55, the F-ratio of Sense of Responsibility for teaching experience is 2.961, and it is significant at 0.05 level. Therefore, the null hypothesis is rejected at 0.05 Level of Significance. Hence, there is a significant difference in Sense of Responsibility between higher education teachers based on teaching experience i.e., below 5 years, 6-10 years, 11-20 years and above 21 years.

Post Hoc tests of Sense of Responsibility

Since there exists a significant difference in Sense of Responsibility based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on Teaching Experience differ and the results are presented in the table 4.56.

Table 4.56

Homogeneous Subset of Post Hoc tests of Sense of Responsibility based on Teaching Experience

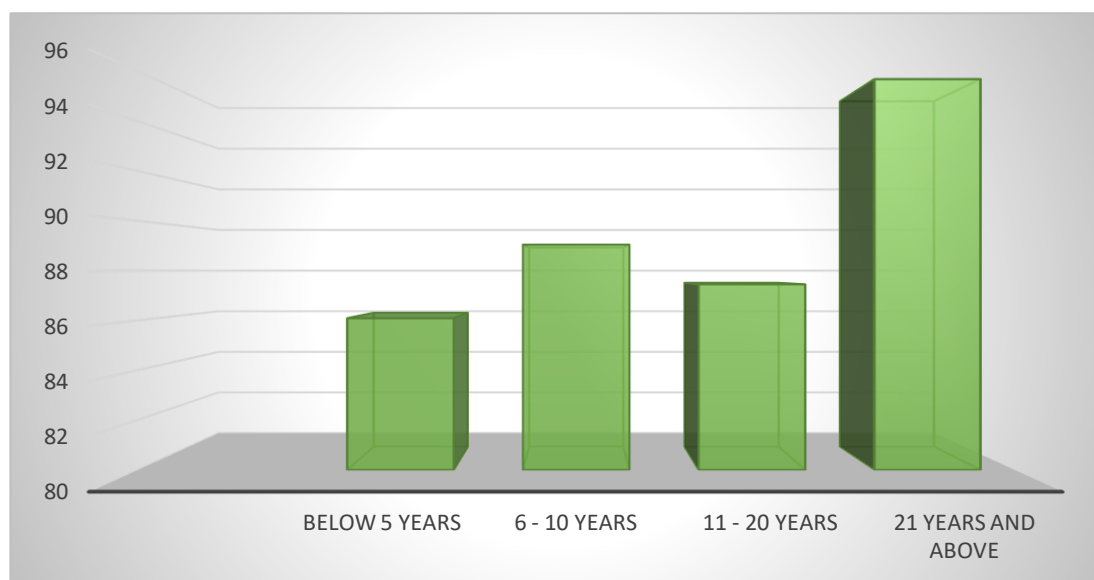
Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	86.09	13.584	86.09	
6 - 10 years	71	89.04	17.695	87.45	
11 - 20 years	67	87.45	14.105	89.04	89.04
21 years and above	24	95.67	16.867		95.67
Sig.				.752	.117

From table 4.56, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with Less than 5 years and 5 - 10 years of teaching experience differs in the Sense of Responsibility with the higher education teachers with teaching experience of 21 years and above. From the mean values of Sense of

Responsibility, it is clear that higher education teachers with teaching experience of 21 years and above have more Sense of Responsibility than higher education teachers with Less than 5 years and 5 - 10 years of teaching experience.

Figure 4.18

Mean of Sense of Responsibility based on Teaching Experience



Dimension-Wise ANOVA Scores of Sense of Responsibility based on Teaching Experience

One-way ANOVA was employed on the scores of dimensions of Sense of Responsibility based on the Teaching Experience of higher education teachers and the result is presented in the table 4.57.

Table 4.57

Dimension-Wise Scores of Sense of Responsibility based on Teaching Experience

Variable	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Behaviour of Students	Between Groups	76.880	3	25.627	4.519	**S
	Within Groups	1678.650	296	5.671		
	Total	1755.530	299			
Learning Outcomes	Between Groups	113.348	3	37.783	1.922	*NS

	Within Groups	5820.022	296	19.662		
	Total	5933.370	299			
Student's Achievement	Between Groups	133.913	3	44.638	3.417	**S
	Within Groups	3867.004	296	13.064		
	Total	4000.917	299			
Providing Support	Between Groups	47.983	3	15.994	1.329	*NS
	Within Groups	3563.653	296	12.039		
	Total	3611.637	299			
Enhancement of Capacity Building for Students	Between Groups	50.033	3	16.678	2.914	**S
	Within Groups	1693.967	296	5.723		
	Total	1744.000	299			
Social and National Goals of Education	Between Groups	50.328	3	16.776	2.621	*NS
	Within Groups	1894.509	296	6.400		
	Total	1944.837	299			

From the results presented in the table 4.57, the following interpretations for the dimensions of Sense of Responsibility are drawn:

The F - ratio of the dimension, Behaviour of Students based on Teaching Experience is 4.519 and it is significant at the 0.01 level. Hence, there is a significant difference in Behaviour of Students based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.01 Level of Significance.

The F - ratio of the dimension, Learning Outcomes based on Teaching Experience is 1.922 and it is not significant at the 0.05 level. Hence, there is no significant difference in Learning Outcomes based on Teaching Experience, viz.,

below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 Level of Significance.

The F - ratio of the dimension, Student's Achievement based on Teaching Experience is 3.417 and it is significant at the 0.05 level. Hence, there is a significant difference in Student's Achievement based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 Level of Significance.

The F - ratio of the dimension, Providing Support based on Teaching Experience is 1.329 and it is not significant at the 0.05 level. Hence, there is a significant difference in Providing Support based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 Level of Significance.

The F - ratio of the dimension, Enhancement of Capacity Building for Students based on Teaching Experience is 2.914 and it is significant at the 0.05 level. Hence, there is a significant difference in Enhancement of Capacity Building for Students based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 Level of Significance.

The F - ratio of the dimension, Social and National Goals of Education based on Teaching Experience is 2.621 and it is not significant at the 0.05 level. Hence, there is a significant difference in Social and National Goals of Education based on Teaching Experience, viz., below 5 years, 6-10 years, 11-20 years and above 21 years at 0.05 Level of Significance.

Post Hoc tests of the dimension: Behaviour of Students

Since there exists a significant difference in Behaviour of Students based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on Teaching Experience differ and the result is presented in the table 4.58

Table 4.58

Homogeneous Subset of Post Hoc tests of Behaviour of Students based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	9.60	2.351	9.60	

6 - 10 years	71	9.73	2.678	9.73	
11 - 20 years	67	10.30	2.153	10.30	10.30
21 years and above	24	11.38	2.223		11.38
Sig.				.449	.103

From table 4.58, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with Less than 5 years and 5 - 10 years of teaching experience differs in the Behaviour of Students with the higher education teachers with teaching experience of 21 years and above. From the mean values of Behaviour of Students, it is clear that higher education teachers with teaching experience of 21 years and above have more Behaviour of Students than higher education teachers with Less than 5 years and 5 - 10 years of teaching experience.

Post Hoc tests of the dimension: Student's Achievement

Since there exists a significant difference in Student's Achievement based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on Teaching Experience differ and the result is presented in the table 4.59.

Table 4.59

Homogeneous Subset of Post Hoc tests of Student's Achievement based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	19.33	3.318	19.33	
5 - 10 years	71	20.62	3.796	20.62	20.62
11 - 20 years	67	20.34	3.519	20.34	20.34
21 years and above	24	21.25	4.812		21.25
Sig.				.274	.582

From table 4.59, the Homogeneous Subset of Post Hoc tests reveals that the

higher education teachers with Less than 5 years of teaching experience differs in the Student's Achievement with the higher education teachers with teaching experience of 21 years and above. From the mean values of Student's Achievement, it is clear that higher education teachers with teaching experience of 21 years and above have more Student's Achievement than higher education teachers with Less than 5 years of teaching experience.

Post Hoc tests of the dimension: Enhancement of Capacity Building for Students

Since there exists a significant difference in the Enhancement of Capacity Building for Students based on Teaching Experience, the Post Hoc test is employed to figure out which of the groups based on Teaching Experience differ and the result is presented in the table 4.60.

Table 4.60

Homogeneous Subset of Post Hoc tests of Enhancement of Capacity Building for Students based on Teaching Experience

Teaching Experience	N	Mean	S.D.	Subset for alpha = 0.05	
				1	2
Below 5 years	138	13.96	2.273	13.96	
6 - 10 years	71	14.31	2.633	14.31	14.31
11 - 20 years	67	14.12	2.332	14.12	
21 years and above	24	15.50	2.485		15.50
Sig.				.877	.059

From table 4.60, the Homogeneous Subset of Post Hoc tests reveals that the higher education teachers with Less than 5 years and 11 - 20 years of teaching experience differs in the Enhancement of Capacity Building for Students with the higher education teachers with teaching experience of 21 years and above. From the mean values of Enhancement of Capacity Building for Students, it is clear that higher education teachers with teaching experience of 21 years and above have more Enhancement of Capacity Building for Students than higher education teachers with Less than 5 years and 11 - 20 years of teaching experience.

Hypothesis 18: There is no significant difference in Sense of Responsibility based on Locality.

To test hypothesis 18, a t-test was performed on the Sense of Responsibility scores of Urban and Rural higher education teachers, and the result is presented in the table 4.61.

Table 4. 61

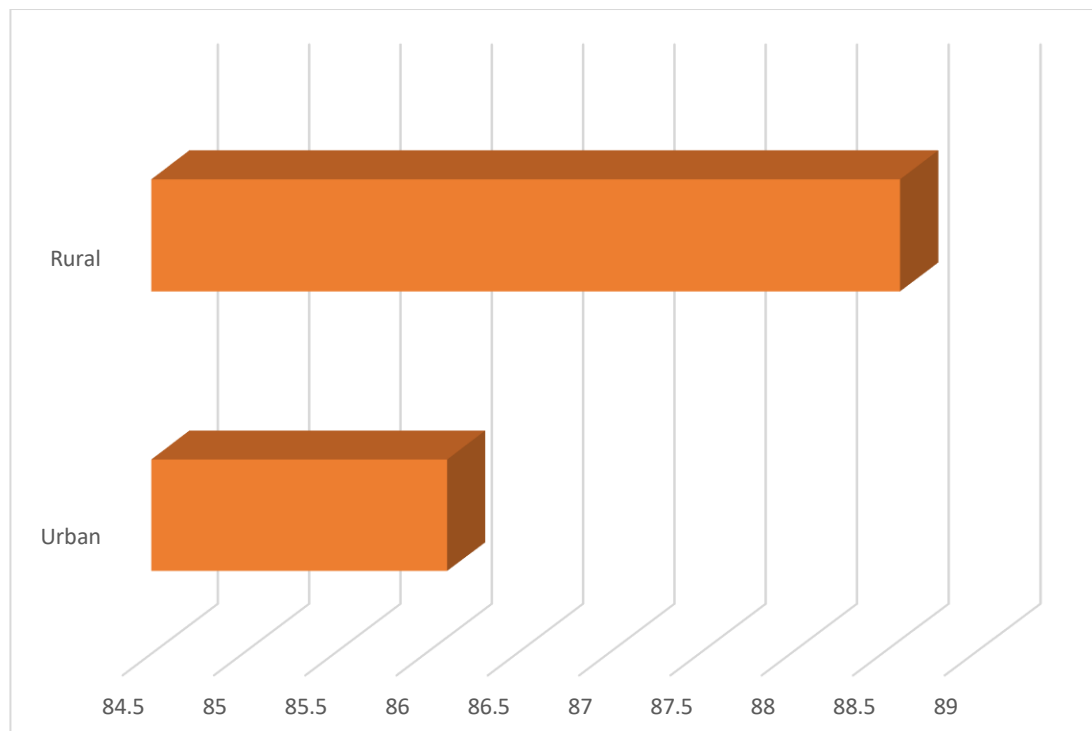
Mean, SD and t-values of Sense of Responsibility based on Locality

Variable	Group	N	Mean	SD	t-value	Remarks
Sense of Responsibility	Urban	90	86.12	16.753	1.297	*NS
	Rural	210	88.60	14.429		

From the results shown in the table 4.61, the t-value of Sense of Responsibility based on Locality is 1.297, and it is not significant at the 0.05 level. Therefore, the null hypothesis is accepted at 0.01 Level of Significance. Hence, there is no significant difference in Sense of Responsibility between Urban (M=86.12, SD=16.753) and Rural (M=88.60, SD=14.429) teachers in higher education at 0.01 Level of Significance ($t(298) = 4.259$).

Figure 4.19

Mean of Sense of Responsibility based on Locality



Dimension-wise Scores of Sense of Responsibility based on Locality

The t-test was employed on the scores of the dimensions of Sense of Responsibility based on Locality of higher education teachers, and the result is presented in the table 4.62.

Table 4. 62

Dimension-wise Scores of Sense of Responsibility based on Locality

Variables		Urban (1)	Rural (2)	t- value	Remark
Behaviour of Students	Mean	9.97	9.91	0.171	*NS
	SD	2.344	2.462		
Learning Outcomes	Mean	18.14	18.50	0.624	*NS
	SD	4.568	4.412		
Student's Achievement	Mean	19.71	20.15	0.947	*NS
	SD	4.193	3.406		
Providing Support	Mean	15.80	16.34	1.230	*NS
	SD	3.947	3.250		
Enhancement of Capacity Building for Students	Mean	13.69	14.42	1.419	*NS
	SD	2.525	2.339		
Social and National Goals of Education	Mean	8.81	9.29	1.480	*NS
	SD	2.848	2.405		

From the results presented in the table 4.62, the following interpretations for the dimensions of Sense of Responsibility are drawn:

The t-value of the dimension, Behaviour of Students based on Locality is 9.970 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Behaviour of Students between Urban and Rural teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Learning Outcomes based on Locality is 0.826 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Learning Outcomes between Urban and Rural teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension, Student's Achievement based on Locality is 4.859 and it is not significant even at the 0.05 level. Hence, there is no significant

difference in Student's Achievement between Urban and Rural teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Providing Support based on Locality is 1.680 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Providing Support between Urban and Rural teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Enhancement of Capacity Building for Students based on Locality is 5.435 and it is not significant even at the 0.05 level level. Hence, there is no significant difference in Enhancement of Capacity Building for Students between Urban and Rural teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Social and National Goals of Education based on Locality is 0.737 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Social and National Goals of Education between Urban and Rural teachers in higher education at 0.05 Level of Significance.

Hypothesis 19: There is no significant difference in Sense of Responsibility based on Type of Management.

To test hypothesis 19, a t-test was performed on the Sense of Responsibility scores of Government and Private higher education teachers, and the result is presented in the table 4.63.

Table 4.63

Mean, SD and t-values of Sense of Responsibility based on Type of Management

Variable	Group	N	Mean	SD	t-value	Remarks
Sense of Responsibility	Govt.	92	90.73	14.143	2.271	**S
	Private	208	86.59	15.477		

**S - Significant at the 0.05 level (2-tailed)

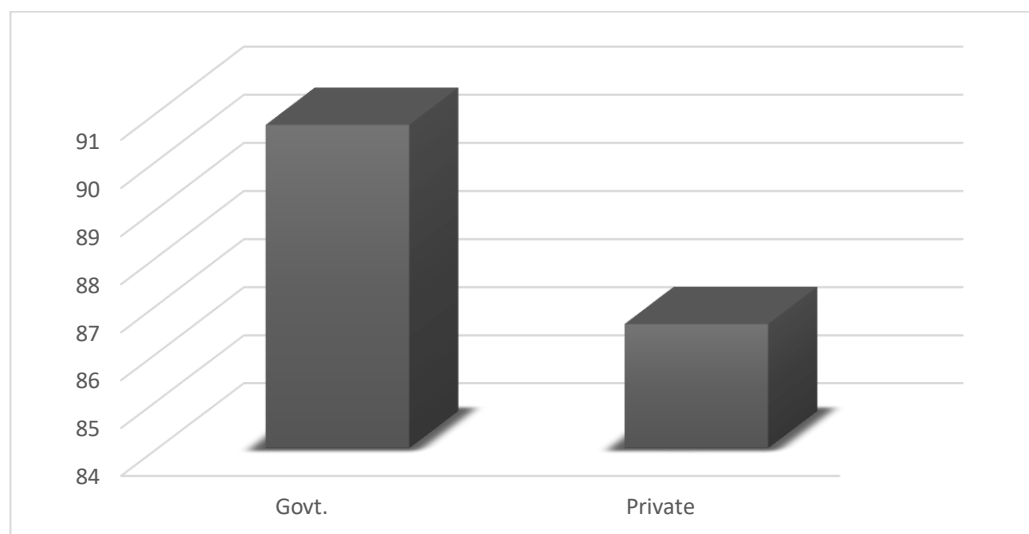
From the results shown in Table 4.63, the t-value of Sense of Responsibility based on Type of Management is 2.271, and it is significant at the 0.05 level. Therefore, the null hypothesis is rejected at the 0.05 Level of Significance.

Hence there is a significant difference in Sense of Responsibility between government (M=90.73, SD=14.143) and private (M=86.59, SD=15.477) teachers in higher education at the 0.05 Level of Significance ($t(298) = 2.271$).

From the mean values of Sense of Responsibility, it is clear that the teachers from government institutions have more Sense of Responsibility than teachers from private institutions.

Figure 4.20

Mean of Sense of Responsibility based on Type of Management



Dimension-wise Scores of Sense of Responsibility based on Type of Management

The t-test was employed on the scores of the dimensions of Sense of Responsibility based on Type of Management of higher education teachers, and the result is presented in the table 4.64.

Table 4.64

Dimension-wise Scores of Sense of Responsibility based on Type of Management

Variables		Govt. (1)	Private (2)	t- value	Remark
Behaviour of Students	Mean	10.59	9.64	3.128	**S
	SD	2.455	2.357		
Learning Outcomes	Mean	19.07	18.09	1.702	*NS
	SD	4.725	4.308		
Student's Achievement	Mean	20.71	19.71	2.297	**S
	SD	3.346	3.755		
Providing Support	Mean	16.30	16.12	0.461	*NS
	SD	2.792	3.743		
Enhancement of Capacity Building for Students	Mean	14.73	13.97	2.651	**S
	SD	2.204	2.472		
Social and National Goals of Education	Mean	9.34	9.06	0.897	*NS
	SD	2.446	2.596		

From the results presented in the table 4.64, the following interpretations for

the dimensions of Sense of Responsibility are drawn:

The t-value of the dimension, Behaviour of Students based on Type of Management is 3.128 and it is significant at the 0.01 level. Hence, there is a significant difference in Behaviour of Students between Government and Private teachers in higher education at 0.01 Level of Significance. The mean values shows that the teachers from government institutions have more Behaviour of Students than teachers from private institutions.

The t-value of the dimension Learning Outcomes based on Type of Management is 1.702 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Learning Outcomes between Government and Private teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension, Student's Achievement based on Type of Management is 2.297 and it is significant at the 0.05 level. Hence, there is a significant difference in Student's Achievement between Government and Private teachers in higher education at 0.05 Level of Significance. The mean values shows that the teachers from government institutions have more Student's Achievement than teachers from private institutions.

The t-value of the dimension Providing Support based on Type of Management is 0.461 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Providing Support between Government and Private teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension, Enhancement of Capacity Building for Students based on Type of Management is 2.651 and it is significant at the 0.05 level. Hence, there is a significant difference in Enhancement of Capacity Building for Students between Government and Private teachers in higher education at 0.05 Level of Significance. The mean values shows that the teachers from government institutions have more Enhancement of Capacity Building for Students than teachers from private institutions.

The t-value of the dimension Social and National Goals of Education based on Type of Management is 0.897 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Social and National Goals of Education between Government and Private teachers in higher education at 0.05 Level of Significance.

Hypothesis 20: There is no significant difference in Sense of Responsibility

based on Academic Stream.

To test hypothesis 20, a t-test was performed on the Sense of Responsibility scores of Arts and Science higher education teachers, and the result is presented in the table 4.65.

Table 4. 65

Mean, SD and t-values of Sense of Responsibility based on Academic Stream

Variable	Group	N	Mean	SD	t-value	Remarks
Sense of Responsibility	Arts	168	86.88	15.519	2.952	**S
	Science	132	92.06	14.730		

**S - Significant at the 0.01 level (2-tailed)

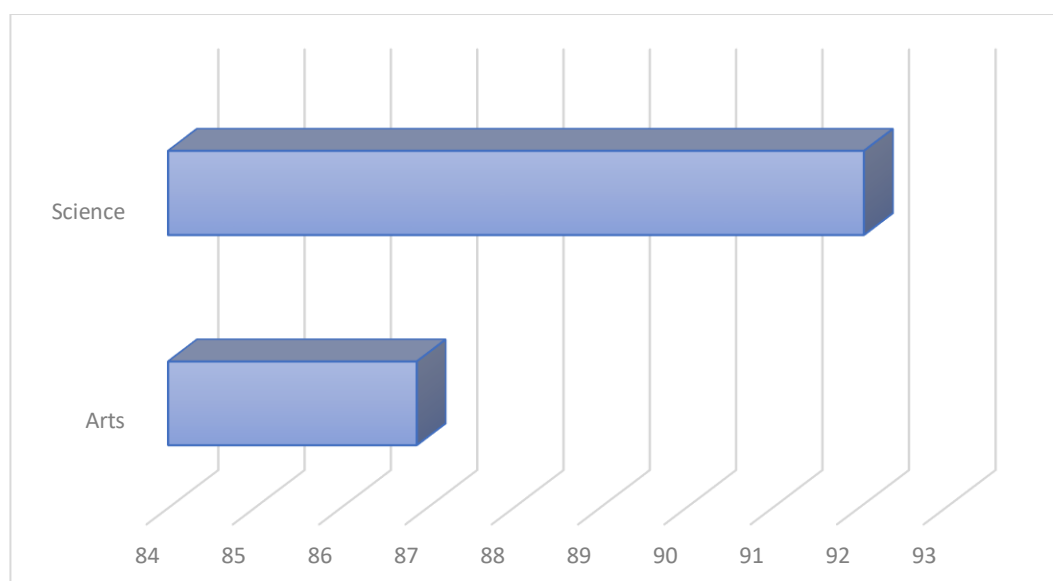
From the results shown in Table 4.65, the t-value of Sense of Responsibility based on Academic Stream is 2.952, and it is significant at the 0.01 level. Therefore, the null hypothesis is rejected at the 0.01 Level of Significance.

Hence there is a significant difference in Sense of Responsibility between Arts (M=86.88, SD=15.519) and Science (M=92.06, SD=14.730) teachers in higher education at the 0.01 Level of Significance ($t(298) = 2.952$).

From the mean values of Sense of Responsibility, it is clear that the teachers from Arts institutions have more Sense of Responsibility than teachers from Science institutions.

Figure 4.21

Mean of Sense of Responsibility based on Academic Stream



Dimension-wise Scores of Sense of Responsibility based on Academic Stream

The t-test was employed on the scores of the dimensions of Sense of Responsibility

based on Academic Stream of higher education teachers, and the result is presented in the table 4.66.

Table 4.66

Dimension-wise Scores of Sense of Responsibility based on Academic Stream

Variables		Arts (1)	Science (2)	t- value	Remark
Behaviour of Students	Mean	9.67	11.17	5.339	**S
	SD	2.387	2.437		
Learning Outcomes	Mean	18.01	19.92	3.673	**S
	SD	4.413	4.514		
Student's Achievement	Mean	19.89	20.17	0.661	*NS
	SD	3.911	3.317		
Providing Support	Mean	16.19	16.16	0.078	*NS
	SD	3.687	3.2		
Enhancement of Capacity Building for Students	Mean	14.14	14.28	0.510	*NS
	SD	2.412	2.425		
Social and National Goals of Education	Mean	8.98	10.36	4.702	**S
	SD	2.633	2.434		

From the results presented in the table 4.66, the following interpretations for the dimensions of Sense of Responsibility are drawn:

The t-value of the dimension, Behaviour of Students based on Academic Stream is 5.339 and it is significant at the 0.01 level. Hence, there is a significant difference in Behaviour of Students between Arts and Science teachers in higher education at 0.01 Level of Significance. The mean values shows that the teachers from Science institutions have more Behaviour of Students than teachers from Arts institutions.

The t-value of the dimension, Learning Outcomes based on Academic Stream is 3.673 and it is significant at the 0.01 level. Hence, there is a significant difference in Learning Outcomes between Arts and Science teachers in higher education at 0.01 Level of Significance. The mean values shows that the teachers from Science institutions have more Learning Outcomes than teachers from Arts institutions.

The t-value of the dimension Student's Achievement based on Academic

Stream is 0.661 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Student's Achievement between Arts and Science teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension, Providing Support based on Academic Stream is 0.078 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Providing Support between Arts and Science teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension Enhancement of Capacity Building for Students based on Academic Stream is 0.510 and it is not significant even at the 0.05 level. Hence, there is no significant difference in Enhancement of Capacity Building for Students between Arts and Science teachers in higher education at 0.05 Level of Significance.

The t-value of the dimension, Social and National Goals of Education based on Academic Stream is 4.702 and it is significant at the 0.05 level. Hence, there is a significant difference. The mean values shows that the teachers from science institutions have more Social and National Goals of Education than teachers from Arts institutions.

CHAPTER-V

MAJOR FINDINGS, DISCUSSION, EDUCATIONAL IMPLICATIONS, CONCLUSION, AND SUGGESTIONS FOR FURTHER RESEARCH

5.1 Introduction

This chapter deals with the major findings, discussions, educational implications, and some suggestions that would help further research concerning the liable variables of the study. The data analysis and interpretation were based on teaching effectiveness in relation to professional commitment and sense of responsibility of higher education teachers in Nagaland.

5.2 Major Findings of the Study

Objective 1: To assess the level of Teaching Effectiveness, Professional Commitment and Sense of Responsibility of Higher Education Teachers

1. The study found that in regard to the level of Teaching Effectiveness, out of 300 higher education teachers, 0.33% have high Teaching Effectiveness, 2% have above average Teaching Effectiveness, 72% have average Teaching Effectiveness, 25.33% have below average Teaching Effectiveness, 0.33% have low Teaching Effectiveness. No higher education teacher has extremely high and extremely low Teaching Effectiveness.
2. The study revealed the level of Professional Commitment that out of 300 higher education teachers, 4.67% have extremely high Professional Commitment, 9.67% have high Professional Commitment, 28.67% have above average Professional Commitment, 34.33% have average Professional Commitment, 13.67% have below average Professional Commitment, 7.33% have low Professional Commitment, and 1.67% have extremely low Professional Commitment.
3. In regard to the level of teachers' sense of responsibility, it showed that out of 300 higher education teachers, 8.67% have extremely high Sense of Responsibility, 19.67% have high Sense of Responsibility, 24.00% have above average Sense of Responsibility, 30.00% have average Sense of Responsibility, 12.67% have below average Sense of Responsibility, 4.33% have low Sense of Responsibility, and 0.67% have extremely low Sense of Responsibility. Bhowmik et al. (2021) found a high level in regard to the teachers' sense of responsibility.

Objective 2: To examine the relationship between Teaching Effectiveness and Professional Commitment of Higher Education Teachers

1. There is a significantly positive moderate relationship between Professional Commitment and Teaching Effectiveness of higher education teachers.

Objective 3: To examine the relationship between Teaching Effectiveness and Sense of Responsibility of Higher Education Teachers

1. There is a significantly positive moderate relationship between Sense of Responsibility and Teaching Effectiveness of higher education teachers.

Objective 4: To investigate the difference in Teaching Effectiveness based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and academic Stream

1. There is a significant difference between male and female higher education teachers' Teaching Effectiveness. It showed that male higher education teachers have better Teaching Effectiveness than female higher education teachers.
2. There is a significant difference in Teaching Effectiveness between higher education teachers based on age i.e., below 30 years, between 31-40 years; and above 41 years. It found that higher education teachers aged above 41 years have more Teaching Effectiveness than higher education teachers below 30 years and between 31-40 years.
3. There is a significant difference in Teaching Effectiveness between higher education teachers based on teaching experience i.e., below 5 years, 6-10 years, 11-20 years and above 21 years. The higher education teachers with teaching experience of 21 years and above have more Teaching Effectiveness than higher education teachers with less than 5 years of teaching experience.
4. There is a significant difference in Teaching Effectiveness between urban and rural higher education teachers. It revealed that urban higher education teachers have better Teaching Effectiveness than rural teachers in higher education.
5. There is a significant difference in Teaching Effectiveness between government and private higher education teachers. It showed that government higher education teachers have better Teaching Effectiveness than private higher education teachers.
6. There is no significant difference in Teaching Effectiveness based on academic stream i.e., higher education teachers from arts and science institutions.

Objective 5: To investigate the difference in Professional Commitment based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management, and Academic Stream

1. There is a significant difference in Professional Commitment between male and female higher education teachers. It revealed that male higher education teachers have more Professional Commitment than female higher education teachers.

2. There is a significant difference in Professional Commitment between higher education teachers based on age i.e., below 30 years, between 31-40 years; and above 41 years. It showed that higher education teachers aged 31-40 years and above 41 years have more Professional Commitment than those of below 30 years.
3. There is a significant difference in Professional Commitment between higher education teachers based on teaching experience i.e., below 5 years, 6-10 years, 11-20 years and above 21 years. It indicated that higher education teachers with teaching experience of 21 years and above have more Professional Commitment than those with less than 5 years of teaching experience.
4. There is a significant difference in Professional Commitment between urban and rural higher education teachers. It found that teachers from urban have more Professional Commitment than teachers from rural places.
5. There is a significant difference in Professional Commitment between government and private higher education teachers. The government higher education teachers have better Teaching Effectiveness than private higher education teachers
6. There is no significant difference in Professional Commitment based on academic stream i.e., higher education teachers from arts and science institutions.

Objective 6: To investigate the difference in Sense of Responsibility based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management, and Academic Stream

1. There is a significant difference in Sense of Responsibility between male and female higher education teachers. It found that male higher education teachers have more Sense of Responsibility than female higher education teachers.
2. There is no significant difference in Sense of Responsibility between the higher education teachers based on age i.e., below 30 years, between 31-40 years, and above 41 years. Out of six (6) dimensions of Sense of Responsibility, four (4) dimensions namely Learning Outcomes, Providing Support, Enhancement of Capacity Building for students, and Social and

National Goals of Education did not differ significantly based on age viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance. However, there is a significant difference in Sense of Responsibility in two (2) dimensions- The behaviour of students, and Students' Achievement. For both dimensions of Behaviour of Students and Students' Achievement, it was found that higher education teachers aged 41 and above are better than higher education teachers below 30 years and 31-40 years.

3. There is a significant difference in Sense of Responsibility between higher education teachers based on Teaching Experience i.e., below 5 years, between 6-10 years, between 11-20 years and above 21 years.
4. There is no significant difference in Sense of Responsibility between urban and rural higher education teachers.
5. There is a significant difference in Sense of Responsibility between government and private higher education teachers. It found government higher education teachers have more Sense of Responsibility than private higher education teachers.
6. There is a significant difference in Sense of Responsibility based on academic stream i.e., arts and science. The higher education teachers from arts institutions have more Sense of Responsibility than teachers from science institutions.

5.3 Discussion of the Study

- i. The findings revealed that the level of Teaching Effectiveness of the higher education teachers is high with mean percentage of 76.90. The mean percentage of 77.38 shows that the level of Professional Commitment of the higher education teachers is high. However, the mean percentage of 65.05 shows that the level of Sense of Responsibility of the higher education teachers is moderate.

Therefore, higher education teachers should be encouraged to improve Teaching Effectiveness, Professional Commitment and Sense of Responsibility.

- ii. As per the findings of the study, there is a positive moderate relationship between Teaching Effectiveness and Professional Commitment of higher

education teachers. This proves that Professional Commitment has a relation towards the effectiveness of teaching. Commitment to the profession and healthy relationships are some factors to improve Teaching Effectiveness (Gupta & Verma, 2021). Therefore, the heads of educational institutions or the principals of schools should promote healthy beliefs in their teaching profession as it indirectly influences work attitudes, leadership behaviours, learning effectiveness and teacher effectiveness among teachers (Mahdy et al., 2018). So, a teacher needs to be professionally committed to teaching.

- iii. The interpreted results showed a positive moderate relationship between Teaching Effectiveness and Sense of Responsibility of higher education teachers. This proves that a Sense of Responsibility has a relation towards the effectiveness of teaching.
- iv. A difference in Teaching Effectiveness between male and female higher education teachers is found in the present study. The result showed that male higher education teachers have better Teaching Effectiveness than female teachers. This was supported by Sumer & Syiem (2021). However, Kumar et al (2024), Shobha (2022), Paschal & Srivastava (2021), Bawa and Varma (2020), and Sadhukhan (2018) disclosed insignificant differences.
- v. In regard to Teaching Effectiveness of higher education teachers concerning age, variation is found between different age groups. It found that higher education teachers above 41 years have more Teaching Effectiveness than higher education teachers below 30 years and between 31-40 years. The finding contradicted studies of Kumar (2019) and Lalchhuanawma et al. (2020).
- vi. The teaching experience between higher education teachers revealed a significant difference in Teaching Effectiveness. The higher education teachers with teaching experience of 21 years and above have more Teaching Effectiveness than those with less than 5 years of teaching experience. Similar results were found by Raju & Vijaya (2022) and Sadhukhan (2018). However, Kumar (2019), Paschal & Srivastava (2021) showed no differences in their investigation.
- vii. The present study indicated a difference in Teaching Effectiveness between urban and rural higher education teachers. The same finding was brought out by Raju & Vijaya (2022). Sumer and Syiem (2021) and Sadhukhan (2018).

The present study revealed that urban higher education teachers have better Teaching Effectiveness than rural teachers in higher education. Kumar (2019) supported the same. Adequate physical facilities, teaching-learning resources, proper transport and communication facilities influence the teaching-learning process. Therefore, efforts should be made in rural areas to promote the effectiveness of teaching.

- viii. The interpreted results indicated a notable variation in Teaching Effectiveness between government and private higher education teachers. Kumar et al (2024) supported the same. Here, it showed that government higher education teachers have higher effectiveness in their teaching. This was supported by Paschal & Srivastava (2021). However, it was contradicted by Kumar et al. (2024), Vijaya (2022) and Shobha (2022). This has shown the need for private higher education institutions to improve the Teaching Effectiveness of higher education teachers.
- ix. The objective to find the differences with respect to academic stream, i.e., higher education teachers in arts and science institutions, found no differences. This finding was supported by Sadhukhan (2018). This shows that Teaching Effectiveness does not depend on the differences between the academic streams.
- x. The present study examined the Professional Commitment and revealed a significant difference in Professional Commitment between male and female higher education teachers. It showed that male higher education teachers have more Professional Commitment than female higher education teachers. On the other hand, Yazici & Ozan (2024) contrasted the present findings. Studies on secondary school teachers indicated the same findings Liegise & Rai (2018), Ranju (2017), and Sunitha and Kalaivani (2023). However, Kumar and Shobha (2023), Begum and Alam (2022), Shanthi and Renugadevi (2021), and Gupta and Jain (2013) indicated no discernible differences. Teachers' commitment is caused by numerous factors such as lack of proper training, low salary, incompetent heads of educational institutions, lack of motivation, lack of job security, unhealthy working environment and government interference in the teaching profession (Mwesiga & Okendo, 2018).

- xi. The study also examined the difference in Professional Commitment between higher education teachers based on age i.e., below 30 years, between 31-40 years; and above 41 years. And found differences between the various age groups. It showed that higher education teachers aged 31-40 years and above 41 years have more Professional Commitment than those below 30 years.
- xii. The Professional Commitment between higher education teachers found a significant based on teaching experience i.e., below 5 years, 6-10 years, 11-20 years and above 21 years. It indicated that higher education teachers with teaching experience of 21 years and above have more Professional Commitment than those with less than 5 years of teaching experience. Shanthi and Renugadevi (2021), Sood and Anand (2010) demonstrated a significant discernible variation. Teaching experiences contribute more to Professional Commitment. So, emphasis should be given to higher education teachers for job satisfaction so that it increases the years of teaching experience. As there is a strong association between professional commitment and job satisfaction as found by Upadhyaya et al. (2024).
- xiii. In this study, variation exists in Professional Commitment between urban and rural higher education teachers. It found that teachers from urban areas have more Professional Commitment. The same relation was supported by Talukdar (2024). Therefore, continuous professional development programs should be organized for college teachers to improve the Professional Commitment of higher education teachers.
- xiv. The government and private higher education teachers possess a significant difference in Professional Commitment between them. It was found that the government higher education teachers have better Teaching Effectiveness than private higher education teachers. This finding was contradicted by Mahajan & Kauts, (2022). Shobha (2023), Sunitha and Kalaivani (2023) showed no variation too. Therefore, to improve the Professional Commitment of government and private higher education teachers, the provision of financial incentives to prospective teachers and financial assistance to colleges could enhance the Professional Commitment of higher education teachers and also facilitate research-related activities towards better Professional Commitment.

- xv. As no difference was found in Professional Commitment for academic stream i.e., higher education teachers from arts and science institutions. Higher education institutions should concentrate on the themes that influence teachers' Professional Commitment, such as positive work relationships, professional dignity, opportunities for growth, workload, and a sense of safety (Low et al., 2022).
- xvi. The Sense of Responsibility of higher education teachers is found to be different. It unconcealed a difference between male and female higher education teachers. It found that male higher education teachers have more Sense of Responsibility than female higher education teachers. This aligned with the findings of Aliakbari and Kafshgar (2013). Alyousef and Khalaf (2023) and Bhowmik et al. (2021) contradicted this finding. This could be because male higher education teachers are more involved in decision-making for the growth and development of a nation.
- xvii. The higher education teachers differ in age i.e., below 30 years, between 31-40 years, and above 41 years regarding Sense of Responsibility. Out of six (6) dimensions of Sense of Responsibility, four (4) dimensions namely Learning Outcomes, Providing Support, Enhancement of Capacity Building for students, and Social and National Goals of Education did not differ significantly based on age viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance. However, there is a significant difference in Sense of Responsibility in two (2) dimensions- The behaviour of students, and Students' Achievement. For both dimensions of Behaviour of Students and Students' Achievement, it was found that higher education teachers aged 41 and above are better than higher education teachers below 30 years and 31-40 years. Aliakbari and Kafshgar (2013) findings supported the same.
- xviii. The higher education teachers' Sense of Responsibility differs significantly in Teaching Experience i.e., below 5 years, between 6-10 years, between 11-20 years and above 21 years. Similar distinctions were found by Vidushy and Kishor (2020) regarding the experience of teachers and their responsibilities. This shows that all teachers require certain years of experience to be responsible and teach effectively.

- xix. The findings on Sense of Responsibility found no differences between urban and rural higher education teachers. It means that the Sense of Responsibility does not differ on locality of higher education teachers. This contradicted the findings of Bhowmik et al. (2021) and Aliakbari and Kafshgar (2013). However, the present study has proved that the teachers' Sense of Responsibility depends on the individual. Therefore, all higher education teachers should be encouraged to perform their teaching duties responsibly, as there is a strong connection between teachers' Sense of Responsibility and Teaching Effectiveness.
- xx. The difference in the Sense of Responsibility between government and private higher education teachers was proved in the present study. It found that government higher education teachers have more Sense of Responsibility than private higher education teachers. Therefore, higher education teachers teaching in private higher education institutions should be encouraged and they should be assisted to have better Sense of Responsibility.
- xxi. With regard to the academic stream, the study did not find any difference in the Sense of Responsibility i.e., between arts and science. The higher education teachers from arts institutions have more Sense of Responsibility than teachers from science institutions. To address such variations in higher education institutions, the importance of diverse responsibilities of educators to meet the needs of learners, parents and society should be discussed at the higher education (Sherpa and Bachhar, 2018).

5.4 Educational Implications

The present study has several significant educational implications that may be useful for higher education and other levels of education. Based on the study's findings and discussion, the following educational implications are provided as follows:

- i. The study is an insight for higher education teachers as it has disclosed a positive moderate association between teachers' teaching effectiveness and professional commitment. This reveals the requirement for higher education teachers to be professionally committed, teach effectively and influence learners as facilitators and guides to all learners.

- ii. There is a positive moderate association between teachers' teaching effectiveness and sense of responsibility. So, higher education teachers should feel responsible for their teaching profession.

It has shown an urgency for all teachers in the present era to maintain a balance in their diverse responsibilities to meet the needs of learners, parents and society.

- iii. Significant variations were found in gender, age, teaching experience, locality, and type of college management concerning teaching effectiveness and professional commitment. The male higher education teachers were better than the female higher education teachers. This shows the need for higher education institutions to encourage and motivate all teachers teaching in various colleges irrespective of gender, age, teaching experience, locality and type of management.

Hence, all stakeholders must responsibly ensure to promote gender equality and provide adequate resources required for higher education institutions.

- iv. Different findings were found in higher education teachers' sense of responsibility. There were variations in age, teaching experience, type of management and academic stream, with no notable distinction in age and locality about their sense of responsibility. Hence, the study has provided an extension on the need for sensitization of the significance of teachers' sense of responsibility for effective teaching.
- v. The study has clearly shown that the differences between academic streams do not hinder teachers' commitment or teaching. There were no distinctions between arts and science higher education teachers' commitment and effectiveness. Therefore, all higher education institutions should create a favourable and conducive learning environment regardless of academic streams.
- vi. The study has provided more practical insights for higher education teachers and teachers of other levels for addressing the various aspects related to the quality of teachers and the effectiveness of teaching. Therefore, the Department of Higher Education should organize more workshops, seminars, Faculty Development Programs (FDP), and continuous professional development programs for higher education teachers.

- vii. The present study has contributed to a great extent towards understanding the need and significance of possessing professional commitment and a sense of responsibility in the teaching profession.
- viii. The study showed the need for higher educational institutions and regulatory bodies to collaboratively bring educational policies, strategies, and methods to balance academic as well as non-academic responsibilities of teachers. Therefore, policymakers and all stakeholders of higher education should initiate and collaboratively implement the various educational policies for holistic quality education.
- ix. Today's generation of learners as well as teachers are faced with a lot of challenging tasks and responsibilities. Nowadays, the teacher's task is not only to deliver the acquired knowledge or transact the curriculum but also to develop moral conduct and values in learners. The present study has focused on Professional Commitment and Sense of Responsibility towards effective teaching as effective teaching not only facilitates the teaching-learning process but brings progress and development in society.
- x. The teaching profession is considered a noble profession. However, there are several issues and challenges in education. This study will encourage teachers concerning the use of innovative ideas, various educational devices, modern innovative teaching-learning methods and strategies which in turn will positively enhance the quality of education.
- xi. Teaching Effectiveness is not confined to certain variables as revealed in the present study. Several factors influence the teaching-learning process and the teaching profession. This study will not only assist higher education teachers in better teaching, but it will also allow parents and the community to understand the various factors that influence the teaching-learning process and its quality.
- xii. Teachers' obligation goes beyond implementing and delivering the curriculum. They have a great responsibility to address the issues which may arise among the learners in the classroom and help them to solve and cope with the problem effectively. Teacher's responsibility to create responsible citizens. This study is a contribution to fulfilling one's responsibility as a teacher.

- xiii. The academic success or failure of learners largely depends on various factors of education. Therefore, the present study is a contribution to the field of education as well as the progress and development of our nation. The study of Teaching Effectiveness in relation to Professional Commitment and Sense of Responsibility is an influence for the enhancement of the quality higher education teachers in Nagaland.
- xiv. The study has generated new and more ideas for teachers of different levels, scholars and researchers to conduct related studies with other variables and geographical context. It has proved the need for more studies to be conducted in higher education. Hence, the present study has rightly paved the way for future studies in numerous ways.

5.5 Conclusion

In the present scenario, a teacher is expected to understand and complete the individual needs of students. This can only be done if a teacher possesses a certain set of abilities or qualities. Such qualities help a teacher to be effective in their teaching. The effective teacher takes responsibility for students and provides them with opportunities to discuss and explore. The study has shown a relationship between Teaching Effectiveness, Professional Commitment and Sense of Responsibility. So, to be effective in teaching, a teacher should use a variety of teaching techniques to match the pace of students. A teacher with high teaching effectiveness certainly carries out his/her duties with a high level of commitment and a sense of responsibility.

Therefore, regardless of gender, age, teaching experience, locality, type of management and academic streams, a higher education teacher or teachers of any level in the field of education should strive and render their services to the best of their abilities. Because teacher effectiveness stated to be an imperative area is essential towards promotion of holistic quality education. Teacher effectiveness is also scrutinised in curriculum development and instructional strategies, the methodology utilized by the teacher in imparting training and instruction to the students largely represents teacher effectiveness. Teachers should possess adequate skills and abilities to identify the needs and requirements of the students.

Teachers have remarkable contributions to making and shaping every person in society and are referred to as the people who instruct to provide the teaching-

learning process. Effective teaching helps students learn as well as enhances their academic performance or achievement. It has become even more important as the emphasis on quality in higher education has increased. The teacher has a major role in the educational development. Teacher is the backbone of any nation. Teachers are one of the most important and moral agents of educational institutions in any society. They are the one who transmits the curriculum and educates the future generation. It is the teacher who can make the maximum impact on the development of the learner's personality.

Hence, the study has proved beneficial in regard to the Teaching Effectiveness concerning Professional Commitment and a Sense of Responsibility in Nagaland

5.6 Suggestions for Further Research

This section presents various possible directions and suggestions for further research with the following variables: Teaching Effectiveness, Professional Commitment and Sense of Responsibility.

- i. The effectiveness of teachers contributes a lot towards quality education. Therefore, comparative studies on Teaching Effectiveness, Professional Commitment and Sense of Responsibility can be undertaken between professional and non-professional colleges, in-service and prospective teachers.
- ii. Studies on Teaching Effectiveness, Professional Commitment and Sense of Responsibility can be conducted at different educational levels. The study is related to teachers teaching at the undergraduate level. More studies related to these aspects could be done at other levels such as primary, secondary, and university levels.
- iii. The present study could not include some higher education teachers, colleges and districts of Nagaland. It was limited to a particular sample. The sample of the study consisted a sample of 300 higher education teachers. Hence, it could be extended to a larger sample, other colleges and districts of Nagaland and even beyond the state of Nagaland.
- iv. The study consisted of three variables: Teaching Effectiveness, Professional Commitment and Sense of Responsibility. For extended research, variables may be changed or increased to study teachers' Teaching Effectiveness.
- v. The effectiveness of teachers may be further pursued by considering other pertinent demographic variables such as post-held, UGC NET qualified and non-NET qualified, educational qualification, refresher courses and Faculty Development Programs attended.

SUMMARY

1. Introduction

It is vital to possess effectiveness for developing learners, educators and educational institutions, so educators have to inculcate several desirable qualities in the teaching profession. In the area of education, teachers face adversities, but the possession of desirable teacher traits empowers them to be productive and efficient in performing their duties effectively. Education must be universal to guarantee the needs of all children. The basic learning needs of children are demarcated in terms of the essential learning tools and content that children require to live and work with dignity and continue learning with quality education. However, education has been an area that needs attention. Basic education for all should emphasise good education for all. To deliver basic education to students, many factors influence it. Teachers' instruction to students is one factor that influences or impacts student learning. The influence can be both positive and negative so it is imperative to check and maintain the quality of teachers and their teaching-learning process.

Holistic education can be received and imparted effectively through the combined efforts of committed, responsible and effective teachers. Teachers of all levels have a great impact on the educational domain. The teachers' role is most important when educating the people of a nation. Today, students should not just learn as teachers teach them, but students should learn how to learn, think, create, adapt, and solve problems. So, the teacher's role has become critical and challenging in several aspects.

Several studies on effective teaching have disclosed that no single teaching pattern fits all teaching situations. So, all teachers should put an effort into effective teaching and learning. Effective teaching is connected with unlimited teaching-learning tasks. Any teaching that promotes students' learning outcomes to their maximum may be considered effective teaching. Effective teaching is the quality of teaching that a teacher can bring about in his/her students' learning and desirable modification of their behaviour. Teachers are expected to possess professional commitment and a sense of responsibility to teach effectively.

Thus, the present study is an attempt to study the Teaching Effectiveness in relation to Professional Commitment and Sense of Responsibility among higher education teachers and the various variables liable for it.

2. Review of Literature

For the present study, the researcher reviewed 76 works of literature related to Teaching Effectiveness, Professional Commitment and Sense of Responsibility.

Studies on teaching effectiveness by Sumer and Syiem (2021) revealed that male and female teachers varied significantly. However, Kumar et al (2024), Shobha (2022), Paschal and Srivastava (2021), Bawa and Varma (2020), and Sadhukhan (2018) disclosed insignificant differences.

Lalchhuanawma et al. (2020) and Kumar (2019) disclosed no link between age and teaching effectiveness. Raju and Vijaya (2022) and Sadhukhan (2018) studied teaching experience to determine teaching effectiveness and found that it differed significantly. Whereas, Paschal and Srivastava (2021) and Kumar (2019) stated that no variation exists. Raju and Vijaya (2022), Sumer and Syiem (2021), and Sadhukhan (2018) revealed substantial variations between rural and urban teachers. Kumar (2019) discussed that urban educators' effectiveness is greater than rural educators.

Kumar et al (2024) showed notable distinctions between government and private teachers. Kumar (2019) disclosed that private teachers possess higher effectiveness. Sumer and Syiem (2021) indicated that government and private teachers differ significantly in their effectiveness. However, Raju and Vijaya (2022) and Shobha (2022) reported no significant differences in the type of school in the effectiveness of teaching.

Upadhyaya et al. (2024), Sunitha and Kalaivani (2023), Liegise and Rai (2018), Ranju (2017), and Sood and Anand (2010) proved significant variations in professional commitment between male and female teachers. Yazici and Ozan (2024) identified that female teachers have a greater commitment. Kumar and Shobha (2023), Begum and Alam (2022), Shanthi and Renugadevi (2021), and Gupta and Jain (2013) indicated no discernible differences between male and female teachers.

Shanthi and Renugadevi (2021) and Sood and Anand (2010) demonstrated a significant discernible variation between professional commitment with the experience of teachers. However, Legise and Rai (2018) stated that teaching experience showed no notable differences in attitude towards professional commitment.

Upadhyaya et al. (2024) investigated professional commitment with respect to urban and rural teachers. Ali (2020) discovered that urban educators were better than educators in rural areas. Whereas Gupta and Jain (2013) indicated no discernible differences for locality in commitment. Liegise and Rai (2018) and Choudhury (2007) disclosed that professional commitment differed in institution type. Whereas Kumar and

Shobha (2023), Sunitha and Kalaivani (2023) showed no variation in the type of management concerning the professional commitment of teachers.

Related literature showed the need for teachers to possess an obligation or responsibility in the teaching profession. Alyousef and Khalaf (2023) and Bhowmik et al. (2021) showed no statistical differences in sense of responsibility based on gender and locality. Aliakbari and Kafshgar (2013) stated that teachers' sense of responsibility is not defined by the school location. Vidushy and Kishor (2020) found noteworthy distinctions according to the types of institutions and experience of teachers.

3. Significance of the Study

Holistic quality education is an emerging need for today's learners. The National Education Policy (NEP) 2020 emphasizes high-quality education and moving towards a higher educational system consisting of multidisciplinary colleges and universities. So, teachers should improve the standard of teaching and meet emerging challenges to serve the nation's needs. Teachers are an integral component of the educational spectrum and agents of change towards the growth and development of any nation. Therefore, higher education institutions require teachers who are effective, committed and responsible to their teaching profession.

For any nation to possess quality education, it is necessary to provide quality teachers for effective teaching and to bring desirable changes in education. Teaching quality has a huge impact on students' learning, performance and achievement (Darling-Hammond, 2000). Teachers are considered the main source of educational reforms. The National Education Policy (NEP) 2020 reiterated empowering and re-establishing teachers. So, teachers should be effective in their teaching profession. Commitment is a major component of the effectiveness of all organisations, so teachers' commitment is essential for improving learners and their learning outcomes. Similarly, teachers' sense of responsibility has an enormous influence in facilitating the psychological and mental well-being of learners, which ultimately leads to students' learning and performance. Thus, a dire need is felt to investigate the liable variables in higher education.

The increasing growth of colleges in Nagaland reflects the development in the education sector. However, with the advancement in technology, the emerging trends and approaches in education, and the increasing autonomy of education, teaching effectiveness has become a matter of concern. Therefore, higher education teachers should possess professional commitment and a sense of responsibility for effective teaching and quality education. Hence, it is essential to study the teaching effectiveness, professional commitment and

sense of responsibility of higher education teachers.

Consequently, the present study attempts to examine the teaching effectiveness of higher education teachers concerning professional commitment and sense of responsibility. The present study will enable higher education teachers and all stakeholders to contribute towards enhancing quality education in a greater and wider perspective. Hence, the present study is pertinent and significant as it will help to know more about higher education teachers and their teaching effectiveness concerning liable variables for it.

4. Statement of the Problem

The main concern in studying Teaching Effectiveness is to examine whether there is any relationship and differences between Teaching Effectiveness, Professional Commitment and Sense of Responsibility. Hence, the study has been stated as **“Teaching Effectiveness in relation to Professional Commitment and Sense of Responsibility among Higher Education Teachers in Nagaland”**.

5. Objectives of the Study

The following are the objectives of the study:

1. To assess the level of Teaching Effectiveness, Professional Commitment and Sense of Responsibility of Higher Education Teachers
2. To examine the relationship between Teaching Effectiveness and Professional Commitment of Higher Education Teachers
3. To examine the relationship between Teaching Effectiveness and Sense of Responsibility of Higher Education Teachers
4. To investigate the difference in Teaching Effectiveness based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream
5. To investigate the difference in Professional Commitment based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream
6. To investigate the difference in Sense of Responsibility based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream

6. Hypotheses of the Study

The following hypotheses are formulated for the study:

1. There is no significant relationship between Teaching Effectiveness and Professional Commitment of Higher Education Teachers.
2. There is no significant relationship between Teaching Effectiveness and Sense of Responsibility of Higher Education Teachers.
3. There is no significant difference in Teaching Effectiveness based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream.
 - 3.1. There is no significant difference in Teaching Effectiveness concerning Gender.
 - 3.2. There is no significant difference in Teaching Effectiveness concerning Age.
 - 3.3. There is no significant difference in Teaching Effectiveness concerning Teaching Experience.
 - 3.4. There is no significant difference in Teaching Effectiveness concerning Locality.
 - 3.5. There is no significant difference in Teaching Effectiveness concerning Type of Management.
 - 3.6. There is no significant difference in Teaching Effectiveness concerning Academic Stream.
4. There is no significant difference in Professional Commitment based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream
 - 4.1. There is no significant difference in Professional Commitment concerning Gender.
 - 4.2. There is no significant difference in Professional Commitment concerning Age.
 - 4.3. There is no significant difference in Professional Commitment concerning Teaching Experience.
 - 4.4. There is no significant difference in Professional Commitment concerning Locality.
 - 4.5. There is no significant difference in Professional Commitment concerning Type of Management.
 - 4.6. There is no significant difference in Professional Commitment concerning Academic Stream.

5. There is no significant difference in Sense of Responsibility based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and Academic Stream.

5.1. There is no significant difference in Sense of Responsibility concerning Gender.

5.2. There is no significant difference in Sense of Responsibility concerning Age.

5.3. There is no significant difference in Sense of Responsibility concerning Teaching Experience.

5.4. There is no significant difference in Sense of Responsibility concerning Locality.

5.5. There is no significant difference in Sense of Responsibility concerning Type of Management.

5.6. There is no significant difference in Sense of Responsibility concerning Academic Stream.

7. Operational Definitions of the Terms

The following are the operational definitions of the terms used

a) Teaching Effectiveness: In the present study, teaching effectiveness refers to teachers who have attained the needed effectiveness in teaching, such as academic and professional knowledge, preparation and presentation, classroom management, interpersonal relationships, and teacher characteristics. Here, it represents the teaching effectiveness of higher education teachers.

b) Professional Commitment: In the present study, professional commitment refers to the commitments of higher education teachers, such as commitment to the learner, commitment to society, commitment to the profession, commitment to achieve excellence in professional actions, and commitment to basic values. Here, it represents the professional commitment of higher education teachers.

c) Sense of Responsibility: In the present study, sense of responsibility refers to the responsibility of higher education teachers towards students' behaviour, learning outcomes, student achievement motivation, providing support, enhancement of capacity building for students and social and national goals of education (Vidushy, 2020). Here, it represents the sense of responsibility of higher education teachers.

d) Higher Education Teachers: Higher education teachers are teachers who teach at the higher education level. For the present study, it refers to the higher education teachers teaching in colleges affiliated with Nagaland University.

8. Variables of the Study

The variables of the study are Teaching Effectiveness, Professional Commitment and Sense of Responsibility. These variables are studied with the demographic variables liable for it.

Here, the demographic variables are gender, age, teaching experience, locality, type of management and academic stream.

9. Delimitations of the Study

- a) The study is delimited to higher education teachers of Nagaland only.
- b) The study is delimited to colleges affiliated with Nagaland University.
- c) The study is delimited to three (3) districts of Nagaland, namely, Kohima, Dimapur and Chumoukedima.
- d) The study is delimited to two academic streams, i.e., arts and science.

10. Methodology

The present study is concerned with the present phenomena in terms of conditions. Therefore, the investigator employed the descriptive survey method as it is considered an appropriate method to attain the study's goals.

11. Population

Here, all the higher education teachers teaching in colleges affiliated with Nagaland University are the population of the study.

12. Sample

The investigator used a simple random sampling technique so that every characteristic or item is represented properly with a fair or equal chance.

At present, thirteen (13) recognised districts of Nagaland have colleges affiliated with Nagaland University. Out of which, there are seventy (70) Nagaland University-affiliated colleges. The investigator selected the colleges using a simple random sampling technique (lottery method) from three (3) districts (approximately 20% of the total districts) The selected districts were Kohima, Dimapur and Chumoukedima, which fall in the category of districts with the highest number of Nagaland University-affiliated colleges (CDU, NU, 2022). The number of colleges in the selected districts is approximately 70% of the total colleges.

Hence, the investigator prepared a list containing the names of colleges for selection. Based on the selected colleges, a sample of three hundred (300) teachers teaching in Nagaland University-affiliated colleges was selected using a simple random sampling technique by lottery method.

13. Tools of the Study

The researcher has employed three (3) research tools namely i) the Teaching Effectiveness Scale for Higher Education Teachers constructed by the researcher, ii) the Professional Commitment Scale for Higher Teachers for Higher Education Teachers and iii) the Teacher's Sense of Responsibility Scale, to gather pertinent data necessary to achieve the specified objectives and hypothesis of the study.

14. Data Collection

The researcher personally visited various colleges of Higher Education in Nagaland to administer the relevant tools for the study. The research tools, namely Teaching Effectiveness Scale for Higher Education Teachers (TESHET), Professional Commitment Scale for Higher Education Teachers (PCSHET) and Teacher's Sense of Responsibility Scale (TSRS), were administered to the sample of the study for the collection of data.

15. Statistical Techniques Employed

Based on the objectives and hypothesis of the study, the researcher employed appropriate statistical techniques such as Percentage, Mean, Standard Deviation (SD), t-test and Analysis of Variance (ANOVA) to find the differences in Teaching Effectiveness, Professional Commitment and Sense of Responsibility based on the demographic variables. Pearson Product Moment Correlation was used to test the relationship between the variables, Teaching Effectiveness, Professional Commitment and Sense of Responsibility.

16. Analysis of Data

The researcher used relevant research tools and appropriate statistical techniques to achieve the objectives, test the hypothesis, show results, and draw conclusions for the study. The raw scores were systematically entered variable-wise, and SPSS 24.0 version was applied to compute all statistical calculations of the study.

According to the objectives and hypothesis of the study, descriptive, differential, and correlation analyses were performed. The collected data were tabulated, analyzed and interpreted

17. Major Findings of the Study

Objective 1: To assess the level of Teaching Effectiveness, Professional Commitment and Sense of Responsibility of Higher Education Teachers

1. The study found that in regard to the level of Teaching Effectiveness, out of 300 higher education teachers, 0.33% have high Teaching Effectiveness, 2% have above average Teaching Effectiveness, 72% have average Teaching Effectiveness, 25.33% have below average Teaching Effectiveness, 0.33% have low Teaching Effectiveness. No higher education teacher has extremely high and extremely low Teaching Effectiveness.
2. The study revealed the level of Professional Commitment that out of 300 higher education teachers, 4.67% have extremely high Professional Commitment, 9.67% have high Professional Commitment, 28.67% have above average Professional Commitment, 34.33% have average Professional Commitment, 13.67% have below average Professional Commitment, 7.33% have low Professional Commitment, and 1.67% have extremely low Professional Commitment.
3. In regard to the level of teachers' sense of responsibility, it showed that out of 300 higher education teachers, 8.67% have extremely high Sense of Responsibility, 19.67% have high Sense of Responsibility, 24.00% have above average Sense of Responsibility, 30.00% have average Sense of Responsibility, 12.67% have below average Sense of Responsibility, 4.33% have low Sense of Responsibility, and 0.67% have extremely low Sense of Responsibility.

Objective 2: To examine the relationship between Teaching Effectiveness and Professional Commitment of Higher Education Teachers

1. There is a significantly positive moderate relationship between Professional Commitment and Teaching Effectiveness of higher education teachers.

Objective 3: To examine the relationship between Teaching Effectiveness and Sense of Responsibility of Higher Education Teachers

1. There is a significantly positive moderate relationship between Sense of Responsibility and Teaching Effectiveness of higher education teachers.

Objective 4: To investigate the difference in Teaching Effectiveness based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management and academic Stream

1. There is a significant difference between male and female higher education teachers' Teaching Effectiveness. It showed that male higher education teachers have better Teaching Effectiveness than female higher education teachers.
2. There is a significant difference in Teaching Effectiveness between higher education teachers based on age i.e., below 30 years, between 31-40 years; and above 41 years. It found that higher education teachers aged above 41 years have more Teaching Effectiveness than higher education teachers below 30 years and between 31-40 years.
3. There is a significant difference in Teaching Effectiveness between higher education teachers based on teaching experience i.e., below 5 years, 6-10 years, 11-20 years and above 21 years. The higher education teachers with teaching experience of 21 years and above have more Teaching Effectiveness than higher education teachers with less than 5 years of teaching experience.
4. There is a significant difference in Teaching Effectiveness between urban and rural higher education teachers. It revealed that urban higher education teachers have better Teaching Effectiveness than rural teachers in higher education.
5. There is a significant difference in Teaching Effectiveness between government and private higher education teachers. It showed that government higher education teachers have better Teaching Effectiveness than private higher education teachers.
6. There is no significant difference in Teaching Effectiveness based on academic stream i.e., higher education teachers from arts and science institutions.

Objective 5: To investigate the difference in Professional Commitment based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management, and Academic Stream

1. There is a significant difference in Professional Commitment between male and female higher education teachers. It revealed that male higher education teachers have more Professional Commitment than female higher education teachers.
2. There is a significant difference in Professional Commitment between higher education teachers based on age i.e., below 30 years, between 31-40 years; and above 41 years. It showed that higher education teachers aged 31-40 years and above 41 years have more Professional Commitment than those of below 30 years.
3. There is a significant difference in Professional Commitment between higher education teachers based on teaching experience i.e., below 5 years, 6-10 years, 11-20 years and above 21 years. It

indicated that higher education teachers with teaching experience of 21 years and above have more Professional Commitment than those with less than 5 years of teaching experience.

4. There is a significant difference in Professional Commitment between urban and rural higher education teachers. It found that teachers from urban have more Professional Commitment than teachers from rural places.
5. There is a significant difference in Professional Commitment between government and private higher education teachers. The government higher education teachers have better Teaching Effectiveness than private higher education teachers.
6. There is no significant difference in Professional Commitment based on academic stream i.e., higher education teachers from arts and science institutions.

Objective 6: To investigate the difference in Sense of Responsibility based on demographic variables such as Gender, Age, Teaching Experience, Locality, Type of Management, and Academic Stream

1. There is a significant difference in Sense of Responsibility between male and female higher education teachers. It found that male higher education teachers have more Sense of Responsibility than female higher education teachers.
2. There is no significant difference in Sense of Responsibility between the higher education teachers based on age i.e., below 30 years, between 31-40 years, and above 41 years. Out of six (6) dimensions of Sense of Responsibility, four (4) dimensions namely Learning Outcomes, Providing Support, Enhancement of Capacity Building for students, and Social and National Goals of Education did not differ significantly based on age viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance. However, there is a significant difference in Sense of Responsibility in two (2) dimensions- The behaviour of students, and Students' Achievement. For both dimensions of Behaviour of Students and Students' Achievement, it was found that higher education teachers aged 41 and above are better than higher education teachers below 30 years and 31-40 years.
3. There is a significant difference in Sense of Responsibility between higher education teachers based on Teaching Experience i.e., below 5 years, between 6-10 years, between 11-20 years and above 21 years.
4. There is no significant difference in Sense of Responsibility between urban and rural higher education teachers.

5. There is a significant difference in Sense of Responsibility between government and private higher education teachers. It found government higher education teachers have more Sense of Responsibility than private higher education teachers.
6. There is a significant difference in Sense of Responsibility based on academic stream i.e., arts and science. The higher education teachers from arts institutions have more Sense of Responsibility than teachers from science institutions.

18. Discussion of the Study

- i. The findings revealed that the level of Teaching Effectiveness of the higher education teachers is high with mean percentage of 76.90. The mean percentage of 77.38 shows that the level of Professional Commitment of the higher education teachers is high. However, the mean percentage of 65.05 shows that the level of Sense of Responsibility of the higher education teachers is moderate. Therefore, higher education teachers should be encouraged to improve Teaching Effectiveness, Professional Commitment and Sense of Responsibility.
- ii. As per the findings of the study, there is a positive moderate relationship between Teaching Effectiveness and Professional Commitment of higher education teachers. This proves that Professional Commitment has a relation towards the effectiveness of teaching. Commitment to the profession and healthy relationships are some factors to improve Teaching Effectiveness (Gupta & Verma, 2021). Therefore, the heads of educational institutions or the principals of schools should promote healthy beliefs in their teaching profession as it indirectly influences work attitudes, leadership behaviours, learning effectiveness and teacher effectiveness among teachers (Mahdy et al., 2018). So, a teacher needs to be professionally committed to teaching.
- iii. The interpreted results showed a positive moderate relationship between Teaching Effectiveness and Sense of Responsibility of higher education teachers. This proves that a Sense of Responsibility has a relation towards the effectiveness of teaching.
- iv. A difference in Teaching Effectiveness between male and female higher education teachers is found in the present study. The result showed that male higher education teachers have better Teaching Effectiveness than female teachers. This was supported by Sumer & Syiem (2021). However, Kumar et al (2024), Shobha (2022), Paschal & Srivastava (2021), Bawa and Varma (2020), and Sadhukhan (2018) disclosed insignificant differences.
- v. In regard to Teaching Effectiveness of higher education teachers concerning age, variation is found between different age groups. It found that higher education teachers above 41 years have more

Teaching Effectiveness than higher education teachers below 30 years and between 31-40 years. The finding contradicted studies of Kumar (2019) and Lalchhuanawma et al. (2020).

- vi. The teaching experience between higher education teachers revealed a significant difference in Teaching Effectiveness. The higher education teachers with teaching experience of 21 years and above have more Teaching Effectiveness than those with less than 5 years of teaching experience. Similar results were found by Raju & Vijaya (2022) and Sadhukhan (2018). However, Kumar (2019), Paschal & Srivastava (2021) showed no differences in their investigation.
- vii. The present study indicated a difference in Teaching Effectiveness between urban and rural higher education teachers. The same finding was brought out by Raju & Vijaya (2022). Sumer and Syiem (2021) and Sadhukhan (2018). The present study revealed that urban higher education teachers have better Teaching Effectiveness than rural teachers in higher education. Kumar (2019) supported the same. Adequate physical facilities, teaching-learning resources, proper transport and communication facilities influence the teaching-learning process. Therefore, efforts should be made in rural areas to promote the effectiveness of teaching.
- viii. The interpreted results indicated a notable variation in Teaching Effectiveness between government and private higher education teachers. Kumar et al (2024) supported the same. Here, it showed that government higher education teachers have higher effectiveness in their teaching. This was supported by Paschal & Srivastava (2021). However, it was contradicted by Kumar et al. (2024), Vijaya (2022) and Shobha (2022). This has shown the need for private higher education institutions to improve the Teaching Effectiveness of higher education teachers.
- ix. The objective to find the differences with respect to academic stream, i.e., higher education teachers in arts and science institutions, found no differences. This finding was supported by Sadhukhan (2018). This shows that Teaching Effectiveness does not depend on the differences between the academic streams.
- x. The present study examined the Professional Commitment and revealed a significant difference in Professional Commitment between male and female higher education teachers. It showed that male higher education teachers have more Professional Commitment than female higher education teachers. On the other hand, Yazici & Ozan (2024) contrasted the present findings. Studies on secondary school teachers indicated the same findings Liegise & Rai (2018), Ranju (2017), and Sunitha and Kalaivani (2023). However, Kumar and Shobha (2023), Begum and Alam (2022), Shanthi and Renugadevi (2021), and Gupta and Jain (2013) indicated no discernible differences. Teachers' commitment is caused by numerous factors such as lack of proper training, low salary,

incompetent heads of educational institutions, lack of motivation, lack of job security, unhealthy working environment and government interference in the teaching profession (Mwesiga & Okendo, 2018).

- xi. The study also examined the difference in Professional Commitment between higher education teachers based on age i.e., below 30 years, between 31-40 years; and above 41 years. And found differences between the various age groups. It showed that higher education teachers aged 31-40 years and above 41 years have more Professional Commitment than those below 30 years.
- xii. The Professional Commitment between higher education teachers found a significant based on teaching experience i.e., below 5 years, 6-10 years, 11-20 years and above 21 years. It indicated that higher education teachers with teaching experience of 21 years and above have more Professional Commitment than those with less than 5 years of teaching experience. Shanthi and Renugadevi (2021), Sood and Anand (2010) demonstrated a significant discernible variation. Teaching experiences contribute more to Professional Commitment. So, emphasis should be given to higher education teachers for job satisfaction so that it increases the years of teaching experience. As there is a strong association between professional commitment and job satisfaction as found by Upadhyaya et al. (2024).
- xiii. In this study, variation exists in Professional Commitment between urban and rural higher education teachers. It found that teachers from urban areas have more Professional Commitment. The same relation was supported by Talukdar (2024). Therefore, continuous professional development programs should be organized for college teachers to improve the Professional Commitment of higher education teachers.
- xiv. The government and private higher education teachers possess a significant difference in Professional Commitment between them. It was found that the government higher education teachers have better Teaching Effectiveness than private higher education teachers. This finding was contradicted by Mahajan & Kauts, (2022). Shobha (2023), Sunitha and Kalaivani (2023) showed no variation too. Therefore, to improve the Professional Commitment of government and private higher education teachers, the provision of financial incentives to prospective teachers and financial assistance to colleges could enhance the Professional Commitment of higher education teachers and also facilitate research-related activities towards better Professional Commitment.
- xv. As no difference was found in Professional Commitment for academic stream i.e., higher education teachers from arts and science institutions. Higher education institutions should concentrate on the

themes that influence teachers' Professional Commitment, such as positive work relationships, professional dignity, opportunities for growth, workload, and a sense of safety (Low et al., 2022).

- xvi. The Sense of Responsibility of higher education teachers is found to be different. It unconcealed a difference between male and female higher education teachers. It found that male higher education teachers have more Sense of Responsibility than female higher education teachers. This aligned with the findings of Aliakbari and Kafshgar (2013). Alyousef and Khalaf (2023) and Bhowmik et al. (2021) contradicted this finding. This could be because male higher education teachers are more involved in decision-making for the growth and development of a nation.
- xvii. The higher education teachers differ in age i.e., below 30 years, between 31-40 years, and above 41 years regarding Sense of Responsibility. Out of six (6) dimensions of Sense of Responsibility, four (4) dimensions namely Learning Outcomes, Providing Support, Enhancement of Capacity Building for students, and Social and National Goals of Education did not differ significantly based on age viz., below 30 years, between 31-40 years; and above 41 years at 0.01 Level of Significance. However, there is a significant difference in Sense of Responsibility in two (2) dimensions- The behaviour of students, and Students' Achievement. For both dimensions of Behaviour of Students and Students' Achievement, it was found that higher education teachers aged 41 and above are better than higher education teachers below 30 years and 31-40 years. Aliakbari and Kafshgar (2013) findings supported the same.
- xviii. The higher education teachers' Sense of Responsibility differs significantly in Teaching Experience i.e., below 5 years, between 6-10 years, between 11-20 years and above 21 years.
- xix. The findings on Sense of Responsibility found no differences between urban and rural higher education teachers. It means that the Sense of Responsibility does not differ on locality of higher education teachers. This contradicted the findings of Bhowmik et al. (2021) and Aliakbari and Kafshgar (2013). However, the present study has proved that the teachers' Sense of Responsibility depends on the individual. Therefore, all higher education teachers should be encouraged to perform their teaching duties responsibly, as there is a strong connection between teachers' Sense of Responsibility and Teaching Effectiveness.
- xx. The difference in the Sense of Responsibility between government and private higher education teachers was proved in the present study. It found that government higher education teachers have more Sense of Responsibility than private higher education teachers. Therefore, higher education teachers teaching in private higher education institutions should be encouraged and they should be assisted to have better Sense of Responsibility.

- xxi. With regard to the academic stream, the study did not find any difference in the Sense of Responsibility i.e., between arts and science. The higher education teachers from arts institutions have more Sense of Responsibility than teachers from science institutions.

19. Educational Implications

The present study has several significant educational implications that may be useful for higher education and other levels of education. Based on the study's findings and discussion, the following educational implications are provided as follows:

- i. The study is an insight for higher education teachers as it has disclosed a positive moderate association between teachers' teaching effectiveness and professional commitment. This reveals the requirement for higher education teachers to be professionally committed, teach effectively and influence learners as facilitators and guides to all learners.
- ii. There is a positive moderate association between teachers' teaching effectiveness and sense of responsibility. So, higher education teachers should feel responsible for their teaching profession. It has shown an urgency for all teachers in the present era to maintain a balance in their diverse responsibilities to meet the needs of learners, parents and society.
- iii. Significant variations were found in gender, age, teaching experience, locality, and type of college management concerning teaching effectiveness and professional commitment. The male higher education teachers were better than the female higher education teachers. This shows the need for higher education institutions to encourage and motivate all teachers teaching in various colleges irrespective of gender, age, teaching experience, locality and type of management. Hence, all stakeholders must responsibly ensure to promote gender equality and provide adequate resources required for higher education institutions.
- iv. Different findings were found in higher education teachers' sense of responsibility. There were variations in age, teaching experience, type of management and academic stream, with no notable distinction in age and locality about their sense of responsibility. Hence, the study has provided an extension on the need for sensitization of the significance of teachers' sense of responsibility for effective teaching.
- v. The study has clearly shown that the differences between academic streams do not hinder teachers' commitment or teaching. There were no distinctions between arts and science higher education teachers' commitment and effectiveness. Therefore, all higher education institutions should create a favourable and conducive learning environment regardless of academic streams.

- vi. The study has provided more practical insights for higher education teachers and teachers of other levels for addressing the various aspects related to the quality of teachers and the effectiveness of teaching. Therefore, the Department of Higher Education should organize more workshops, seminars, Faculty Development Programs (FDP), and continuous professional development programs for higher education teachers.
- vii. The present study has contributed to a great extent towards understanding the need and significance of possessing professional commitment and a sense of responsibility in the teaching profession.
- viii. The study showed the need for higher educational institutions and regulatory bodies to collaboratively bring educational policies, strategies, and methods to balance academic as well as non-academic responsibilities of teachers. Therefore, policymakers and all stakeholders of higher education should initiate and collaboratively implement the various educational policies for holistic quality education.
- ix. Today's generation of learners as well as teachers are faced with a lot of challenging tasks and responsibilities. Nowadays, the teacher's task is not only to deliver the acquired knowledge or transact the curriculum but also to develop moral conduct and values in learners. The present study has focused on Professional Commitment and Sense of Responsibility towards effective teaching as effective teaching not only facilitates the teaching-learning process but brings progress and development in society.
- x. The teaching profession is considered a noble profession. However, there are several issues and challenges in education. This study will encourage teachers concerning the use of innovative ideas, various educational devices, modern innovative teaching-learning methods and strategies which in turn will positively enhance the quality of education.
- xi. Teaching Effectiveness is not confined to certain variables as revealed in the present study. Several factors influence the teaching-learning process and the teaching profession. This study will not only assist higher education teachers in better teaching, but it will also allow parents and the community to understand the various factors that influence the teaching-learning process and its quality.
- xii. Teachers' obligation goes beyond implementing and delivering the curriculum. They have a great responsibility to address the issues which may arise among the learners in the classroom and help them to solve and cope with the problem effectively. Teacher's responsibility to create responsible citizens. This study is a contribution to fulfilling one's responsibility as a teacher.
- xiii. The academic success or failure of learners largely depends on various factors of education. Therefore, the present study is a contribution to the field of education as well as the progress and

development of our nation. The study of Teaching Effectiveness in relation to Professional Commitment and Sense of Responsibility is an influence for the enhancement of the quality higher education teachers in Nagaland.

- xiv. The study has generated new and more ideas for teachers of different levels, scholars and researchers to conduct related studies with other variables and geographical context. It has proved the need for more studies to be conducted in higher education. Hence, the present study has rightly paved the way for future studies in numerous ways.

20. Conclusion

In the present scenario, a teacher is expected to understand and complete the individual needs of students. This can only be done if a teacher possesses a certain set of abilities or qualities. Such qualities help a teacher to be effective in their teaching. The effective teacher takes responsibility for students and provides them with opportunities to discuss and explore. The study has shown a relationship between Teaching Effectiveness, Professional Commitment and Sense of Responsibility. So, to be effective in teaching, a teacher should use a variety of teaching techniques to match the pace of students. A teacher with high teaching effectiveness certainly carries out his/her duties with a high level of commitment and a sense of responsibility.

Therefore, regardless of gender, age, teaching experience, locality, type of management and academic streams, a higher education teacher or teachers of any level in the field of education should strive and render their services to the best of their abilities. Because teacher effectiveness stated to be an imperative area is essential towards promotion of holistic quality education. Teacher effectiveness is also scrutinised in curriculum development and instructional strategies, the methodology utilized by the teacher in imparting training and instruction to the students largely represents teacher effectiveness. Teachers should possess adequate skills and abilities to identify the needs and requirements of the students.

Teachers are the educational system's mainstay, so the study gave teachers a better understanding of how important it is for a teacher at a higher level to teach effectively in the present era. Effective teaching helps students learn as well as enhances their academic performance or achievement. It has become even more important as the emphasis on quality in higher education has increased. The teacher has a major role in the educational development. Teacher is the backbone of any nation. Teachers are one of the most important and moral agents of educational institutions in any society. They are the one who transmits the curriculum and educates the future generation. It is the teacher who can make the maximum impact on the development of the learner's personality.

Hence, the study has proved beneficial in regard to the Teaching Effectiveness concerning Professional Commitment and a Sense of Responsibility in Nagaland.

21. Suggestions for Further Research

The various possible directions and suggestions for further research with the following variables: Teaching Effectiveness, Professional Commitment and Sense of Responsibility.

- i. The effectiveness of teachers contributes a lot towards quality education. Therefore, comparative studies on Teaching Effectiveness, Professional Commitment and Sense of Responsibility can be undertaken between professional and non-professional colleges, in-service and prospective teachers.
- ii. Studies on Teaching Effectiveness, Professional Commitment and Sense of Responsibility can be conducted at different educational levels. The study is related to teachers teaching at the undergraduate level. More studies related to these aspects could be done at other levels, such as primary, secondary, and university levels.
- iii. The present study could not include some higher education teachers, colleges and districts of Nagaland. It was limited to a particular sample. The sample of the study consisted a sample of 300 higher education teachers. Hence, it could be extended to a larger sample, other colleges and districts of Nagaland and even beyond the state of Nagaland.
- iv. The study consisted of three variables: Teaching Effectiveness, Professional Commitment and Sense of Responsibility. For extended research, variables may be changed or increased to study teachers' Teaching Effectiveness.
- v. The effectiveness of teachers may be further pursued by considering other pertinent demographic variables such as post-held, UGC NET qualified and non-NET qualified, educational qualification, refresher courses and Faculty Development Programs attended.

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Appendix-I: Data Collection Permission Letter



NAGALAND UNIVERSITY

(A Central University Established by the Act of Parliament, 35/1989)

Department of Teacher Education,
Kohima Campus,
Meriema, Nagaland-797004

To,

Sub: **Permission for Data Collection**

Sir/Madam,

In fulfilment of the Degree of Doctorate of Philosophy, **Ms. Keneivi-ü Rhatsu**, a research scholar from the Department of Teacher Education, Nagaland University, bearing Reg. No-Ph./TED/00400 is undertaking a study entitled **“Teaching Effectiveness in relation to Professional Commitment and Sense of Responsibility among Higher Education Teachers in Nagaland”**. In this regard, the researcher needs to collect data from various Higher Education Institutions in Nagaland. Therefore, I humbly request your esteemed authority to grant permission to collect data from your institute.

I assure you that it will be solely for the purpose of research work. And your kind consideration will be highly appreciated.

Thanking you in anticipation

Yours Sincerely,

Dr. T. YOLILA SANGTAM,

Assistant Professor,

Department of Teacher Education,

Nagaland University, Kohima Campus- Meriema.

Appendix-II:

Teaching Effectiveness Scale for Higher Education Teachers (TESHET)

Section A (Kindly fill in the following information).

Name of the Teacher (Optional): _____

Gender: Male/ Female

Name of the College (Optional): _____

Stream: Arts/Science

Locality: Urban/Rural **Type of Management:** Government/Private

Post Held: Assistant Professor /Associate Professor/ Professor

Year of Appointment _____

Age: Below 30 years / between 31-40 years/ above 41 years

Teaching Experience: 0-5 years/ 6-10 years/ 11-20 years/ 21 and above

Educational Qualification: PG with PhD/ PG without PhD/ PhD with JRF(Yes/No)

UGC-NET Qualification: Qualified/Non-Qualified

Faculty Induction Programme /Orientation Programme attended: Yes/No

Refresher Course attended: Yes/No (If yes, no.of Refresher Course

Section-B

This section consists of 33 statements concerning **Teaching Effectiveness**. Each statement has options like **Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree**. Kindly indicate your view against each statement by placing a tick mark (✓) under any one of the five (5) given alternatives.

Sl.No	Statements	Strongly agree	Agree	Neutral	Dis-agree	Strongly Disagree
1	I have full confidence in the subject that I teach.					
2	Knowledge of my subject matter is up to date.					
3	Apart from my subject, I impart knowledge related to current events and general awareness.					

Sl.no	Statements	Strongly Agree	Agree	Neutral	Dis-agree	Strongly Disagree
4.	I participate in Orientation Programmes, Faculty Development Programmes (FDP) etc.					
5.	I seek knowledge and experiences with colleagues to improve my teaching.					
6	I organise seminars, workshops etc in the college.					
7	My lesson plan does not take the diverse needs of students.					
8	Teaching-Learning Materials (TLMs) are incorporated in my teaching.					
9	I use relevant examples to simplify difficult topics.					
10	Opportunities are given to students to develop creative and critical thinking.					
11	Professionalism is maintained in my teaching.					
12	I facilitate students to elaborate their knowledge.					
13	I prioritise equity and equality of education.					
14	Cordial relationship is maintained with students, colleagues, parents and the head of the institution.					
15	I fail to teach keeping in view the current trends and issues in education.					
16	I am unable to contribute to the development of society.					
17	I judiciously use the time given for my subject.					
18	I sincerely abide by the rules and regulations of the college.					
19	I do not practice partiality					

	towards students.					
20	My duties are not performed with a sense of responsibility.					
Sl.no	Statements	Strongly Agree	Agree	Neutral	Dis-agree	Strongly Disagree
21	I do not admit my faults wherever necessary.					
22	I make sure students maintain discipline in the college.					
23	Constructive feedback is given to students.					
24	My teaching is planned according to the objectives of the course.					
25	I am unable to use blended teaching-learning approach.					
26	I evaluate students through Continuous Comprehensive Evaluation (CCE).					
27	I provide time for discussion on various topics.					
28	I ignore subject-related interaction with students.					
29	My teaching establishes a connection with the real-life situations.					
30	I motivate students in my teaching.					
31	I am dedicated to my teaching profession.					
32	Confidentiality is maintained wherever necessary.					
33	I extend my cooperation in faculty meetings and other education-related works.					

Appendix-III

Professional Commitment Scale for Higher Education Teachers (PCSHET)

Section-A (Kindly fill in the following information).

Name of the Teacher (Optional): _____
Gender: Male/ Female
Name of the College (Optional): _____
Stream: Arts/Science
Locality: Urban/Rural **Type of Management:** Government/Private
Post Held: Assistant Professor /Associate Professor/ Professor
Year of Appointment _____
Age: Below 30 years / between 31-40 years/ above 41 years
Teaching Experience: 0-5 years/ 6-10 years/ 11-20 years/ 21 and above
Educational Qualification: PG with PhD/ PG without PhD/ PhD with JRF(Yes/No)
UGC-NET Qualification: Qualified/Non-Qualified
Faculty Induction Programme /Orientation Programme attended: Yes/No
Refresher Course attended: Yes/No(If yes, no.of Refresher Course

Section-B:

This section consists of 57 statements related to **Professional Commitment**. Each statement has to be rated on any one of the five given responses, i.e., **Always, Frequently, Sometimes, Rarely, and Never**. Kindly put a tick (✓) on the answer which appropriately shows your behaviour.

Sl. No	Statements	Always	Frequently	Sometimes	Rarely	Never
1	I remain available to students during/after college to solve their problems.					
2	I try to find reasons when students do not take interest in co-curricular activities.					

Sl. No	Statements	Always	Frequently	Sometimes	Rarely	Never
3	I provide freedom to students to share subject-related opinions.					
4	I encourage students to participate in various co-curricular activities.					
5	I keep in touch with my old students to know their progress.					
6	I fail to instill loyalty in my students through actions than words.					
7	I motivate students through several means to eradicate social activities.					
8	I encourage students to promote democracy, secularism, and socialism.					
9	I organize co-curricular activities to develop sensitivity about constitutional norms, values, rights, and duties.					
10	I involve in research work, apart from teaching.					
11	I try to develop various skills among students.					
12	I emphasize social activities for students to play social roles effectively.					
13	I write articles in research journals and magazines.					
14	I teach human values among students.					
15	I check students' results to enhance my work efficiency.					
16	I believe that the quality of education depends on teachers.					
17	I feel proud to be a college teacher.					
18	I take part in seminars, conferences and workshops.					
19	I use learning support materials to provide quality education.					
20	I sensitize students and teachers					

	about new developments and innovations in education.					
Sl. No	Statements	Always	Frequently	Sometimes	Rarely	Never
21	I inform students regarding employment opportunities.					
22	Teachers' participation in orientation and refresher courses is essential for professional growth.					
23	I believe that teachers are prepared by various Teacher-Education courses and programmes.					
24	I do not practice partiality in evaluating students' learning and experiences.					
25	I discuss the problems of students with their parents.					
26	I see to it that the rules and regulations framed by UGC are followed in my college.					
27	I teach to help students conserve Indian Cultural Heritage.					
28	I see that my work efficiency is not affected by various factors of society.					
29	I help students to develop life skills through my teaching.					
30	I review research literature to know more about educational problems.					
31	It is essential for teachers to be a member of educational, social and research organization.					
32	I cooperate with higher authorities and colleagues to build an appropriate academic environment.					
33	I make efforts to provide financial help to students of my college.					
34	I prepare working plans to impart education.					

35	I encourage students to form student council, science club, red ribbon club etc to inculcate social values.					
Sl. No	Statements	Always	Frequently	Sometimes	Rarely	Never
36	I arrange guest lecturesto establish a cordial relationship between the college and society.					
37	I teach keeping in view the needs of all students.					
38	I try to develop a sense of dignity and hard work among students.					
39	I develop consciousness among students through my actions and activities.					
40	I feel proud of solving academic and non-academic problems.					
41	I discuss the attendance of students with their parents.					
42	I organize activities to develop awarenessregarding social issues and problems.					
43	I try to develop right and healthy social outlook among students.					
44	I followhuman values such as impartiality, objectivity, rationality, etc.					
45	I keep in touch with other teachers to acquaint myself with the trends and problems in education.					
46	I refrain myself from teachers who are involved in research.					
47	I identify and work on my shortcomings as a teacher.					
48	I make students aware of social institutions so that they act accordingly in society.					
49	I discuss the educational progress of students with their parents.					

50	I organize extension activities with my colleagues to establish coordination between the college and society.					
51	I provide reinforcement and feedback to remove shortcomings of students.					
Sl. No	Statements	Always	Frequently	Sometimes	Rarely	Never
52	Through my teaching, I make students aware of important national and international issues.					
53	I encourage students to be punctual by ensuring my regularity in college.					
54	I encourage students to participate in authorized blood donation camps, environment awareness rallies, and other programmes.					
55	I carry out discussions with teachers and researchers in regard to education and teaching.					
56	I identify and help students in the teaching-learning difficulties.					
57	I use appropriate teaching-learning methods and skills in my teaching.					

Appendix-IV

Teachers' Sense of Responsibility Scale by Dr. Vimal Vidushy and Dr. Nand Kishor (2020).

Section-A (Kindly fill in the following information).

Name of the Teacher (Optional): _____
Gender: Male/ Female
Name of the College (Optional): _____
Stream: Arts/Science
Locality: Urban/Rural **Type of Management:** Government/Private
Post Held: Assistant Professor /Associate Professor/ Professor
Year of Appointment _____
Age: Below 30 years / between 31-40 years/ above 41 years
Teaching Experience: 0-5 years/ 6-10 years/ 11-20 years/ 21 and above
Educational Qualification: PG with PhD/ PG without PhD/ PhD with JRF(Yes/No)
UGC-NET Qualification: Qualified/Non-Qualified
Faculty Induction Programme /Orientation Programme attended: Yes/No
Refresher Course attended: Yes/No(If yes, no.of Refresher Course

Section-B:

This section consists of 27 statements concerning **Teacher's Sense of Responsibility**. Kindly put a tick mark (✓) against any of the five alternatives: **Completely Responsible, Mostly Responsible, Uncertain, Rarely Responsible, and Not at all Responsible.**

Sl.no	Statements	Completely Responsible	Mostly Responsible	Un-certain	Rarely Responsible	Not at all Responsible
1	A student of mine comes to class on time prepared.					
2	A student of mine doesn't obey classroom rules.					
3	A student of mine doesn't get sensible in the class.					

Sl.no	Statements	Completely Responsible	Mostly Responsible	Un-certain	Rarely Responsible	Not at all Responsible
4	The students of mine don't listen to their parents.					
5	A student of mine shows very low achievement.					
6	The students of mine show disruptive behaviour in the class.					
7	The large percent of students in my class are doing poorly.					
8	A student of mine fails to learn required material.					
9	A student of mine shows excellent progress throughout the year.					
10	A student of mine quickly feels bored when I give the subject assignment.					
11	A student of mine gets good marks in the subject I teach.					
12	A student of mine dislike the subject I teach.					
13	The students of mine enthusiastically participate in all learning activities.					
14	A student of mine values to learn the subject I teach.					
15	The students of mine feel discouraged when I teach.					
16	A student of mine thinks that he/she can't trust me with his/her problems in or outside school.					
17	A student of mine doesn't believe in retaining responsibility for his/her learning.					
18	A student of mine thinks he/she is not treated fairly in the classroom.					
19	A student of mine doesn't get reward/incentive for good behaviour.					
20	A student of mine believes that I truly care about him/her.					
21	A student of mine doesn't					

	participate in classroom discussions.					
Sl.no	Statements	Completely Responsible	Mostly Responsible	Un-certain	Rarely Responsible	Not at all Responsible
22	A student of mine feels encouraged when I assist him/her with his/her home assignment.					
23	The students of mine feel motivated when I help them to indicate their strengths and weaknesses.					
24	The students of mine get involved in school matters.					
25	The students of mine don't show the capacity to acquire relevant knowledge and interpret social and national values.					
26	A student of mine doesn't want to work as a team in any assigned project.					
27	The students of mine can't think independently to find his/her own point of reference in the class.					

Appendix-V: Paper Presentations





Appendix-VI: Paper Publication

SHODHAK A Journal of Historical Research <i>Certificate of Publication</i>		ISSN : 0302-9832
This is to certify that the article entitled		
PROFESSIONAL COMMITMENT OF HIGHER EDUCATION TEACHERS IN NAGALAND		
Authored By		
Keneivi-u Rhatsu Ph. D Research Scholar, Dept of Teacher Education, Nagaland University.		
Published in		
Shodhak : A Journal of Historical Research ISSN : 0302-9832 (P) with IF= 7.75 Volume: 53, Issue: 02, No: 14, May - August : 2023 UGC CARE Group- 1 Peer Reviewed, Bilingual, Referred Journal		
	Published By National Organisation of Historians and Social Scientists	

मध्य भारती मानविकी एवं समाज विज्ञान की विविध शाखाओं में		MADHYA BHARTI (UGC CARE Group-1, Multi disciplinary)
CERTIFICATE OF PUBLICATION		
This is to certify that the article entitled		
TEACHING EFFECTIVENESS AMONG TEACHER-EDUCATORS IN NAGALAND		
Authored By		
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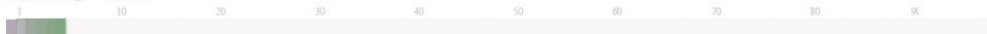
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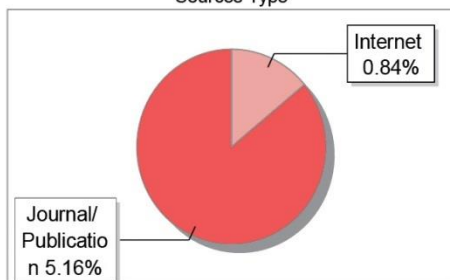
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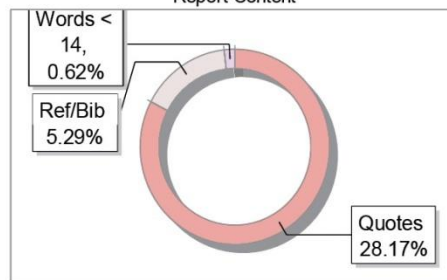
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