Effect of Communication Style and Personality on Communication Effectiveness: A Comparative Study of Faculty of Technical and Non-Technical Institutions

A Thesis

Submitted in fulfillment of the requirement for the degree of

DOCTOR OF PHILOSOPHY

Submitted by

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(DEEMED TO BE UNIVERSITY)

PATIALA, PUNJAB, INDIA

2023

DECLARATION

I, hereby declare that thesis entitled "**Effect of Communication Style and Personality on Communication Effectiveness: A Comparative Study of Faculty of Technical and Non-Technical Institutions**" submitted to Thapar Institute of Engineering and Technology (Deemed to be University), in the fulfilment of the requirements for the award of the degree of **DOCTOR OF PHILOSOPHY** in **COMMUNICATION** is an original research work carried out by me under the supervision of **Dr. Gurvinder kaur**, Associate Professor, Thapar Institute of Engineering and Technology. The matter embodied in this thesis has not been submitted in part or full to any other University or Institute for the award of any degree, diploma, title or recognition.

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CERTIFICATE

This is to certify that this thesis entitled "**Effect of Communication Style and Personality on Communication Effectiveness: A Comparative Study of Faculty of Technical and Non-Technical Institutions**" which is being submitted by Ms. Navdeep Dhillon for the fulfilment of the requirements for the degree of **DOCTOR OF PHILOSOPHY** in **COMMUNICATION** is the record of candidate's original research work carried out under my supervision and guidance. The matter embodied in the thesis has not been submitted to any other University or Institute for the award of any degree, diploma, title or recognition.

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Date: 17 July 2023

Place: Patiala, Punjab, India.

ACKNOWLEDGMENTS

"No one who achieves success does so without acknowledging the help of others. The wise and confident acknowledge this help with gratitude." - *Alfred North Whitehead*

One of the joys of completion is to look over the past journey and remember and thank everyone who has motivated and facilitated me to achieve my goals in some way or the other.

Foremost, I would like to express my deepest gratitude to the Almighty for showering His choicest blessings on me and steering me through this incredible and exciting journey. God always answered my sincere prayers and imparted me with contentment, satisfaction and courage to solve the intricacies of life.

I fall short of words to acknowledge the invaluable contribution of my revered supervisor, Dr (Ms) Gurvinder Kaur, Associate Professor and Former Head, School of Humanities and Social Sciences, Thapar Institute of Engineering and Technology, Patiala for supporting me at every stage of the research with her patience and knowledge. Fortunately, I have benefited from her extraordinary motivation, vast experience, great intuition, immense knowledge and technical insight. Her insightful comments and suggestions have contributed immensely to the research. Sailing through this journey would not have been possible without her guidance and assistance.

I want to thank my institute, Thapar Institute of Engineering and Technology (TIET), Patiala, for providing the resources to complete this thesis. I express my sincere gratitude to Dr Rafat Siddique and Dr N. Tejo Prakash (Professor and Dean of Research & Sponsored Projects, TIET) for providing a motivating and learning environment. I am grateful to Dr Kaustuv Roy (Head of the department, SHSS) and Dr Ravikiran for their kind support. I sincerely thank the doctoral committee members- Dr Apurva Bakshi, Dr S.C. Bose, and Dr S.S. Mallick for their thoughtful and detailed feedback.

On a personal note, special thanks to My Husband- Mr Jaspreet Singh Sidhu IPS; I cannot even imagine this journey without his reinforcement, constant reassurance, patience, companionship and, in fact, his very presence. He is my best critic, my time-keeper, and my motivator who has been there since day one to keep my spirits high. I am grateful to all my three children, my mother-in-law, Sdn Ranjit Kaur and my family. Their endless support and constant encouragement have greatly facilitated the completion of this challenging work. Above all, I dedicate my work to my late parents, miss them so much. They would have been so proud of me.

I am highly indebted to Dr Rakesh Kumar Sharma, Dr Sheena Chhabra and Dr Simerpreet Ahuja for their wholesome support throughout my journey. I want to thank them for motivating me and answering all my questions. All my colleagues from SHSS need a special mention for cooperating with me while I was completing my research. And lastly, I would like to thank all the respondents for their time and cooperation in completing the survey. Without their participation, the research could not have been carried out.

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ABSTRACT

Effect of Communication Style and Personality on Communication Effectiveness: A Comparative Study of Faculty of Technical and Non-Technical Institutions

The excellence of educational institutions can be developed and improved by the teachers' consistent and effective communication with the students. Personality traits and communication styles play a critical role in teachers' communication effectiveness during classroom interactions, further enhancing students' learning and academic satisfaction. The current research attempts to explore the relationship between teachers' personality and communication style and the impact of their personality traits on their communication effectiveness while teaching in classrooms and determine the mediating role of communication style. Explicitly, it is an endeavour to explore the best predictors among diverse components of communication style and personality traits that lead to enhanced communication effectiveness. The study also analyses the differences in communication effectiveness between the faculty of technical and non-technical institutions. Finally, the effects of gender, age, and tenure on the communication effectiveness of the faculty are also examined.

Three instruments were administered to six hundred faculty members teaching in technical and non-technical institutions in the northern region of India, the HEXACO-PI-R model of personality (Ashton et al., 2004; Ashton & Lee, 2008), an adapted version of the Communication Styles Inventory (CSI) by De Vries et al. (2013) and communication effectiveness instrument developed by Loy (2006). After the completion of data collection, the data was analysed using SPSS version 22.0 and Smart PLS version 3.2.0. Descriptive and inferential statistics were used to analyse the responses gathered from self-reporting questionnaires.

The personality traits of faculty significantly influenced their communication effectiveness during their classroom interaction with the students, and there is a total mediating impact of their communication style on the relationship between their personality traits and communication effectiveness. The study identified "conscientiousness" and "extraversion" as significant predictors resulting in enhanced communication effectiveness of teachers through their 'expressive' and 'precise' styles leading to pedagogical efficiency and communication effectiveness. The results of Pearson correlation coefficient indicated a significant positive correlation between personality traits and communication styles of faculty from technical and non-technical institutions. CSI ‘expressiveness’ correlated most strongly with HEXACO

‘extraversion’ and HEXACO ‘consciousness.’ A substantial correlation between HEXACO ‘agreeableness’ and CSI ‘impression manipulativeness,’ was also reported. CSI ‘verbal aggressiveness’ correlated very strongly (negatively) with HEXACO ‘questioningness’; nonetheless, a weak relationship was identified between CSI ‘emotionality’ and HEXACO ‘emotionality’.

No significant difference was reported in the communication effectiveness of faculty from technical and non-technical institutions. However, faculty from technical and non-technical institutions differed only in one sub-variable of communication effectiveness; ‘assertiveness.’ The faculty from non-technical institutions was more assertive than faculty from technical institutions. The results indicated existence of gender differences in communication effectiveness. For subscales of communication effectiveness, ‘listening’ and ‘ability to get the message across,’ females scored higher than males. However, for the subscale ‘assertiveness,’ male faculty scored higher than female faculty. The age and tenure of teaching faculty also influenced their communication effectiveness while interacting with the students in the classrooms. For the subscales of communication effectiveness, the results showed that based on age and tenure of faculty differed particularly in their ‘ability to get the message across’, ‘insight into the communication process’, and ‘assertiveness.’ Differences were also identified for several pairs of means based on the results of Tukey HSD.

The results of the current study will facilitate faculty to self-assess and enhance their communication effectiveness. Classroom environment and students' learning are influenced by teachers' communication styles and personality traits; thus, they should be incorporated when conceptualising the effectiveness of teachers and schools. The relationship established among teachers' personality traits, communication style, and communication effectiveness will give a unique direction to their performance. It will amplify students' class participation, academic performance, and social skills. Promoting interpersonal relationships and effective communicative interactions between instructors and students is imperative, as this will lead to excellence in educational institutions.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

List of Abbreviations

ANOVA	Analysis of Variance
AVE	Average Variance Extracted
CCA	Confirmatory Covariance Analysis
CFA	Confirmatory Factor Analysis
CMB	Common method bias
CR	Composite Reliability
CSI	Communication Style Inventory
HEXACO	Honesty-Humility (H), Emotionality (E), Extraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O).
HEXACO-PI-R	HEXACO-Personality Inventory – Revised
NEO- PI-R	NEO - Personality Inventory – Revised
PLS-SEM	Partial Least Squares -Structural Equation Modeling
SPSS	Statistical Package for the Social Sciences
VIF	Variance Inflation Factor

Chapter 1
INTRODUCTION

Overview

Communication is the exchange and accurate replication of ideas, facts, beliefs, and feelings between or among individuals to elicit a desired response or change in behaviour. Communication, in the words of Rogers (2003), is "a process in which participants create and share information with one another in order to reach a mutual understanding" (p. 5). When a sender's expectations match a receiver's response, communication is congruent and effective (Feldberg, 1975). Hence, any communication aims to ensure sender's anticipation and the receiver's response are as in tune as possible and that the receiver replies as the sender expected. The congruency and efficiency of communication are influenced by the message's content, direction, and medium. According to Cheney et al. (2004), organisational communication as an academic discipline includes the study of signs and symbols, messages, mediums, interactions, associations, networks, effective campaigns, and broader discourses within organisations of all kinds, including governmental organisations, corporations, religious institutions, social movements, and the like.

Communication is a key component for the basic functioning of all organisations. If the employees are provided with timely, clear and accurate information, their performance improves with respect to planning, structure, and communication (Raina, 2010). The foundation of a good working team is regular and complete communication. Effective communication acts as the soul of the educational system, initiating, stimulating, and maintaining successful relationships. Young students' enthusiasm for learning and understanding and their ability to focus on results are greatly influenced by the effectiveness of teachers' communication (Agustiani, 2019; Hipkins, 2012; Palmerton, 1992). Educational institutions represent a set of hierarchical, organised, well-defined, and goal-oriented relationships. They are crucial for establishing societal consciousness, cultures, interpersonal interactions, and highly qualified human resources for the welfare of humanity (Habaci et al., 2013; Srivastava, 2016; Gonda, 2014). The major objectives of teachers while teaching students are not just to get them to think but also to give them an intellectual framework that will direct their thinking, raise their level of participation, and help them become self-reliant. Pedagogical communication is a specific type of communication with its unique features and,

the same time, following basic psychological interrelations, which are unique to communication as an aspect of human interaction, encompassing interactive, communicative and perceptual components (Zhamilya et al., 2013). A variety of ingrained characterises determine a teaching faculty's interest, style, and effectiveness. The interactions educators have with their students and the communication strategies they employ reveal their communication style. The concept of an instructor's communication style can aid in understanding how they function as an 'instrument of thought,' influencing the classroom environment. Teachers' actions, attitudes, and instructional style have an impact on students' motivation, learning, and academic achievement (Joe et al., 2017; Moskovsky et al., 2016).

There are several characteristics of personality that are closely associated with instructors' ideas, feelings, and credibility; these traits are the main influences on their performance and effectiveness in facilitating the transfer of learning. Personality is viewed as a system that influences and explains persistent human behavioural responses to many classes of environmental stimuli (Roberts & Del Vecchio, 2000; Adelstein et al., 2011); this also includes communicating styles (Celli, 2013). The psychological atmosphere of the classroom, which is mainly influenced by the teacher's personality, has a direct bearing on the student's learning outcomes and is connected with teachers' performance. Therefore, an educator's personality is crucial in ensuring effective teaching practices for effective learning. Teachers' personalities play a crucial part in reflecting their teaching methods besides influencing their teaching style (Safarie & Tarlani-aliabadi, 2014). It is vital for teachers to understand the basics of communication, their own style of communication, the critical role of personality, and the impact of all of this on communication effectiveness.

1.2Theoretical Framework

1.2.1 Communication Effectiveness

Communication is the transmission of thoughts and ideas by the sender; it becomes effective when the recipient experiences it in the same way the sender had imagined. Effective communication promotes any institution's relationship with its stakeholders and teamwork, two things that are vital to any organisation's success. Workplace communication is a strategy to convey information so others can understand (Sanchez & Guo, 2005). People who are proficient at communicating in a professional setting, who have developed a wide range of written and verbal communication skills, and who are aware of when and how to utilise

them have more successful careers and make more remarkable contributions to their organisations. The ability to communicate effectively has an impact on both individual and organisational productivity and efficacy (Brun, 2010; Summers, 2010). Employees' ability to communicate effectively determines how well they accomplish organisational goals (Herich, 2008). The quality of interpersonal relationships depends on how well they connect through communication and organisational success rises when connections are better.

Conversely, ineffective communication creates misunderstandings and a lack of clarity, which result in conflict and satisfactory outcomes. The application of the communication effectiveness scale can provide information that can be used to improve interpersonal connections and teamwork for leadership and organisational success in a global setting (Mukherji & Jain, 2015). Employers are likely to employ, retain, and promote employees who are righteous, dependable, resourceful, self-directed, motivated to work and learn, exhibit a positive approach and have effective communication skills (Wats & Wats, 2009).

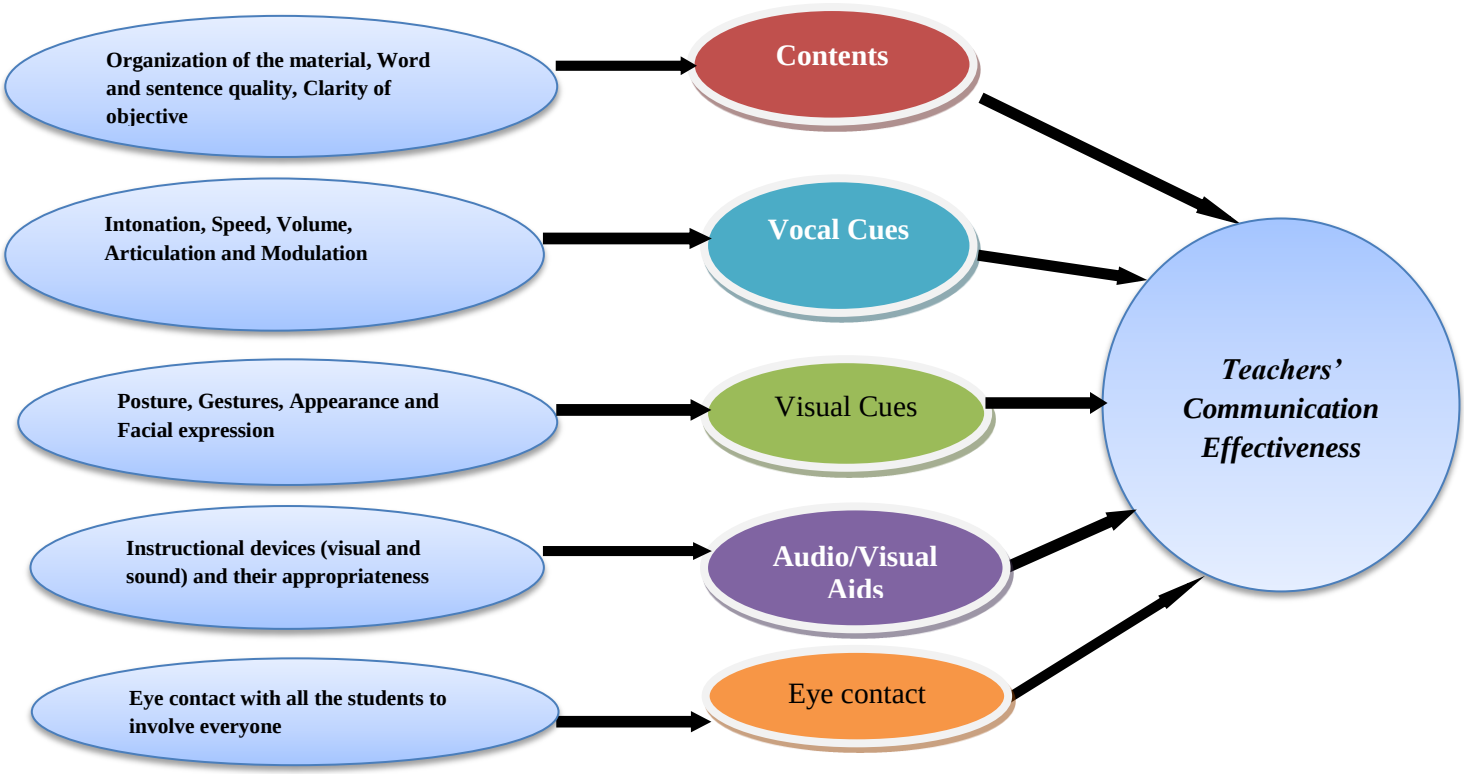
The goal of communication is to strengthen relationships between individuals and create an environment that is beneficial to the organisation's internal growth (Bucăţa & Rizescu, 2017). The essential relationship between language and medium (verbal and nonverbal) is illustrated by effective communication, which is the 'lifeblood' of organisations (Lovlyn Ekeowa, 2017; Bucata & Rizescu, 2017). Effective communication improves workplace relationships, helps workers develop networks and collaborate with one another, increases employee motivation for improved performance, and plays a crucial role in helping employees comprehend the need for change (Mukerjee, 2014; Sen, 2007; Rizvi, 2005; Rodriques, 2003). Employers generally prefer to see an extensive range of skills in the employees they hire; in addition to knowledge based on a particular discipline, an adequate level of soft skills is also desired.

As in all organisations, communication effectiveness is crucial in educational institutions. Every now and then, youngsters are exposed to external influences. There are noticeable changes in interactions and relationships of young students with their family, friends, peers and society on the whole. Furthermore, the electronic media fails to provide appropriate mental stimulation and sensory experience, which is required at this stage. Teachers' communication effectiveness psychologically influences students, which strongly affects their personal well-being, academic performance, and successful career ahead. If teachers can establish cordial relationships with the students, it will have a favourable effect on the student's attitude towards them. Students' motivation and engagement are influenced by how

teachers lead classroom instruction and communicate with them. An educational institution's ability to function effectively may be fuelled by the creation of an efficient communication system within it (Brinia, et al., 2022). Teachers should not simply concentrate on theory and practice; instead, they should focus on what has to be done in the classroom to increase effectiveness and establish close bonds with their students (Heck, 2009; Stronge et al., 2004; Gurney, 2007). As a result, the impact of effective communication on young students is very critical. The fundamental communication effectiveness variables of teachers in the classroom, as shown in Fig. 1, is content shared with students, vocal cues of the teachers (paralinguistic), visual cues of the teachers (kinesics and artefacts), audio-visual aids used while teaching and their eye contact with the students (occulescis).

Figure 1.1

Variables influencing Communication Effectiveness of Teachers



Controlling and modifying communication effectiveness is crucial in ensuring the functional development of the students. Without effective communication, learning cannot occur (Ergin & Birol, 2005, p. 30), and students had positive sentiments towards teachers' communication

if they perceived teachers' messages as engaging (Falcon & Leon, 2023). Consistent teacher communication in the classroom can help develop and strengthen educational institutions, and nearly all of the actions carried out by students in the classroom are built on the teacher's communication effectiveness. The level of communication between the teacher and the student influences a student's performance and behaviour. Teachers and their quality, as well as their style of instruction, significantly influence students understanding and learning, educational achievement, and future outcomes (Sidelinger et al., 2015; Chetty et al., 2014). Communication is an essential component, and the excellence of educational institutions is determined by how consistently and effectively instructors communicate with their students. Similar to how no two students acquire and assimilate material in the same way, every instructor has a unique style of instruction and ways of engaging their pupils. Every teacher has a unique teaching style, and they can harness that style in order to become an effective educator (Heimlich & Norland, 2002).

1.2.2 Communication Style:

People communicate using a wide variety of communication styles, and they prefer sharing and receiving information in a distinctive style. Communication style of an individual demonstrates how they organise their social interactions by blending all appropriate communication styles together in the right situations rather than narrowing them down to just one (Pânişoară & Pânişoară, 2010). In order to effectively communicate information, knowledge, ideas, opinions, or feelings, whether it is personal or non-personal, it is essential to have an adequate understanding of the main communication styles. Finding a particularly effective communication style that results in recipient satisfaction and fosters change has proven challenging for professionals (Bel et al., 2018; Altman et al., 2013). Styles of communication are crucial in both personal and professional interactions, such as those between teachers and students, patients and doctors, salespeople and customers, managers and employees, consultants and clients, and public officials. (De Vries et al., 2013).

The manner in which people communicate has always been an area of interest (Norton, 1983; Gudykunst et al., 1996; Burgoon & Hale, 1987; Rubin et al., 2009), but there is a dearth of a cohesive framework to capture communication styles of individuals. Prior to Norton's Communicator Style: Theory, Application, and Measures (1983), there was little theoretical support for communication style; where he defines style of communication as "the way one verbally, nonverbally, and para-verbally interacts to signal how literal meaning should be

taken, interpreted, filtered, or understood" (p. 19, 58). The Communicator Style Measure (CSM) by Norton consists of single dependent variable (communicator image) along with nine independent variables (dramatic, contentious, dominant, animated, contentious, impression-leaving, open, relaxed, attentive, and friendly). The variable that is independent, identifies a person's style, and the dependent variable results from the independent variable's evaluation. De Vries (2009) expands on this description by integrating components of communicative conduct related to identity and interpersonal interactions. According to him, an individual's style of communication is "the distinctive way he or she sends verbal, paraverbal, and nonverbal signals in social interactions denoting (a) who he or she is or wants to appear to be, (b) how he or she tends to relate to people with whom he or she interacts, and (c) in what way his or her messages should typically be interpreted." (p. 179). For example, an individual who communicates with a high level of attentiveness could wish to reassure their audience that they are paying attention while simultaneously making a compassionate impression and earning their audience's confidence. A lexical study was conducted to develop a communication style framework. Consequently, the Communication Styles Inventory (CSI), a 'six-dimensional model' of communication style, was developed to assess a variety of communication style aspects.

No two students acquire information and knowledge in the same way, and similarly every educator has a different style and strategy for motivating and integrating students in the learning process. Research by R. Norton (1977) pioneered the concept of communicator style and its relevance for effective teaching; later (Andersen, 1987; Norton, 1978; Kearney & McCroskey, 1980) yielded prolific empirical data supporting that communication style was critical for effective teaching. Every teacher's style of instruction has some level of exclusivity. Their choice of employing a particular interacting and teaching style largely rely on factors such as their preferred methods of instruction, students' expectations, academic level, pedagogical outcomes, and size of the class. In educational institutions, a faculty member's communication style is determined by how well they interact with students and how they teach. It is explained as an ensemble of distinctive behaviour patterns that place 'mediation demands' on the mental abilities of both the teacher and the student (Butler, 1984). The manner in which an activity is delivered, as opposed to the content of the activity, determines the teaching and interacting style (Macfadyen & Bailey, 2002, p. 57). As long as the style is appropriate for the subject and the students, it is assumed that it is the most effective and efficient way to communicate the material (Trowbridge & Bybee, 1996).

The primary factor influencing students' interest in a subject is the teachers' chosen style of instruction. Teachers use a multiple techniques of communication in order to accomplish their teaching and evaluation objectives, and their communication styles are based on behaviour that is duplicated by teacher-student interaction (Hein et al., 2012). Teaching styles predict teaching self-efficacy, which in turn predicts teaching commitment to the profession (González et al., 2017). These three factors together influence the learned competencies of teachers. Styles of teaching can be divided into three categories: discipline-centric, student-centric, and teacher-centric. Students do not participate actively in a 'teacher-centric' approach. However, under a 'student-centred' model, the emphasis is on the students, and the teachers' communication style is completely oriented towards increased levels of motivation, learning, and thinking among students. This model also maximises the success of the teachers (Keller, 2018; Moustafa et al., 2013; Boddy et al., 2003; Lackey, 1997). As a result, in this shift from teacher-centric to student-centric pedagogy, the communication style of the teacher is vital in creating an environment in the classroom where students can learn, communicate, engage in critical thinking, and express their creativity.

1.2.3 Personality traits

The word 'personality' has a considerably broader meaning than its strict definition, which refers to the masks worn by actors in Greek tragedies. Personality describes the specific psychological characteristics that influence people's feelings, ideas, and behaviours in various contexts. According to Feist & Feist (2006), personality is a collection of distinctive qualities and enduring attributes that provide one's behaviour with both stability and distinctiveness. Personality characteristics impact how people express themselves and communicate with others (Koppensteiner & Grammer, 2011). A person's personality is their inner self, a distinctive feeling, thinking, and behaviour pattern.

Carl Jung's Psychological Types (1923) is one of the most significant theoretical studies on personality types. According to him, the two basic modes of thinking that determine one's personality are how one sees the world and makes decisions. A person's behaviour patterns, which they exhibit in various contexts, are a part of their personality and influence the choices and acts they make in life. Studies support the evidence that different professionals exhibit different personality factors (Roy, 1995; Bering, 2004). Personality has been formalised in various ways and can be measured through different questionnaires, for instance, the Myers-Briggs type indicators (1980) that define four personality types, the

Circumplex Scales of Interpersonal Values (Locke, 2000) that give eight personality types, the Big5 (Costa & McCrae, 1992; Goldberg, 1990) that define five bipolar traits: extraversion, neuroticism (versus emotional stability), agreeableness, conscientiousness, and openness to experience (or: intellect), and the HEXACO Model of Personality (Ashton et al., 2004; Ashton & Lee, 2008), which proposes honesty-humility as an additional personality dimension. Personality is a base that evolves over a period of time, influenced by genetics and social patterns. It brings about uniqueness in human behaviour and determines interpersonal interaction style, further affecting communication effectiveness.

In the current scenario, educational institutions provide skill training that works with emotional understanding and coherence with the social environment. The students must be well-equipped to recognise, understand, and manage their emotions appropriately in social situations. They also need to have skills in verbal expression, empathic listening, and tactful in social interactions. The traits of the faculty are crucial for developing these mental skills in the students. According to Hamza and Nash (1996), teachers with distinctive traits of personality can create a learning atmosphere that promotes creative thinking and problem-solving skills. The psychological environment of the classroom and the teacher's personality has a significant impact on the learning outcomes of the students (Tonelson, 1981). When used suitably, different personality traits of the faculty become catalysts for ideal student learning and are therefore indispensable to the teacher's classroom activities and teacher-student interaction. In addition to their effectiveness in the classroom, particularly in the choices they make regarding instructional activities, materials, tactics, and classroom management approaches, teachers' personality qualities are also reflected in how they engage with their pupils (Henson & Chambers, 2002). Personality traits of educators are essential to ensure effective teaching practices and learning outcomes. Students learning and academic performance were significantly impacted by teachers' personality traits, which included effective communication abilities with access to the most recent information and proper classroom management during lectures. Students were also motivated and experienced moral growth as a result of these factors, which improved the students' overall performance. (Khan et al., 2016).

Every individual has a distinct personality and communication style, which is essential to their communication effectiveness. It is widely believed that communication effectiveness is increased when personality types and communication styles coincide when individuals are communicating. A person's communication style might provide information about their

personality and interpersonal interactions. People's communication styles are a 'natural' extension of an expression of their personality types, and vice versa. As a result, people engage with others in the same way they feel, act, behave, or experience themselves. (Yeakley, 1982; Daly & Bippus, 1998; Adler & Rodman, 2006).

Teachers have a distinctive teaching style and something unique to offer their students. They analyse themselves after their interactions with students in class, either consciously or unconsciously. As a result, self-evaluation is a critical component of the teaching process; instead, every teacher uses it to learn how to increase their efficacy (Johnstone, 1990; Lyandal, 1994; Ramsden, 1991). By self-evaluating, teachers can thoroughly and honestly examine the essential components to manage interactions during teaching and learning and their communication effectiveness. In addition to having unique characteristics, pedagogical communication adheres to general psychological laws that are particular to communication as a form of human interaction, including communicative, interactive, and perceptual components (Zhamilya et al., 2013). The primary goals of teacher evaluation are to improve students' academic performance and the professional functioning of instructors. It is a spectrum with the teachers' accountability and responsibility at one end and their professional development at the other (Reddy et al., 2015; Hašková et al., 2019; McNamara & O'Har, 2008). To improve a teacher's performance, self-reflection is a necessary requirement. The overall results of a teacher's self-evaluation show his or her understanding of teaching and perceived performance in the classroom (Cranton, 2001). As a result, teachers must assess themselves and select the most effective style of classroom teaching in order to enhance the teaching-learning process and guarantee educational quality.

1.3 Motivation for the Study

The learning and understanding of students as well as the teachers' own instructional reflections rely substantially on their personality traits. Their communication style dimensions, resulting in their effectiveness, explain their relationship with the students. Numerous studies in the past have explored the relationship between the personality traits of faculty and their style of communicating, teaching competencies, and effectiveness (Oostrom et al., 2014; Ionescu, 2013; Aydın et al., 2013) and the relationship between teachers' style with their effectiveness and performance of the students (Mohanna et al., 2007; Zuzovsky & Aitkin, 1994). The psychological environment of the classroom, which is influenced by the personality of the teacher, is a major deciding factor for how effective the teachers are in their

performance and how well students understand and learn (Kennedy, 2012; Rose et al., 2014; Thornton et al., 2005). Thus, both personality traits and styles are essential in determining teachers' effectiveness. The effective communication of teachers can assist the students in learning the concepts and developing their understanding. The objective of the current study is unique, as it takes an insight into how instructors' personality traits influence their ability to communicate effectively while interacting with the students in the classrooms and to identify the mediating role of their communication style. Explicitly, it is an endeavour to identify the best predictors among diverse sub-variables of communication style and personality traits that lead to enhanced communication effectiveness.

According to the literature review in Chapter 2, most of the research is based on students' assessments of their teachers and their satisfaction with the teachers' communication. However, a teacher's ability to communicate effectively is a highly subjective phenomenon that can be assessed by self-reporting. Students' assessments of teachers may not be related to how well they teach and how much students learn. However, if teachers have higher expectations for their teaching ability, it will result in higher student accomplishment (Mascall, 2003; Uttl et al., 2016; Herman et al., 2000). The evaluation parameter based on which students rate their teachers is just one aspect of educational activity: student satisfaction with teaching (Serrano & Arámburo, 2013). However, a teacher's classroom effectiveness is not only about good teaching practices but also effective interpersonal skills. There is empirical evidence that teachers who gave good grades to their students or were perceived as lenient graders, in turn, received more positive ratings from the students.

Conversely, teachers who gave low grades and expected their students to work harder were rated negatively by the students. Therefore there are significant doubts concerning the reliability of student assessments of their instructors (Stroebe, 2016). Clayson (2009) found a minimal relationship between students' evaluation of teaching and their learning; moreover, it was not universal across all academic disciplines, levels of instruction or teachers.

On the other hand, when educators self-evaluate, they are able to identify their strengths and areas they need to improve. As a result, they can foster collaborative teacher-student interaction. This results in the growth of both students and teachers (Peterson, 2000). A person's perception of his or her strengths and weaknesses is an integral part of assessment, thus self-evaluation or self-rating offers an important source of evidence to teachers for assessing their effectiveness (Butler, 2001; Berk, 2005; Barge, 2012). Thus, the current study

seeks to explore a unique direction by analysing the relationship between personality traits, communication style, and communication effectiveness through faculty self-evaluation.

The educational philosophy of a teacher, the demographics of the classroom, and the subject (or subjects) they are teaching all have an impact on how well they communicate with their students. This distinction leads to teachers embracing a style that best suits the requirements of the students and their better learning (Felder & Brent, 2005). The studies in the past have yet to examine the difference in the effectiveness of the faculty based on their expertise (technical or non-technical) and subject specialisation. There is a paucity of comparative research on faculty effectiveness from technical institutions (teaching scientific and technological disciplines) and non-technical institutions (humanities and social disciplines). Therefore, the current study makes an attempt to explore the difference in communication effectiveness between technical and non-technical faculty.

Students' perceptions of their teachers are influenced by cultural norms related to gender, age, experience, and attractiveness. Teachers' communication, behaviour, style of teaching, class performance, and relationship with students are significantly influenced by their age, gender, and teaching experience (Lajawa, 2013; Alufohai & Ibhafidon, 2015; Joye & Wilson, 2015). The study also aims to investigate the role of gender, age, and tenure in faculty communication effectiveness during classroom interactions with students based on the self-evaluation process.

1.4 Research Objectives

The main objective of the current study is to explore the effect of Communication Style and Personality on Communication Effectiveness of the faculty of technical and non-technical institutions.

More specifically the current study aims to:

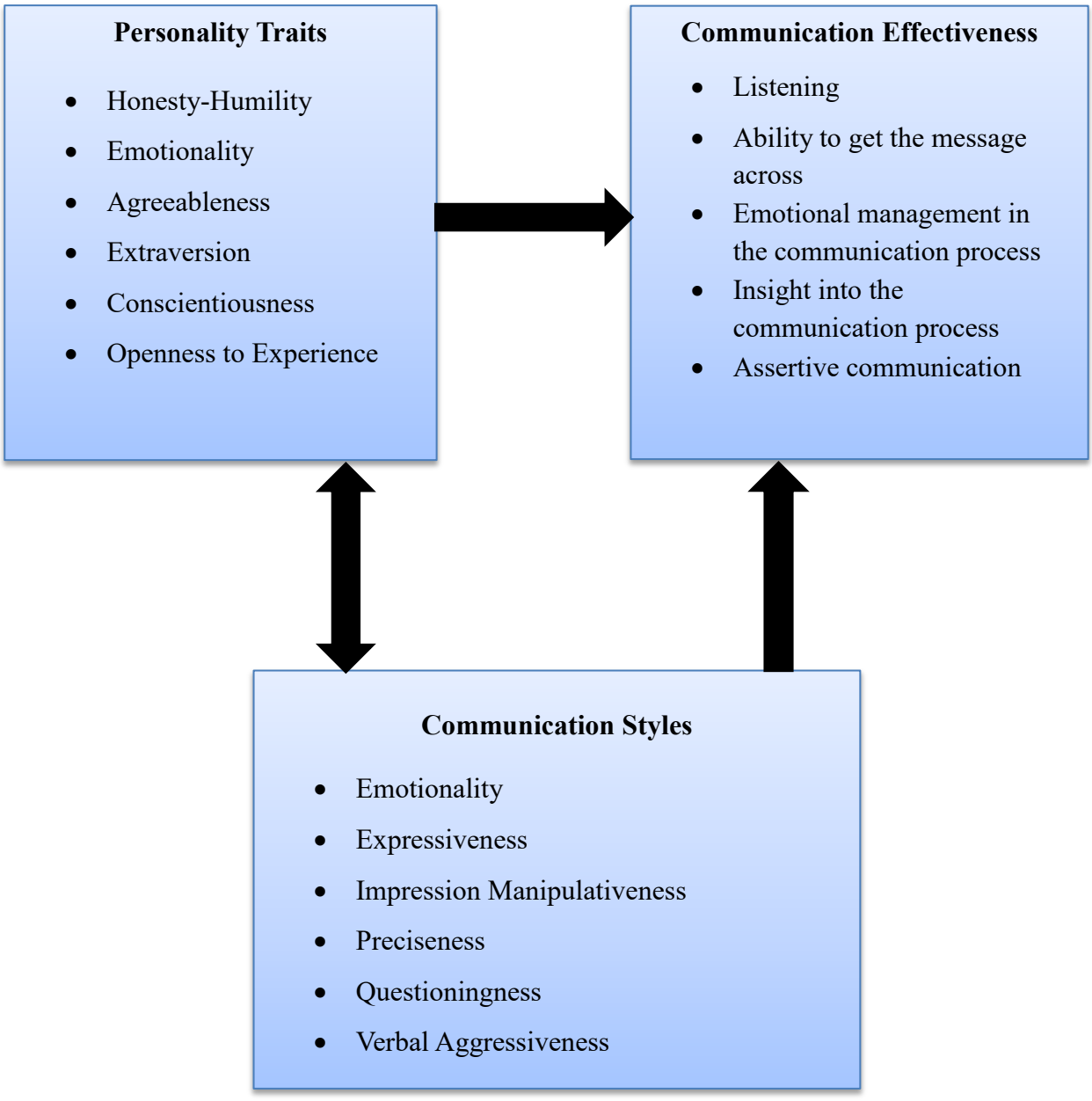
1. To compare the faculty of technical and non-technical institutions on their communication effectiveness.
2. To examine the relationship between Personality and Communication Style of the faculty of technical and non-technical institutions.
3. To study the mediating effect of Communication Style on relationship between Personality and Communication Effectiveness of the faculty of technical and non-technical institutions.

4. To study the effect of age, gender and experience on communication effectiveness of the faculty of technical and non-technical institution.

1.5 Conceptual Framework

The conceptual framework developed for the study is as follows.

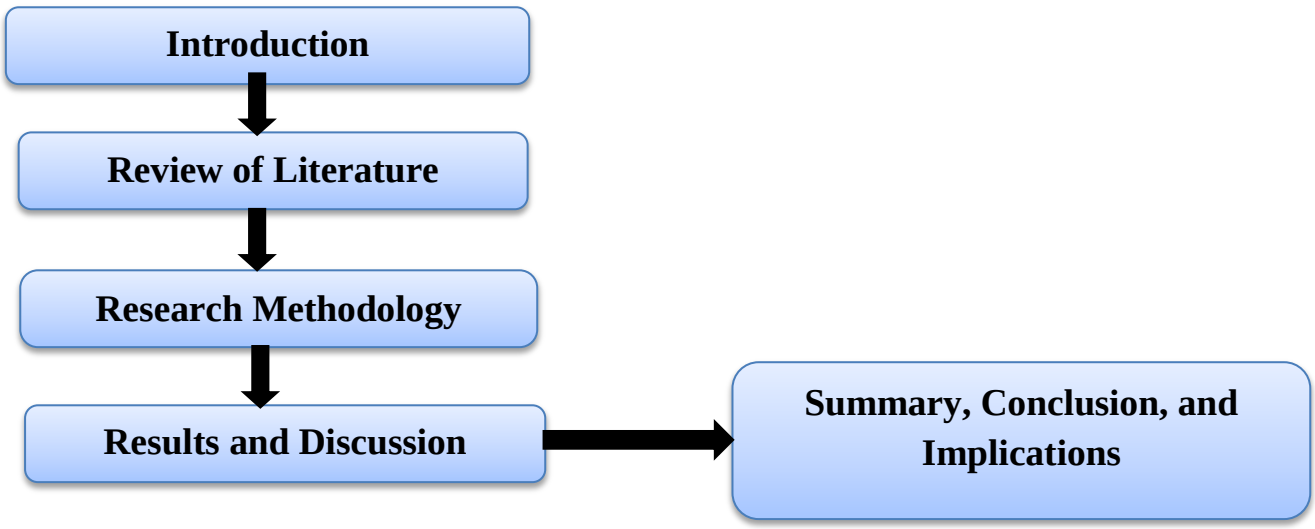
Figure 1.2
Conceptual Framework



1.6 Organisation of the Thesis

Figure 1.3

Flow of chapters



The thesis is presented in five chapters:

Chapter 1: Introduction

The first chapter provides an overview of communication effectiveness, communication styles, and personality traits. The chapter mentions the research questions and lists the five main objectives of the present study. The chapter presents the conceptual framework and the objectives of the study.

Chapter 2: Review of Literature

The second chapter provides a review of the literature. It comprises of prior studies related to personality traits, communication effectiveness, and communication styles of faculty. Further, it reviews research on the relationships among all three constructs. It also covers studies related to differences in the communication effectiveness of faculty from technical and non-technical backgrounds and, finally, studies related to existing differences in the communication effectiveness of faculty based on gender, age, and tenure. The research gaps are identified.

Chapter 3: Research Methodology

The third chapter discusses in detail the methodology used for conducting this research. The chapter clearly describes the targeted sample, how the data were collected, the instruments employed for analysis, and the investigation procedure.

Chapter 4: Results and Discussion

The fourth chapter presents details regarding descriptive statistics and data diagnosis. The chapter deals with the testing of the research hypotheses. The findings are presented according to the research objectives and hypotheses. The study findings are compared with the results of existing studies. Based on the study findings, the chapter mentions the status of each hypothesis.

Chapter 5: Summary, Conclusion, and Implications

The fifth chapter summarises the study, and provides the significance of the research and the conclusion. It also highlights the implications of the research findings, its limitations and future research suggestions.

The thesis is completed with a comprehensive list of references cited in the study and appendices related to the questionnaires used for the study.

1.7 Summary of the Chapter

The first chapter gives an outline of the theoretical concepts of the study. The chapter highlights the research problem that the study aims to address. The chapter mentions the objectives of the present study and the conceptual framework for the study. Finally, the chapter details the organisation of the thesis.

Chapter 2
REVIEW OF LITERATURE

The personality types of instructors, their styles of instruction, and how they communicate with the students have continuously piqued the curiosity of the researchers. An effort has been made in this chapter to review the various theoretical frameworks and research findings related to the study topic under consideration. The formulation of the study's hypothesis and all the following phases of research were guided by all of these viewpoints, opinions, and research findings. The systematic literature review is presented in sections 2.1–2.6, section 2.7 covers the research gaps, and section 2.8 summarises Chapter 2.

2.1 Review of Communication Effectiveness

Effective communication requires a variety of skills that must be developed through practice (Dickson et al., 1997). People who understand how to communicate in an organisation, who possess a variety of written and spoken communication skills, and who are aware of when and how to utilise them seem to have more successful careers and make more noteworthy contributions to their organisations than those who do not (Fairholm, 2002). Phelps and Hassed (2012) suggested that communication effectiveness is essential for an individual to function as a member of society. There is a plethora of information available regarding how effective communication influences organisational performance and success. Management should develop communication effectiveness to maintain and sustain a competitive advantage for an organisation (Avolio, 1999). Several lines of research indicated that effective communication was related to employee skills, performance, goal achievements, motivation, and effective work relationships (Beattie & Ellis, 2014; Bucăţa & Alexandru Rizescu, 2017).

According to Jones et al. (2004), effective communication made it easier for both individuals and groups to plan their actions and accomplish their objectives. Additionally, it was crucial for socialisation, problem-solving, change management, and decision-making. If employees' requirements are met through effective and satisfactory communication, they are more likely to form efficient working relationships (Gray & Laidlow, 2004). Femi (2014) investigated the link between effective communication and employees' productivity and revealed a substantial positive relationship between good communication and employees' productivity, commitment, and performance.

2.1.1 Communication Effectiveness of Faculty in Educational Institutions

Effective communication by faculty in educational institutions was instrumental in responding to the desires of the students, creating a sense of community, and building teacher-student relationships, which helped students perform better academically and feel more satisfied (McCarthy & Carter, 2001; Hornby, 2006). According to Kareva (2011), the intricacy of communication and teaching should be considered while discussing classroom communication because it encompasses both important experiences. Communication and pedagogy are intertwined; effective communication among faculty is an essential variable for best pedagogical practices (Petrie, 2011). If teachers can establish good relationships with their students, it will have a favourable impact on how they feel about them. Educators' successful classroom communication will foster abilities that will help pupils communicate in the future (Weber et al., 2001; Celep, 2004; Pânișoară et al., 2015). Teachers who were highly versatile and responsive in their communication were not only effective; they also helped students overcome their fear of communicating in class, regardless of their communication apprehension trait (Kearney & McCroskey, 1980). The student's motivation to learn was greatly influenced by the communication between the teachers and students, both within and outside the classroom (Geghamyan, 2015). Seven teacher interpersonal communication behaviors—teacher care, clarity, credibility, rapport with students, stroke, immediacy, and confirmation—were introduced and defined by Xie and Derakhshan (2021). They also discussed how these behaviours positively predict academic outcomes like motivation, learning, engagement, involvement, class attendance, willingness to communicate, performance, and success in students.

Research by Ehindero and Ajibade (2000) indicated that an effective teacher must have strong communicative abilities, proper classroom management, up-to-date information, and a balanced personality. When a teacher is approachable and friendly, students' views towards the instructor will be positively influenced since pupils prefer teachers who are friends with them and open to conversation (Celep, 2004, p. 76). Liberante (2012) opined that the interactions between teachers and students profoundly affect learning and that it is crucial for teachers to comprehend their pupils. Ramrez (2012) emphasised the significance of effective communicative interaction, particularly sympathetic listening, in order to attain success in university teaching. In order to achieve excellence in university teaching, Ramrez (2012) emphasised the significance, particularly sympathetic listening. According to Sng Bee (2012), a teacher must develop communication techniques that are appropriate for the

student's abilities and capabilities and inspire them to engage in their learning process. The performance of the pupils was significantly influenced by the teacher's interactions with them and their attitude towards them (De Meyer et al., 2014; Singh & Sarkar, 2015; & Blomeke et al., 2016). Additionally, teachers' communication with their students can influence how they behave in class and how motivated they are to succeed (Mashburn et al., 2008; Dobbs & Arnold, 2009). Contrarily, one of the key contributing factors that caused students to discontinue their studies at a given level was the teachers' poor communication and their unavailability (Dinu, 2015).

The efficacy of the instructor and the students' contentment were both positively correlated with how well the students perceived the instructor's classroom communication abilities and the course material that the teacher had chosen. Students' interaction became more relational, participatory, and functional as a result of the teacher's affirmation (Parayitam et al., 2007; Goodboy & Myers, 2008). In a similar vein, Akram (2019) also emphasised how students' views of teacher effectiveness could be related to their academic success. Most students thought their instructors were effective, which suggests that they frequently displayed effectiveness. Shan et al. (2014) observed that effective communication, a positive learning environment, and sharing accomplishments are key elements in fostering student engagement and enthusiasm for learning, leading to improved academic performance. It is essential for teachers to use effective communication techniques when instructing students because these techniques significantly add to the student's educational performance (Khan et al., 2017). The role of faculty communication in students' educational achievements and success was analysed by Asrar et al. (2018), and a positive correlation was established between them. The positive interaction between teachers and students made learning approachable and enjoyable for the students, in addition to building goodwill and making them result-oriented. Young students' enthusiasm for learning and understanding and the development of their goal-oriented attitudes were greatly influenced by their teachers' effective communication (Diloyan, 2017).

Teachers who had effective communication skills, the latest information, and proper classroom management while delivering the lectures drastically affected the learning and academics of the students, motivated them, and led to moral development, thus facilitating the overall performance of the students (Mohammad et al., 2011; Kheruniah, 2013; Khan et al., 2016). When faculty members were good communicators on a personal level, they fostered a welcoming environment in the classroom where there was mutual respect and

encouragement for the students. This had a favourable effect on the student's overall achievement and commitment to the educational institution (Kareva, 2014). Verbal student-teacher interactions and student characteristics had an impact on students' motivation, understanding, and learning (Domenech & Gomez, 2014; Jurik et al., 2014).

2.2 Review of Personality

An individual's personality is a combination of various traits, which are the distinctive ways in which he or she perceives, feels, believes or acts (Pareek, 2007). Traits of people can be recognised from their behaviour, as behaviour is formed by personality. An individual's traits are what matter, as they guide their behaviour (Conti, 1985), indicating a relationship between their personality and behaviour (Hall, 1997). As a result, by understanding a person's personality, we may predict their behaviour. Students found that the most significant factor that influenced their understanding and learning was the personality of the teacher (Lublin & Barrand, 1987).

2.2.1 Personality Traits of Faculty in Educational Institutions

People's personality traits have long been used as a foundation for understanding them better (Parks-Leduc et al., 2015). Numerous studies have been done in the past to look at teachers' personal characteristics that illustrate the growing importance of personality traits. A number of personality trait variables are closely associated with teachers' opinions, sentiments, and credibility and are the main determinants of their performance and efficacy in facilitating the transfer of knowledge (Polk, 2006; Buttner et al., 2015; Davids et al., 2017). Personality types define various aspects of instructors' professional performance as well as their preferred teaching methods and styles (Curtis & Liying, 2001; Ionescu, 2013). Teachers' personality traits can be seen not only in classroom activities, particularly in their pedagogical strategies, material preferences, instructional behaviour, and classroom management (Johns et al., 1989; Woolfolk, 1998), but also in how they interact with their students (Henson & Chambers, 2002). However, in current times, it is impossible to determine whether there is a consensus regarding what makes an effective teacher (Çubukçu et al., 2012).

Lamke (1951) pioneered using statements from questionnaires based on Cattell's personality theory by Cattell and Mead (2008), to evaluate teacher personality. The F (liveness) and H (social boldness) dimensions saw outcomes above average for more effective instructors, while the F (liveness) dimension saw results below average for less successful teachers.

Birkinshaw's findings, which supported the same theory and demonstrated that extraverted and emotionally stable instructors outperformed inadequate teachers in a range of job-related activities, were cited by Petrovi-Bjeki (1997).The most effective method to understand how a teacher's personality affects their teaching style and professional demeanour is through personality theories (Cramer, 2013; Raymond, 2008). Interestingly, the four personality traits of psychoticism, neuroticism, extraversion, and social conformity discovered in Eysenck's personality model (Eysenck, 1970) did not distinguish between good and bad teachers, according to Li and Wu's (2011) research. Nonetheless, they do not dismiss the importance of teachers' personality traits while instructing. The most significant framework for a more in-depth psychological theory of teacher personality in educational psychology may be based on teachers' personalities that have been created within the context of personality theories (Lajos, 2017).

According to prior research, teachers' personalities had a major impact on students' learning outcomes through the psychological environment of the classroom. A relationship between teachers' personalities and their performance was also identified (Rose et al., 2014; Kennedy, 2012; Thornton et al., 2005). Students observed a strong association between the teacher's personality and the evaluation of instruction when they employed measures to determine the relationship between the teacher's personality and assessment (Clayson & Sheffet, 2006). The preferred teaching methods and styles, as well as aspects of instructors' professional performance, are influenced by the personality types of the educators (Curtis & Liying, 2001; Ionescu, 2013). Kheruniah (2013) established that a teacher's personality, qualification level and working experience positively and significantly affected students' performance. There is a strong association between personality traits and good instruction, and personality types are significant for the variety of academic behaviours they display.

Likewise, Fatemi et al. (2015) observed that teachers' comprehensive awareness of their personality traits would boost their teaching performance and academic outcome. Analysing teachers' personality traits and transformational leadership, they were found to be positively related to teachers' efficacy of classroom management (Mangi et al., 2020). In contrast to the studies mentioned above, Magno and Sembrano (2008) evaluated the relationship between a teacher's performance and effective teaching and their personality traits and teaching efficacy. It was observed that teachers who practised learner-centred approaches made use of their own self-efficacy to be effective in their instruction; however effectiveness did not

translate into good teaching performance ratings. Learner-centred practices have been found to be efficient but did not merit receiving excellent scores based on student assessments.

Numerous researchers and theorists have made an effort to investigate personality traits that were positively connected with faculty effectiveness and others that had little or no bearing on their performance. The Big Five Personality Theory is the foundation for most of these investigations. The Big Five Theory of Personality states five personality dimensions: neuroticism, extraversion, openness, agreeableness, and conscientiousness (Bacanlı et al., 2009). According to Chamorrow-Premuzic, Furnham, and Lewis (2007), although personality traits and learning elements are quite different concepts yet they are connected. Deep learning was positively connected with emotional stability, openness, and agreeability while surface learning was adversely correlated with these traits. Consciousness was also linked to effective and in-depth learning strategies. Additional research revealed that the propensity for interactive instruction correlated with a deep learning strategy, emotional stability, and agreeableness. However, Emmerich et al. (2006) provided evidence that while assertiveness was linked to teachers' performance, conscientiousness was not. Because assertiveness denotes a powerful, ambitious, and spirited social attitude, it is appropriate for teachers to manage the classroom.

The relationship between personality and teaching effectiveness was examined by Othman (2009), who also used the five personality dimensions of agreeableness, conscientiousness, neuroticism, and openness to investigate the association between personality traits and teaching effectiveness. Teaching efficiency and teachers' agreeableness, conscientiousness, and extraversion personality qualities were shown to be significantly correlated, while openness and neuroticism were not. The study also showed that there were other characteristics that affected teaching efficacy in addition to personality, which was not the sole determinant.

Poropat (2009) developed association between academic performance and conscientiousness, and the research also highlighted that they were independent of intelligence level. The correlation between academic performance and educational status was strongly affected by average participant age, educational attainment, and the interaction of age and academic status. Komarraju, Karau, and Schmeck (2009) examined the Big Five personality traits. They were found to be significant determinants in the explanation of academic motivation and success. Conscientiousness significantly affected academic motivation, and there was a

positive correlation between extrinsic motivation and extraversion and intrinsic motivation with openness. Additionally, amotivation was adversely correlated with agreeableness and conscientiousness. In line with these studies, according to Kothari & Pingle (2015), users of the expert teaching style are characterised by conscientiousness and openness to experience. Delegators displayed traits of agreeableness and extraversion, while those who used the facilitator teaching style were described as having emotional stability and extraversion. Personality traits did not distinguish between users of the personal model and those with formal authority traits.

In addition to the findings mentioned above, Klassen and Tze (2017) identified conscientiousness, which is related to planning and organising characteristics, as a significant predictor of teacher effectiveness. Additionally, they discovered that empathetic traits and agreeableness, which are theoretically related to communication, are qualities that make for good teachers. Conscientiousness was also found to be strongly associated with excellent retention rates, more significant value-added estimates, and higher evaluation scores in a study by Bastian et al. (2017). A subtype of conscientiousness called general self-efficacy also significantly impacted teacher value and assessment scores. Kim, Dar-Nimrod, and MacCann (2018) provided evidence in favour of the idea that a teacher's personality affects students' perceptions of their efficacy. The most significant predictor of teacher academic support was conscientiousness, followed by agreeableness and neuroticism as personality traits. Student performance and self-efficacy were also significantly predicted by neuroticism. The objective measure (academic achievement of the students), however, was not predicted by the teacher's personality.

Khalilzadeh and Khodi (2021) observed significant relationships between motivation subscales and the Big Five traits. Predominantly, the conscientiousness personality trait of the teachers positively impacted the intrinsic motivation and knowledge of the students. In contrast, teachers' extraversion personality traits negatively impacted students' intrinsic motivation, success, and understanding. Contrarily, a 2015 study by Buela and Joseph found no connection between openness to experience and conscientiousness as personality qualities and teacher effectiveness. It was shown that there was a substantial association between teachers' extraversion personality qualities, particularly with dimensions of teacher character and topic expertise, and their agreement with the interpersonal relationship component.

According to Barrick and Mount (1991), students preferred extraversion and openness to experience personality traits, as these characteristics had positive attitudes towards their learning experiences. Thus, extraversion and openness to experience were great predictors of the educational adequacy criterion. According to Kalafat (2012), the personality trait that was the most effective indicator of a teacher's qualifications was openness to experience. It was also discovered that teacher personality significantly impacted self-development, one of the teacher requirements. The same conclusions were reached by Arif et al. (2012) that openness outperformed all other personality qualities in terms of significance.

Personality qualities were discovered to significantly influence personal growth, a dimension of teaching abilities Aydn, Bavl, and Alc (2013) explored how pre-service teachers' personality qualities affected how well they judged their teaching abilities. The results showed that extraversion, neuroticism, agreeableness, and conscientiousness all had a significant impact. Extraversion was the strongest indicator of teaching abilities, although neuroticism had the opposite effect. To satisfy extroverts' desire for novelty and intellectual stimulation, the teaching profession in higher education offers stimulating material. Ionescu (2013) also found associations between extraversion and its three components (gregariousness, assertiveness, and activity) and several aspects of teacher professional performance; advancing the notion that extraversion is a desirable quality in teachers.

A related study by Eryilmaz (2014) used the Big-Five Personality Model based on students' responses where they categorised disliked, liked, and neutral teachers. The results supported that the most significant traits of personality which were 'liked' in teachers were extroversion, followed by agreeableness, conscientiousness, openness, and emotional stability. Whereas 'disliked' personality traits of teachers were introversion, antagonism, suspiciousness, emotional instability, carelessness or easy-going nature while interacting with others. Sims (2017) discovered that, with the exception of agreeableness, four of the Big Five domains played a substantial role in determining the experiences of students and educational results. Teachers' high degrees of extraversion and conscientiousness were crucial determinants, predominantly for student teaching ratings. Compared to conscientiousness, extraversion was found to be more strongly connected with teachers' performance (Kim et al., 2019). Meanwhile, teachers' extraversion, conscientiousness, and emotional stability were negatively associated with burnout. With the current trend of online teaching, Singh and Arya (2023) studied the relationship between a teacher's personality and their liking for online teaching. It was revealed that teachers with a high level of agreeableness,

conscientiousness, and openness traits of personality were more comfortable with online teaching as compared to extraversion and neuroticism traits.

Bhargava and Pathy (2011) discovered that competent and confident educators could carry out their professional responsibilities persuasively, and their essential qualities—honesty, patience, and a caring attitude—helped students reach their full potential. Likewise, Yilmaz (2011) also established that personality features such as kin, warmth, friendly, dynamic, and motivating students to learn were recommended as essential characteristics of an effective teacher. The most desired qualities in a teacher are enthusiasm and interest in the subject, followed by empathy and understanding of the feelings of the students. Adaptability, fairness, enthusiasm, high expectations, patience, responsibility, good humour, agreeableness, caring, honesty, friendliness, and respect are some of the twelve prominent personality traits of effective teachers that Gao (2013) identified after examining the personality traits of effective teachers and comparing Chinese and American teachers. While Chinese teachers favoured patience, care, agreeableness, and friendliness, American teachers valued adaptability, humour, and responsibility more highly. Murphy et al.'s (2017) research discovered no significant correlations between personality types and preferred instructional strategies. Extraverts and introverts expressed similar preferences for participation activities in the classroom. The personality types and degrees of agreement with classroom engagement activities varied significantly for one item, "engaging in discussion with other students." Instructors must be cognizant of the fact that their demeanour and style of instruction have an impact on students' achievement (Chimezie, 2020). All of the aforementioned research shows how widespread the benefits of faculty personality traits are and how important it is to recognise and comprehend the attributes that lead to increased professional efficiency and student satisfaction.

2.3 Review of Communication Style

The style of communication used by individuals was influential in both personal and professional situations, including interactions between teachers and students, patients and doctors, salespeople and customers, managers and employees, consultants and clients, politicians and the general public (De Vries et al., 2013). Finding an effective communication style that results in receiver satisfaction and promotes change has proven to be a challenging task for professionals (Bel et al., 2018; Oduaran, 2010; Altman et al., 2013). According to Wubbles et al. (1993), a direct correlation exists between students' academic performance

and overall satisfaction with their teacher and the teaching process. Student learning was found to be facilitated by teachers' communication style.

2.3.1 Communication Style of Faculty in Educational Institutions

Pedagogical context is a major focus of study for the faculty communication style concept. According to Kearney & McCroskey (1980), a teacher's communication style is determined by how students perceive them to be engaging in the classroom. Kan-Kalyk (1987) highlighted that a teacher's style could be explained as distinct typological idiosyncrasies of socio-psychological communication between the student and the teacher. Every instructor has a distinctive style of teaching, which they choose to employ based on a variety of considerations, including pedagogical objectives, their teaching preferences and expectations, the requirements of the students, their academic standing, and the size of the class (Duţă, 2010, 2012; Heimlich & Norland, 2002; Clark, 2000). While teaching, a teacher's communication style focuses on both the content and the method of instruction (Macfadyen & Bailey, 2002; Guerrero & Floyd, 2006; Buang & Samad, 2011). According to Falcon et al. (2021), an instructor's communication style affects how their basic requirements are met and how they are thwarted. The communicative approach taken by teachers also had an impact on their student's performance.

Substantial research validates certain styles of teaching and students' preferences for these styles. Ruiz-Alfonso et al. (2023) gave evidence that teachers' styles of communication had an impact on students' passion for learning and their dedication. Their 'gain-framing' style encouraged students to participate in an activity by emphasising the advantages of participation. In contrast, the loss-framing style had an inverse effect on their passion, and the amotivation-style had no relation with students' behaviour and results. According to a study by Opdenakker and Van Damme (2006), the prevalence of efficient classroom procedures was explained by the faculty's competent class management techniques and their leaner-centric teaching style. Students desired the personal style of teaching and interactive approach of their teachers. Students' relational, participative, and functional communication increased in response to teachers' affirmations (Goodboy & Myers, 2008).

Giles et al. (2012) looked at how students engaged, how teachers and students interacted, and how students perceived how close teachers were to them. According to the findings, having an authoritative communication style has a detrimental impact on students' engagement with

the curriculum and the effectiveness of their relationships with their teachers. In contrast, if teachers had an expressive communication style, it enhanced their responsiveness to the needs of students. Students' motivation and vitality were strongly correlated with instructors' enthusiastic interaction style (Alsharif & Yongyue, 2014). In their study on the mediating role of communication style, Barnett and Johnson (2016) observed that maladaptive perfectionism' decreased perceived social support through precise and vocally confrontational communication approaches.

In addition to the styles mentioned above, Myers and Roca (2007) examined the humorous style employed by instructors when they were in the classroom and found that students gave higher ratings to teachers who used humorous style for their ability to motivate them, reduce anxiety, and establish positive student-teacher relationships. The extent to which students participated in the classroom was positively correlated with the instructor's actor, human, and authoritative approach. In keeping with this study, Makewa et al. (2011) also found that teachers who practiced positive, humorous styles (affiliative humour and self-enhancing humour) while teaching was generally effective, and there was a moderate but significant relationship between teacher's usage of humour and students' ratings of their effectiveness. They were also rated effective in fostering positive student-teacher relationships and in terms of thought stimulation and interest development. Highlighting students' preference for the style of faculty, Geghamyan (2015) postulated that when students were inquired about what they liked the most about their teacher, the answer was that they admired their teacher's smile, artistic teaching ways, and jokes.

There was a considerable difference in approach to learning and teaching based on different cognitive styles. Students with extreme cognitive types showed different approaches to learning (Evans, 2004). The teaching approach with the best academic results prioritised logical learning, applied representation, and interpreted cognitive processing. The communication styles of teachers, students' academic success, and cognitive styles were also found to be strongly related (Bota & Tulbure, 2015).

According to Grasha (1996), teachers' styles can be classified as expert style, authority, formal, facilitator, personal model, and delegator. A 'Teaching Styles Inventory' and a scale of 'Critical Thinking Disposition' were employed by Özgür (2017) to identify the preferred teaching styles of teachers and describe their critical thinking dispositions. It was established that the delegator-facilitator-expert style was the most preferred teaching style. Additionally,

a significant association was identified between teachers' preferred teaching styles and their critical thinking disposition. Likewise, Heydarnejad et al. (2017) posited that facilitator and delegator were teachers' most desired teaching styles, along with expert, personal model, and formal authority. Facilitator-teacher style provided an environment conducive to learning and the highest motivation levels. They helped students make the necessary decisions to achieve their goals. The delegator style also enhanced students' autonomous and independent learning. González et al. (2017) observed that teachers' styles predicted their competencies, which in turn projected their self-efficacy and further predicted their professional commitment. The study made it abundantly evident that teachers must promote professional skills, initial self-efficacy, and a high level of devotion to their field and improve appropriate teaching approaches. Teachers' expressive communication styles improved immediacy in responding to students' demands (Riyani, 2017).

Research by Myers et al. (2002) posited that students' motivations to interact with their professors—such as functional, participative, relational, sycophantic, and excuse-making—could be influenced by both the instructor's socio-communicative style and their socio-communicative orientation. The findings showed a connection between students' assertiveness and their functional, participatory, and justification-making communication reasons. Second, the sycophantic and relational communication reasons are allied to the assertiveness and responsiveness of both the student and the teacher, and third, the functional and participative communication motives are related to the responsiveness of the instructor and the student, respectively. Mottet et al. (2004) suggested that greater student engagement resulted from teachers emphasising messages of inclusivity, appreciation, and openness to communicate. If an instructor used a verbal approach and relational tactics, it positively impacted the students' drive to interact with them for relational, participative, justification-making, and sycophantic reasons. Students' motives to communicate were negatively related to instructors' verbal avoidance and relational strategies.

Teacher immediacy led to motivation, and from motivation came students' self-confidence (Fallah, 2014). Goodboy et al. (2009) carried out four investigations in order to develop and validate a global measure of the student communication satisfaction scale (SCSS) with their instructor. The SCSS, Revised Affective Learning Measure, Attribution Confidence Scale, and Student Motives for Communicating Scale were completed by participants in the second study. While functional, relational, sycophancy, and participatory motives were positively

correlated with the SCSS, offering excuses was negatively correlated with communicative satisfaction. The course and the instructor were impacted by attributional confidence in the teacher.

Teachers' communication style has also been found to be beneficial to students' learning and academic performance. Iurea et al. (2011) posited that the student's academic performance enhanced and became steady if the teacher successfully adapted his or her communication and teaching style to the student's style of learning. Khalid and Rehman (2010) ascertained that teachers' styles of interaction with students distinctly influenced the student's learning habits and their achievements at the same time. Teachers use a variety of communication styles to accomplish their teaching and evaluation goals, and these styles change depending on the situation. Teachers' communication styles were based on behaviour that was replicated by teacher-student interaction (Hein et al., 2012). Rotumoi and Too (2012) opined that the teacher's teaching methodology, the number of students a teacher was responsible for, the availability and sufficiency of classroom space, teaching and learning facilities, and the style the faculty adopted significantly impacted how well the students performed. This led to the conclusion that distinct teaching and learning pedagogies were mutually exclusive and that each had unique traits and effects (Felder & Brent, 2005; Brown, 2003).

A major correlation was established between the interest of students in the subject matter and the preferred teaching style (Buang & Samad, 2011). Myers (2012) investigated how much the communication style of academic advisors affected their effectiveness, the advisees' contentment with their advisors, and the advisees' pleasure with their interaction with advisors. The effectiveness of advisors was found to be predicted by their friendliness, attentiveness, precision, and openness; the satisfaction of students with their advisors' communication was found to be primarily predicted by their friendliness, attentiveness, impression-leaving, relaxedness, and contentiousness; and advisee contentment with interaction was predicted by their friendliness, attentiveness, contentiousness, and impression-leaving. Myers and Claus (2012) conducted a related study on why students communicate with teachers and how the classroom environment affects them. According to the findings, the learning environment was positively correlated with the students' self-reported relational, practical, participatory, and sycophantic motivations for communicating with their professors. Meanwhile, their self-reported reasons for making excuses had little to do with how they felt about the classroom.

The literature mentioned above provides examples of teachers' communication styles, student preferences for these styles, and the associations between these styles and students' academic achievement and satisfaction. However, little research has been conducted where faculty have self-assessed the impact of their style on their communication effectiveness during classroom interactions with students.

2.4 Review of Personality Traits, Communication Style and Communication Effectiveness

A person's personality directly impacts how they communicate, and that communication behaviour has a biological basis (Beatty & McCroskey, 1998, p. 4652). The personality and communication were seen to be 'closely related' (Andersen, 1987) or 'inherently entwined' (Daly & Bippus, 1998, p. 22). Due to personality characteristics' impact on how people interact in diverse interpersonal contexts, personality plays a significant role in interpersonal communication (Daly, 2002). People connect with others in the same way they feel, conduct, act, or experience things. People communicate with others in the same way that they feel, conduct, act, or experience things. Therefore, their communication style is a natural extension and expression of their personality type (Adler & Rodman, 2006; Yeakley, 1982). It has long been the focus of research and discussion on how different personality types and tendencies for communication styles relate to one another. Researchers have found a connection between personality type and communication styles of people (Beatty & McCroskey, 1998; Leung & Bond, 2001; McCroskey et al., 2004). An individual's communication with others is greatly influenced by how that person behaves. For instance, a calm, friendly, and optimistic person will be more expressive in his or her communication and will be regarded as helpful and humorous by others (De Vries et al., 2011). Exploring the role of personality types in a teacher's style and strategies, Safarie and Tarlani-aliabadi (2014) suggested that teachers' personality types were significantly reflected in their teaching practises and could determine their style. Teacher's attitudes, personality, and teaching styles have an impact on students' learning, motivation, and academic accomplishment (Papi & Abdollahzadeh, 2012; Mehrani & Khodi, 2014; Moskovsky et al., 2016; Joe et al., 2017).

Researchers have always been interested in examining how different personality types relate to their propensity for particular communication behaviours and styles. Waldherr and Muck (2011) proposed embedding styles of communication into the Five-Factor Theory proposed by McCrae and Costa (1996) and defined communication styles as characteristic personality

adaptations. In addition, they acknowledged the relationships between culture, personality, observable behaviour, and communication style. De Vries et al.'s study in 2013 included the Communication Styles Inventory (CSI), a six-dimensional communication style model. The six domain-level communicative behaviour scales recognised by the CSI were Expressiveness, Preciseness, Questioningness, Verbal Aggression, Emotionality, and Impression Manipulativeness, each comprising four facet-level scales. As operationalised by the NEO-PI-R and HEXCO-PI-R, the study also observed a medium-to-strong association between communication style and personality. Similar findings were made by Naqvi and Ahmed (2015), who discovered that while communication style and personality are both individualised phenomena, a relationship exists between the two and a particular personality trait that matches a particular communication style.

According to Leung and Bond (2002), the relationship between personality and communication style was significantly influenced by the perspective of self versus others, through which it was measured. Individual differences in personality significantly predicted communication style on all three dimensions (verbal engagement, attention to others, and feelings against silence) as assessed by others. Only two of the three self-rated components of the style of communication (verbal engagement and attentiveness to others) were somewhat predicted by personality when the individual evaluated each component. The relationship between Eysenck's dimensions of personality and various communication variables was examined by McCroskey et al. (2001). The outcomes indicated that non-neurotic extroverts were not shy or apprehensive; they perceived themselves as more competent. They were more assertive and responsive and expressed a high degree of self-acceptance. The neurotic introverts were apprehensive about communication and rated themselves as having a low affect orientation and a somewhat high degree of verbal aggressiveness. Loffredo and Opt (2003) discovered that people's preferences for communication styles and personality traits vary, which may be related to how well or poorly they fit into society. More positive communicators than introverts are people who select extraversion as their preferred mode of behaviour. Additional evidence demonstrates the biological nature of communication behaviour.

Heisel et al. (2003) explored the relationship between personality and communication style. While extraversion and reversed neuroticism were both positively correlated with peer-related affinity-seeking communication, they also found evidence for a positive association

between peer-rated aggressive behaviour and psychoticism. According to a study conducted by Weaver (2005) to examine the relationship between communication style and personality type, it was reported that there was a negative correlation between psychoticism, which is a combination of low agreeableness and low conscientiousness, and the Responsive Communication Style (RCS). There was a positive correlation between straightforward, extraversion, and talkative communication styles, as well as between neuroticism and an acquiescent style of communication. It was established that individuals with extroversion, intuition, and thinking traits had an argumentative style of communication compared to those with introversion, sensing, and feeling traits (Oostrom et al., 2014). Fornaciari et al. (2013) explored the effect of personality type on deceptive communication styles. They reported that people who show certain personality types (extroverts, friendly, organised, and insightful) have a style of communication in which deception can be easily detected. An individual's personality and professional relationships can be determined based on his or her communication style (Qureshi, 2015).

Solaja et al. (2016) established a connection between personality traits and leadership communication style, which also determined organisational productivity. Molero Jurado et al. (2018), in their research on how personal variables impact the communication style of nursing professionals, identified an association between five big traits of personality and aggressive verbal communication style. This study highlighted that conscientiousness, agreeableness, and neuroticism traits were closely connected to aggressive verbal communication. This association was still significant for people with high neuroticism scores, even though mood had a moderating effect. Kottawatta (2019), who investigated the relationship between communication style and personality among students, found that the expressiveness style of communication had a positive and significant relationship with extraversion, agreeableness, openness to experience, and conscientiousness traits of personality. Students' extraversion, openness to experience, agreeableness, and conscientiousness personality traits also positively correlated with their precise style. Further, it was revealed that the neuroticism trait had an impact on emotionality, verbal aggressiveness, and impression manipulativeness styles of communication. All of these studies demonstrate a relationship between communication styles and personality traits.

However, according to Emanuel (2013), it is crucial to keep in mind that these connections are only probabilities and not concrete evidence. In his study on personality type and

communication style, he showed contradictory findings to the previous studies and highlighted that a specific personality type preferred no particular combination of sub-constructs of communication style; nevertheless, some styles of communication sub-constructs were not favoured by certain personality types. Due to the complexity of the human psyche, conceptualising both personality and communication style is undoubtedly challenging.

The existing research has posited the impact of personality traits on willingness to communicate and communication skills. Karadag and Kaya (2019) illustrated that willingness to communicate depended on the extraversion trait of personality; besides this, openness to experiences and conscientiousness also had a positive and significant relationship with willingness to communicate. The impact of conscientiousness and extraversion traits of personality was highly significant on the communication effectiveness of the teachers (Dhillon & Kaur, 2023). Persons who displayed high openness were more expressive, verbally fluent, and funny while communicating (Sneed et al., 1998). Extraversion and agreeableness were found to have substantial relationships with social-communicative abilities, though emotional stability and conscientiousness displayed no correlation with these abilities (Morgeson et al., 2005). Sims (2017) also noted that extraversion enormously impacted communicative assertiveness but did not specifically elucidate the variation in active-empathetic listening. The influence of personality traits on pupils' communication skills was noted by Molinuevo and Torrubia (2013). Students who self-rated their communication skills better also scored higher on extraversion. However, a recent study by Kuntze et al. (2016) indicated that neither of the Big Five personality qualities could considerably predict how well a student mastered communication skills. This suggests that individuals could be proficient communicators regardless of how well they scored on these personality traits.

Literature highlights the relationship between personality and communicative variables and communication styles; nonetheless, there needs to be more research on the interrelationship between personality, communicative style, and effectiveness, particularly among faculty in educational institutions.

2.5 Differences in Technical and Non-technical faculty.

There is a close link between teachers' expertise and their interaction style. Most educators imparted knowledge as they had been taught (Stitt-Gohdes, 2001; Novotna, 2013). The communication style of a teacher depends on their educational philosophy, the demographics of their classroom, and the subject (or subjects) they are teaching. Due to this variation, teachers are able to adopt a teaching method that best meets the needs of their students and promotes improved subject retention (Felder & Brent, 2005). Education professionals are likely to instruct students in the same manner in which they were instructed. (Gardner, 1999). Furthermore, according to Jonassen (1981), there is a significant correlation between a teacher's learning style and the approach they take while teaching or interacting with their students. Furthermore, there is no 'one-size-fits-all' strategy for teaching or learning (Jorgensen, 2006).

Different methods of instruction and learning had their own exclusivity, as well as distinctive qualities and effects (Felder & Brent, 2005; Brown, 2003). In his study on gender bias, Arreola (2000) suggested that the apparent bias may have been caused by the courses that professors were assigned to teach rather than the instructors' genders. A number of deeply ingrained factors largely influenced the interest areas, style, and efficacy of the faculty. The component that facilitated professional development and training in a particular field was vital (Ojure & Sherman, 2001). In their study to compare the learning styles of students in technical and non-technical fields, Calafate et al. (2009) discovered that students with non-technical career options were able to maintain better equilibrium while adjusting to various learning styles than technical career options students. Subject-area specialisation can potentially increase the effectiveness of the teachers and the institutions by leveraging and developing a teacher's subject expertise (Condie et al., 2011; Kane et al., 2011). The area of teachers' specialisation established an association with the performance of teachers in terms of subject-matter expertise and its application within and across course areas (Ezeudu & Utazi, 2014; Malahay, 2021).

In contrast to the above studies, Johansson and Myrberg (2019) found no association between students' perceptions of instructional quality and student reading achievement or between instructional quality and teacher specialisation. In addition to modelling their instruction after previous instructors, teachers often draw from a varied range of

knowledge and prior experiences (Oleson & Hora, 2013), which may be alike for faculty with technical or non-technical backgrounds. A dearth of research has compared the faculty effectiveness from technical institutions (teaching scientific and technological disciplines) and non-technical institutions (humanities and social disciplines). Therefore, the current study attempts to explore the difference in communication effectiveness between technical and non-technical faculty.

2.6 Demographic Variables

Various researchers have shown in their studies a connection between demographic variables and the effectiveness of teachers. The findings have reported a significant impact of teachers' age, gender, and teaching experience on their communication, behaviour, style of teaching, class performance, and relationship with students (Lajawa, 2013; Alufohai & Ibhafidon, 2015; Joye & Wilson, 2015). Students' perceptions of their teachers are influenced by cultural standards related to gender, age, experience, and attractiveness. Females were expected to be kind (Ebert et al., 2014), agreeable, open, and contentious (Löckenhoff, 2014), and competence was expected both from males and females (Löckenhoff, 2014). However, studies have also postulated that circumstances may influence classroom communication between teachers and students, the ongoing dynamic nature of professor-student communication, and how teachers relate to students, irrespective of gender, age, experience, or tenure. The insignificant impact of a teacher's age, seniority, gender, and qualification on their effectiveness indicated that these factors were not imperative for a teacher's classroom teaching, communication with students, or student-teacher relationship (Tran & Do, 2022).

Researchers examined a number of variables based on the claim that interactions between students and teachers are different based on gender. When attempting to explain relationships between students and teachers in a formal classroom setting, the possible influence of gender has been discovered to be a major determinant (Canada & Pringle, 1995; Hopf & Hatzichristoo, 1999; Duffy et al., 2001). Educators' and learners' gender could peculiarly influence the nature of classroom interaction (Rashidi & Naderi, 2012). Teachers' behaviour types, such as expressiveness, could be associated with gender, and gender may also have an impact on their evaluations (Centra & Gaubatz, 2000; Arbuckle & Williams, 2003).

According to Arbuckle and Williams (2003) and Centra and Gaubatz (2000), gender may be related to specific behavioural patterns in teachers, such as expressiveness, and it may also have an effect on how well they are rated. Studies from the past have revealed gender differences in how students are treated by their teachers in educational institutes (Miller & Chamberlin, 2000; Huston, 2006). For example, Basow (1995) discovered that female educators were perceived as more compassionate by their students and exhibited greater empathy towards their perspectives. However, pupils credited male teachers with having extensive knowledge and practice in the subject. Studies have found that college students rated the performance of female educators higher than male educators (Tatro, 1995; Bachen et al., 1999; Feldman, 2007). Female teachers were found to be more engaged with students than their male counterparts however, the length of teaching experience had no significant effect on their work engagement and job satisfaction (Topchyan & Woehler, 2021).

On the other hand, some researchers established that male instructors were rated higher than their female colleagues (Basow & Silberg, 1987; Sadker et al., 1991). Other empirical investigations showed that students viewed male professors as subject matter experts, whereas female educators were seen as more polite and more concerned with maintaining discipline within the classroom (Lacey et al., 1998; Basow, 2000). Numerous other studies also found that female teachers were rated better than male teachers when assessed by female students; however, there was no difference reported in the evaluations of male students based on instructors' gender (Bachen et al., 1999; Whitworth et al., 2002).

In general, it was found that female instructors were more likely to use cooperative educational methods such as tutorials, working in learner clusters, and deciding modes of assignments. According to Starbuck (2003), men tended to prefer less intimate teaching techniques like lectures and computer-based learning. Kimmel (2000) proposed that society's various traditional attitudes regarding the normative forms of relationship and interaction could be the cause of how differently male and female faculty were perceived. Similarly, additional studies have highlighted that students reported gender variations in teachers' teaching approaches (Martin & Marsh, 2005; Whitworth et al., 2002; Chudgar & Sankar, 2008). According to Ibe et al. (2013), there is a considerable difference in the expertise and experience levels of male and female science teachers as

well as in how they manage laboratory equipment. The male teachers were considered better than their female counterparts, as they handled the equipment practically. When examining gender variations in teacher-student interaction, Lavy and Sand (2015) found that most male teachers preferred mixing with male students more than female students, giving them more opportunities to participate in class discussions.

Waseka et al. (2016) assessed the effect of different factors of teachers on learners' performance, and it was found that gender differences were statistically significant determinants of students' academic performance. Most of the students desired to be taught by female teachers as they performed better in fundamental functions compared to male teachers. Muralidharan and Sheth (2016) studied gender differences among teachers in learning outcomes and their effectiveness in decreasing inequality in learning. Female teachers showed more effectiveness when they taught students of their own gender, and girl students performed better when female teachers taught them. Research outcomes reported by Lee et al. (2017) indicated that female professors significantly influenced both the academic success of male and female students and have shown a greater degree of achievement in terms of their teaching methods.

Contrary to claims that there were gender differences in teachers' attitudes and how students perceived the teachers, several studies, including those by Nuhfer (2003), Feldman (1992), Centra and Gaubatz (1998), and Den et al. (2004), did not find that a teacher's gender was a significant predictor of their students' overall feedback. There were no differences based on gender in teachers' attitudes, according to some other studies that looked into the issue. They also backed up the idea that classroom interactions relied on the circumstances at hand and the manner in which teachers interacted with their students (Rashidi & Rafiee Rad, 2010; Doray, 2005). Anumaka and Ssemugenyi (2013) found no significant difference between males and females besides their punctuality aspect, which was found to be relatively higher in men. Additionally, Ogheneakoke (2015) reported that there were no substantial gender differences in the competencies of social studies teachers, and both male and female teachers showed no difference in the use of inquiry methods in upper-basic education. Matheri (2015), in his study to determine the influence of gender on staff and principals, discovered that there was no relationship between the effectiveness and management of principals and their

gender. Teachers' irrespective of their gender, were equally motivated to perform their core duties, both extrinsically and intrinsically (Wanakacha et al., 2018).

While there was no discernible difference in the teaching burden between male and female teachers, men's research workload was noticeably higher than that of women (Ding, 2021). Shah and Udgaonkar (2018) opined that as long as the teacher was engaged and enthusiastic about the subject matter, students did not view gender or age as a barrier to teaching. Female students, however, preferred female teachers because they thought it was easier to communicate with them. Nevertheless, students did feel that female teachers were hardworking, compassionate, sincere, and had a high-pitched audible voices. Compared to males, women talked less and listened more while communicating because, while communicating, they were also concerned about the personal and emotional matters of the students. According to Feldman (2007) and Zuzovsky (2003), Female teachers had an advantage over male teachers regarding student performance.

Various other studies have documented gender differences in the interactive behaviour and teaching styles of teachers, and these gaps and biases on the part of teachers could have both negative and positive impacts on the significance of instruction styles and knowledge. According to Lacey et al. (1998), male instructors' interaction style with the students was more assertive and strict. In contrast, female teachers' style was comparatively more relaxed and open to students' suggestions. In order to encourage a participative environment for students, female teachers were found to be more effective (Ifegbesan, 2010). Teacher's behaviour motivated student's achievement, and a stronger relationship existed between female teachers and their students (Dee, 2005, 2007; Winters et al., 2013).

On the contrary, according to Quari and Bhat (2015), men instructors displayed better teaching attitudes than female teachers. Communication styles have also been found to differ by gender, with the male style being linked to hierarchical rewards (such as more promotions and advancement to higher managerial levels) and the female style being linked to non-hierarchical rewards (such as higher pay and more comprehensive range of control). Additionally, an interaction effect revealed that gendered communication style affected compensation for women more than for males (Young et al., 2009; Weinberg et al., 2015). However, numerous studies have found no discernible distinction between

male and female professors' teaching styles (Islahi & Nasreen, 2013; Francis et al., 2006; Centra & Gaubatz, 2000).

The previous studies suggest that even though there is evidence that gender influences teachers' performance, more research is still required to fully understand how a teacher's gender and other personal traits affect their capacity for effective communication when interacting with students.

Literature has reported that factors like age and prior teaching experiences have a particular influence on the effectiveness of teachers. In their study, Martin and Smith (1990) concluded that middle-aged teachers performed better in terms of competence, organisation, and communication. In line with this study, Alufohai and Ibhafidon (2015) also revealed that compared to younger and older teachers, teachers in the midst of their careers—between the ages of 36 and 48—were more effective in improving student performance. Additionally, it was discovered that younger instructors between the ages of 21 and 34 performed better than more experienced instructors between the ages of 49 and above. Unal and Unal (2012) found that when compared to younger teachers, those over the age of 41 were shown to be more effective teachers, and they also had better classroom management skills. Aloka and Bojuwoye (2013) reinforced this viewpoint. They observed that younger teachers frequently ended up making riskier decisions because they did not cautiously analyse the context. They had disciplinary problems while dealing with students. The reason could be their inexperience and immaturity compared to the more experienced professors. These results did not differ from those of a subsequent study by Nyagah and Gathumbi (2017), who claimed that older teachers were more likely to improve students' learning and performance than their middle-aged and younger colleagues.

However, on the other side, some studies state that young or middle-aged teachers were rated higher on their teaching skills compared to old teachers or that there was no significant dissimilarity between old and young teachers (Goebel & Cashen, 1979; Abrami & d'Appollonia, 1999; d'Appollonia & Abrami, 1994). Sivasakthi and Muthumanickam (2012) found no substantial difference in teaching effectiveness amongst young teachers (30 years and below), mature or middle-aged teachers (30 to 40 years), and older teachers (above 40 years), which categorically indicated that the efficiency of the teachers was unaffected by their age. Similarly, Bodhe and Jankar

(2015) also observed a conflicting result, stating that an intelligent and dedicated teacher found respect among students irrespective of age, gender, or designation. Students gave importance to the capabilities of the teacher, especially knowledge, explanation, and clarity. Effective communication is essential for teachers to build rapport with students and motivate them for better learning.

Age is associated with experiences, and the latter could also be a noteworthy factor that reflects the teachers' careers (Burroughs et al., 2019) and determines educational success (Rakib et al., 2017). Nonetheless, the connection between teacher experience and student learning was not always observed to be significant or wholly linear (Klitgaard & Hall, 1974; Murnane & Phillips, 1981). At different levels of teachers teaching careers, it is not always that teachers with less experience are always ineffective, and vice versa (Kini & Podolsky, 2016; Kanto et al., 2020; Nuraini et al., 2019). There was an association between the age and teaching experience of faculty and the quality of their teaching performance (Ahmadi, 2021).

The evidence presently available reveals that there is a favourable correlation between teachers' experience and student accomplishments (Wayne & Youngs, 2003). Inexperienced teachers who had just joined the teaching profession did not have sufficient skills in managing student behaviour and were thus less effective. In contrast, teachers with years of experience responded proficiently when dealing with students' behaviour, availing themselves of the advantages of experience level after a couple of years (Rivkin et al., 2000; Hagger & McIntyre, 2006). Day et al. (2007) found that less experienced teachers had more difficulty making decisions regarding the management of students. Rugai and Agih (2008) found that the effectiveness of teachers is significantly correlated with their experience. When compared to teachers with less experience, those having more than six years of teaching experience were determined to be more knowledgeable (Kartini et al., 2010). Tsouloupas (2011) opined that more experienced educators expressed greater self-confidence in maintaining order in the classroom and handling problematic student behaviour. Less experienced teachers, on the other hand, were less confident of themselves and less successful in managing children who exhibited problem behaviours.

Unal and Unal (2012) discovered that more experienced teachers' demonstrated significantly different attitudes towards classroom management compared to those with

fewer years of experience; they appeared to have better control of their classrooms, were more successful in their interactions with students, and were better at making decisions. Putman (2012) demonstrated a significant correlation between teachers' experience and their higher level of self-efficacy in engaging students and managing their classrooms. A teacher with more experience as a result of working longer in the teaching sector will be different from a teacher with less experience. With more extended experience, they could teach more effectively, and their classroom management abilities improved with years of service (Rakib et al., 2017; Tugay, 2015). Meanwhile, some studies did not identify a steady and statistically significant association between teacher experience and student achievement (Hanushek & Luque, 2003; Luschei & Chudgar, 2011; Blomeke et al., 2016; Gustaffsson & Nilson, 2016).

The experience of teachers is an observable teacher attribute commonly investigated in an attempt to see whether there may be a correlation between the length of a teacher's tenure and a student's performance. Overall, these studies' findings showed a positive association between teacher experience and student achievement; however, this relationship is not proven to be totally linear; instead, there is a threshold beyond which more experience has little or no impact. Consequently, it was discovered that any benefits from more experience frequently happened in the first five years of teaching (Darling-Hammond, 2000; Nye et al., 2004; Rockoff, 2004; Ackerman et al., 2006; Clotfelter et al., 2010). Conspicuous characteristics of teachers, such as education and experience, exhibited no relationship with the improvement in their productivity beyond the first few years of their experience (Stuhlman & Pianta, 2009). Some studies have even revealed deterioration in teaching quality after a few years. In their respective studies, Mahfooz and Akhtar (2013) and Maolosi (2013) emphasised how a teacher's ability to engage students while employing cutting-edge teaching practices may be negatively impacted by the number of years they have spent teaching. The reason could be that teachers felt fatigued and less motivated due to several years of service.

The review of the literature discussed above supports the fact that the personality traits of teachers, their effectiveness, and varied styles of communication in the classes had an impact on students' satisfaction and academic outcomes. Prior studies have brought forward diverse styles of teachers' communication, students' preference for these styles and the relation between students' contentment and academic performance with these

styles. The relationship of personality with communicative variables and styles of communication has been thoroughly analysed. Nonetheless, there is a paucity of research on the interrelation between personality, communicative style and effectiveness, particularly of faculty in higher education institutions. Studies have reported a marked influence of teachers' age, gender and teaching experience on their communication, behaviour, teaching style, class performance and their relation with students. The aforementioned empirical review of literature guided the present study.

2.7 Research Gaps

An in-depth review was done to find research gaps and motivation for the study. There is a rich literature on Communication effectiveness, Communication style, and Personality traits of faculty, and it is plausible that teachers' personality and communication style is closely linked. Surprisingly, this link has not been investigated for Indian higher educational institutions. A review of the literature supports the fact that personality traits play an important role in interpersonal communication and that every personality type has its way of communicating with others. However, there is a paucity of research that analyses the impact of personality traits on teachers' communication effectiveness by understanding their style during their classroom interaction. (The best predictors of personality and style lead to enhanced communication effectiveness.) The current study aims to close this gap and offer a hypothesis indicating that communication style has a mediating role in the relationship between personality and communication effectiveness.

Past literature has attempted to examine personality dimensions that were positively associated with faculty effectiveness and others that had a negative or no impact on their performance, and these studies are primarily based on the Big Five Personality Theory. However, there is a dearth of research analysing the teachers' personality characteristics in light of the HEXACO-PI-R model of personality (Ashton et al., 2004; Ashton & Lee, 2008), which has a moderate to strong correlation with the Communication Styles Inventory (De Vries et al., 2013).

There is a paucity of studies that focus on faculty members' self-evaluations of their communication effectiveness when interacting with students in the classroom, as opposed to studies that focus primarily on students' evaluations and satisfaction with their instructors' communication. A teacher's ability to communicate effectively is an individual trait and a

critical component that may be better evaluated through self-reporting. Given that one's view of their own strengths and limitations is a crucial component of this calculation, self-evaluation or self-rating offers teachers a key source of evidence for measuring effectiveness. Therefore, the current study seeks to explore a new route where the relationship between personality traits, communication style, and communication effectiveness is assessed based on self-evaluation by the faculty.

There is a dearth of comparative studies that have investigated differences in the communication effectiveness of teachers from technical and non-technical institutions. Therefore, the current study has been advanced from the perspective of determining whether there are differences in teachers' communication effectiveness based on their fields of study, topic expertise, and academic subjects covered in their institutions.

2.8 Summary of the Chapter

An overview of the literature pertinent to the subject of the study is provided in the second chapter. This chapter analyses the body of research on faculty communication effectiveness, personality types, and communication styles in educational institutions. It also discusses the results of empirical investigations that have been conducted in these areas. The chapter also provides recent research on how instructors' effectiveness varies depending on their academic specialisation, discipline, and nature of the institution. The literature that is available in relation to the effects of tenure, gender, and age on the productivity and effectiveness of academic faculty has also been discussed. The chapter highlights the gaps identified in the existing state of information about communication effectiveness, personality traits and communication styles of faculty.

CHAPTER 3
RESEARCH METHODOLOGY

This chapter discusses the research methodology adopted to address the study's main objectives. The present study was undertaken to explore the impact of personality traits on the communication effectiveness of the faculty of technical and non-technical institutions and the effect of communication style as a mediator between the two. It also seeks to compare the communication effectiveness of teaching faculty from technical and non-technical institutions and research the impact of tenure, gender, and age on the communication effectiveness of faculty from technical and non-technical institutions. Accordingly, a review of the literature was done in the preceding chapter, the research gaps were identified, and they were used in developing the hypotheses, selecting and planning of research design and methods. Choosing the right research design and method is one of the most critical components of the research process.

The section-wise structure depicts that Section 3.1 covers the study's objectives as well as the criteria for selecting the study's data and sample. The development of hypotheses is covered in Section 3.2. Section 3.3, which includes information about the sample, follows this. The tools employed, along with their psychometric and other characteristics, are summarised in Section 3.4. An explanation of the data collection process is then given in Section 3.5. Last but not least, Section 3.6 describes the tools and techniques used in the research. The chapter is summarised in Section 3.7.

3.1 Data and Sample Selection Criterion

There is a plethora of literature on teaching faculty's personality traits, styles of interacting with the students and effectiveness of their performance. It is probable that teachers' personality traits and communication styles are closely linked. Still, it is surprising that this relationship has not been looked into for higher education institutions in India. The existing research postulates that personality dimensions are significant in interpersonal communication, and each personality type has a distinctive style of interacting with others. However, more research is required to examine how personality factors affect instructors' ability to communicate effectively in the classrooms by comprehending their communication style. The evolution of pedagogical practices has made it mandatory for teachers to reflect on their effectiveness and evolve constantly. In this era of accountability, gauging the

competence and effectiveness of a teacher solely based on feedback from the students or a superior's evaluation is not enough. Supervisors and students, through their observation, can only capture a partial sample of educators' effectiveness (Zepeda, 2014). Teachers can improve their performance by self-evaluating the effectiveness of their knowledge, pedagogical skills, and teaching style leading to students' satisfaction. The study attempts to establish interrelationships among personality traits, communication style and effectiveness through self-assessment. Self-rating is a crucial source of information for measuring effectiveness since it incorporates the individual's view of their strengths and weaknesses (Barge, 2012; Berk, 2005; Butler, 2001). This study, conceptualised within personality traits, communication styles, and effectiveness of teachers, endeavours to examine the impact of the teacher's disciplines and institutions (technical or non-technical), gender, age and tenure on their communication effectiveness.

The current research employed personality traits and communication styles as independent variables (predictors) and communication effectiveness as dependent (criterion) variables. The study used questionnaires to collect the required primary data to achieve the research objectives. A quantitative research method using descriptive and exploratory design was adopted, and a self-reported survey was conducted. If there is some lucidity regarding the nature of the issue, descriptive research is conducted to provide accurate information (Zikmund, 2000). The higher education technical and non-technical institutions from the North region of India were the subjects of a cross-sectional study in which data were gathered at a single point in time. The sample from technical institutions included only those faculty members who taught scientific and technological disciplines, whereas faculty from humanities departments of technical institutions were excluded. Similarly, faculty teaching scientific and technological subjects in non-technical institutions were not considered for the research. The non-technical sample included only faculty teaching arts, humanities and social sciences in non-technical intuitions.

3.1.1 Objectives of the Study

The principal objectives of the study are:

1. To compare the faculty of technical and non-technical institutions on their communication effectiveness.
2. To examine the relationship between Personality and Communication Style of the faculty of technical and non-technical institutions.

3. To study the mediating effect of Communication Style on the relationship between Personality and Communication Effectiveness of the faculty of technical and non-technical institutions.
4. To study the effect of age, gender and experience on the communication effectiveness of the faculty of technical and non-technical institutions.

3.2 Hypotheses Development

Students have varying levels of motivation and diverse attitudes towards teaching and learning. As a result of this variety, teachers have to adapt their teaching styles to meet better their students' requirements, which helps the students comprehend their courses. Most instructors impart knowledge in the same way as they had learnt (Novotna, 2013; Stitt-Gohdes, 2001). There was a close connection between the teachers' expertise and their style of interacting. Subject-area specialisation could potentially increase the effectiveness of teachers and institutions by leveraging and enhancing teachers' subject expertise (Condie et al., 2014; Kane et al., 2011). The apparent difference in teachers' effectiveness could be due to the courses they taught (Arreola, 2000). Students who chose a non-technical career option were better able to adapt to various learning methods than those who chose a technical career option (Calafate et al., 2009). These findings indicate that teachers' style and effectiveness were based on their approach to teaching, the setting in the classroom, and the subject (or subjects) they taught. On the basis of the above premises, the following hypothesis was formulated:

H1: There is a significant difference in the communication effectiveness of the faculty of technical and non-technical institutions.

Personality and communication were found to be 'inherently intertwined' (Daly & Bippus, 1998, p. 22) or 'close relative[s]' (Andersen, 1987). Interpersonal communication among individuals is mainly dependent on their behaviour and mannerism. For instance, a calm, friendly, and optimistic person communicates more expressively and is regarded as humorous and helpful (De Vries et al., 2011). Communication styles are characteristic adaptations of personality (Waldherr & Muck, 2011). The relationship between different personality types and the inclination of communication styles has always been a research topic. A medium-to-high association between communication style and personality was established using HEXCO-PI-R and NEO-PI-R (De Vries et al., 2013; Naqvi & Ahmed, 2015). The personality of a teacher has an effect on their pedagogical approach, and it also influences the style of

their communication (Safarie & Tarlani-aliabadi, 2014). In sight of the above facts, the following hypothesis was proposed:

H2: There is a relationship between the Personality and Communication Style of the faculty of technical and non-technical institutions.

Teachers' personality traits, which also included effective communication skills, access to the most recent information, and proper classroom management during lecture delivery, had a significant impact on students' learning and academic performance, as well as their motivation and moral development (Khan et al., 2016; Kheruniah, 2013; Awang et al., 2013). There is a strong relationship between personality traits and effective instruction, and personality types are significant for a variety of academic practices (Fatemi et al., 2015; Clayson & Sheffet, 2006). When the teacher modifies his or her communication and teaching styles to the student's preferred learning styles, the student's academic performance is enhanced and becomes stable (Iurea et al., 2011). Students preferred the delegator-facilitator-expert teaching style of teachers, followed by the facilitator-personal model-expert style (Ozgür, 2018; Heydarnejad et al., 2017). The expressive communication style increased teachers' responsiveness to students' needs, and the authoritative communication style was associated with lower levels of student engagement (Giles et al., 2012; Riyani, 2017).

The effectiveness of instructors, their personality traits, and styles of communication, which contribute to student satisfaction and academic outcomes, have been the subject of research studies. However, a dearth of research analyses the impact of personality traits on teachers' communication effectiveness by understanding their style during their classroom teaching. The current study posits that personality traits influence the communication effectiveness of faculty, and communication style acts as a mediator between personality traits and communication effectiveness. The following hypothesis was proposed:

H3 Communication style is a mediator between personality traits and the communication effectiveness of the faculty of technical and non-technical institutions.

Various researchers have shown in their studies a connection between demographic variables and the effectiveness of teachers. The finding reported a significant influence of teachers' age, gender, and teaching experience on their communication, behaviour, style of teaching, class performance, and relationship with students (Lajawa, 2013; Alufohai & Ibhafidon, 2015; Joye & Wilson, 2015). Students' perceptions of their teachers are influenced by

cultural standards related to gender, age, experience, and attractiveness. Females were expected to be kind (Ebert et al., 2014), agreeable, open, and contentious (Löckenhoff, 2014), and competence was expected both from males and females (Löckenhoff, 2014). Based on these premises, the following hypotheses were formed:

H4a: Gender plays a significant role in the communication effectiveness of the faculty.

H4b: Age affects the communication effectiveness of the faculty.

H4c: Tenure affects the communication effectiveness of the faculty.

3.3 Details of the Sample

The term population refers to the group of people on whom research is concentrated. The entire population's responses cannot be obtained in a practical manner. As a result, a sample (a portion of the population) is chosen to serve as the subject of the study. Sampling is the process of acquiring samples to comprehend the population's features. The chosen sample should represent the population from which it was obtained to derive accurate conclusions. The two types of sampling techniques are probability sampling and non-probability sampling. In a probability sample, each member of the target population has an equal chance of being chosen. This is not true in the case of non-probability sampling.

The population for the study comprised of faculty from higher educational technical and non-technical institutions from the North Region of India. The stratified sampling technique gives better representation and improves parameter estimation accuracy (Shi, 2015); thus, a stratified sampling technique was employed to reach out to six hundred faculties in the region. They were grouped based on technical (scientific and technological) and non-technical (humanities, social sciences and arts) institutions, gender, age (25–60 years), and years of experience (ranging from 1 to 25 years). The demographic details of the sample are presented in Table 3.1. Among the six hundred participants, 301 (50.16%) were from technical institutions, and 299 (49.8%) were from non-technical institutions. The sample consisted of 293 (48.8%) females and 307 (51.16%) males. Approximately 38% were aged 25 to 35, followed by those aged 36–45 (37.7%) and above 45 (24.3%). For tenure, 172 (28.7%) had 1 to 5 years of experience, 169 (28.1%) 6–10 years, 139 (23.2%) in the third category (11–15 years), and finally, 120 (20%) had above 15 years of experience (Table 3.1).

Table 3.1

Demographic Details of Participants (N= 600)

Demographic Characteristics	Percentage
Institution	
Technical	50.16%
Non-Technical	49.8%
Gender	
Females	48.8%
Males	51.16%
Age	
25-35 years	38%
36-45 years	37.7%
Above 45 years	24.3%
Tenure	
1-5 years	28.7%
6-10 years	28.1%
11-15 years	23.2%
Above 15 years	20%

3.4 Instruments Used for the Data Collection

The primary objective of the study was to determine if there is a relation between the personality traits of a teacher with their communication effectiveness and the role of communication style as a mediator in this relationship during a classroom interaction with the students. A quantitative assessment of the faculty's Personality, Communication Style and Communication effectiveness was developed and deployed to address this central research question. Before administering the tests, the subjects were informed that the researcher aimed

to elicit information regarding their behavioural patterns. They were told to respond truthfully and sincerely to each question on the questionnaires (Appendix attached).

3.4.1 The HEXACO Personality Inventory-Revised

Almost all the personality studies in the past have concentrated on the Big Five Factor Theory (McCrae & Costa, 2008); however, attempts have been made to analyse personality traits that go beyond the Big Five (Saucier & Goldberg, 1998; Paunonen & Jackson, 2000), as some of the Big Five outliers also had substantial predictive ability beyond the Big Five measures (Paunonen et al., 2003). In this direction, Ashton & Lee (2002) proposed a new personality model based on lexical studies, from which the Big Five emerged. Reanalysing lexical studies using the same adjective selection method on which Big Five was based (Ashton & Lee, 2001, 2002, 2007; Ashton et al., 2006; Ashton et al., 2004; Lee & Ashton, 2008), a new model was posited. Rather than five, six personality dimensions evolved and were given the term 'HEXACO model of personality.' Six personality dimensions are represented by the acronym HEXACO: Honesty–Humility (H), Emotionality (E), eXtraversion (X), Agreeableness (A), Conscientiousness (C) and Openness to experience (O). Three dimensions, i.e., consciousness, extraversion, and openness to experience of the HEXACO model, closely resemble their corresponding dimensions in the Big Five model. Emotionality and agreeableness dimensions of the HEXACO model are rotational modifications of the Big Five's emotional stability and agreeableness. Irritability-related Content has been shifted to HEXACO agreeableness instead of Big Five emotional instability, and sentimentality has been shifted to HEXACO emotionality instead of Big Five agreeableness. Lastly, the HEXACO model has an additional dimension, 'honesty-humility,' which reveals how individuals differ in their tendency to be sincere, fair, and modest as opposed to being greedy, insincere, and boastful. The HEXACO Personality Inventory (HEXACO-PI; Lee & Ashton, 2004, 2006) has been developed to evaluate all these six dimensions through a questionnaire.

In recent times, the HEXACO model has gained immense popularity in industrial and organisational psychology (Hough & Connelly, 2013; Anglim et al., 2017; McAbee et al., 2019), and research has also recommended the use of the HEXACO model of personality in the study of teacher personality (Ashton & Lee, 2007; Gongz, 2017; McAbee et al., 2019). McAbee et al. (2019) reviewed the HEXACO model and its application in educational and work settings. Future research to improve the application and development of the HEXACO

model in educational study and practice was suggested after considering the relationships between HEXACO traits and several crucial outcome factors in educational and workplace settings.

Table 3.2

The HEXACO Personality Inventory-Revised

	Honesty-Humility	Emotionality	Agreeableness	Extraversion	Conscientiousness	Openness to Experience
Facet-level scales	Sincerity	Fearfulness	Forgiveness	Social boldness	Organization	Aesthetic Appreciation
	Fairness	Anxiety	Gentleness	Social self-esteem	Diligence	Inquisitiveness
	Greed Avoidance	Dependence	Flexibility	Sociability	Perfectionism	Creativity
	Modesty	Sentimentality	Patience	Liveliness	Prudence	Unconventionality

(Source: Ashton & Lee, 2009)

The current study employed 60 items of the HEXACO Personality Inventory-Revised (Lee & Ashton, 2009) to assess the personality traits of faculty (Appendix 3). The HEXACO-PI-R measures six domains of personality (Table 3.2). Six scales include ten items and a broad array of content; they have a minimum of two items representing all four narrow traits of the six significant scales of HEXACO-PI-R. The participant gave the response to all the statements on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

3.4.2 The Communication Styles Inventory (CSI)

The communication style of faculty was measured by employing an adapted version of the Communication Style Inventory (CSI), which has its roots in a lexical study on communication styles (De Vries et al., 2009) and in deception and impression management research (Burgoon et al., 1996; Goffman, 1959). CSI was chosen as it has been validated to measure communication style (De Vries et al., 2013), and it also has trait-based and dimensional aspects that focus on the senders' behaviours during communication (De Vries et al., 2013). Its basics also shaped it in the five-factor model as well as the HEXACO personality models. Six domain-level communicative behaviour scales: Emotionality,

Expressiveness, Impression Manipulativeness, Preciseness, Verbal Aggressiveness, and Questioningness, are distinguished in CSI further; each of the domain-level scales consists of four facets (Table 3.3). The CSI consists of 96 communication behaviour items.The items are divided equally among the six domain-level scales (16 items per scale) each facet with four items.

Table 3.3

Communication Styles Inventory

	Emotionality	**Expressiveness**	**Impression Manipulativenes**	**Preciseness**	**Questioningness**	**Verbal Aggressiveness**
Facets	Sentimentality	Talkativeness	Ingratiation	Structuredness	Unconventionality	Angriness
	Worrisomeness	Conversational Dominance	Charm	Thoughtfulness	Philosophicalness	Authoritarianism
	Tension	Humour	Inscrutableness	Substantiveness	Inquisitiveness	Derogatoriness
	Defensiveness	Informality	Concealingness	Conciseness	Argumentativeness	Non-supportiveness

(Source : De Vries et al., 2013)

The modified survey instrument was adapted after a detailed review of literature that applied to the sample, classroom setting, teachers' interactions with the students, and the objective of the research. For example, the statement 'I often manage to make others burst out laughing' was written as 'I often manage to make my class hilarious and make students burst out laughing.' Several survey instrument design concepts were taken into consideration while creating this instrument. Each instrument item was written with clarity, simplicity, accuracy, and precise manner. As a rule of thumb, it was generally advisable to write at least twice as many items as were required for the final instrument (Nunnally et al., 1978). The Items' proper formatting was also critical since it was essential to consistently solicit responses to them (Fowler, 1993). Subject-matter experts with English proficiency reviewed the questionnaire. They assessed all the questionnaire items to determine whether they were representative of and relevant to the construct of the study. They suggested some changes, which were incorporated, and the questions were rephrased. In addition, some language mistakes were identified and corrected, and the questionnaire was pilot tested. Feedback was

solicited from the respondents regarding the language, clarity, and comprehensibility of the items. Based on the feedback, a few more changes were made to refine the questionnaire. This exercise helped establish the face and content validity of the questionnaire. The final adapted scale, which consisted of 48 items (8 items for each component of communication style), is reported in Appendix 1. Each sub-scale was connected back to one or more of the research questions. The six domain-level scales are expressiveness, preciseness, verbal aggressiveness, questioningness, emotionality, and impression manipulativeness: consisting of four facets each, there were two items from each facet (Table 3.3).

In order to identify the respondent's dominant communication style dimension, the six aforementioned communication style dimensions are used as a framework. All of the instrument's questions were answered on a five-point Likert-type scale because it was reasonable to assume that the faculty's opinions could range from almost never to most of the time. The proposed responses were: 'most of the time', 'quite often', 'sometimes', 'rarely', and 'almost never.' The responses to the questionnaires were thoroughly analysed. This strategy was chosen because it is beneficial for the researchers to get personalised responses when they ask respondents a series of questions. As a result, the responses can be quantified, which is the postulation for the research (Driessnack, Sousa, & Mendes, 2007). Cronbach's coefficient alpha was calculated for 48 communication style survey items in order to assess the validity of the study's survey instruments. They kept up with prior studies, where these scales consistently showed strong reliabilities, ranging from.65 to.88 (De Vries et al., 2013; Naqvi & Ahmed, 2015). The present study's internal consistency of communication style is robust since alpha values are 0.715.

3.4.3 Communication Effectiveness Instrument

The present research adapted communication effectiveness instrument developed by Loy (2006) that contained acquired items validated by Psychtests.com. The Psych test Inc. designed the instrument in such a manner which permitted respondents could give their replies at different levels. The literature in the past has identified several skills that are vital for an educator to be an effective communicator. They should be able to convey the idea in an understandable and concise manner. The following sub-scores are included in the communication skills test created by Psychtests.com: 1) Listening; 2) Ability to get the message across; 3) Emotional management in the communication process 4) Insight into the

communication process 5) Assertive communication. Through the responses to the items of the instruments, each variable is self-reported and is defined as follows:

1. Listening: This variable evaluates the teacher's ability to listen actively, as opposed to passive listening.
2. Ability to get the message across: This factor assesses a teacher's ability to deliver a clear message to others.
3. Insight into the communication process: This variable determines how effectively a teacher comprehends the principles of communication.
4. Emotional management in the communication process: This variable measures the ability of the teacher to express their emotions and their ability to deal with the emotions of others.
5. Assertive communication: This variable measures the teacher's capacity for expressing diverse viewpoints and the ability to stand up for those opinions.

The survey instrument was selected and modified for the current study after thoroughly reviewing of the literature. A draft instrument was created with items gathered from research and instruments in the literature on similar topics. All the instrument items reflected on communication skills of the teachers in the classrooms. The questionnaire was pilot tested. The respondents were asked for feedback evaluating the language, clarity, and preciseness of the items. In response to the inputs, a few changes were made to the questionnaire and the repetitive items were deleted. The face and content validity of the questionnaire were established by this exercise. The questionnaire was validated through a teacher population sample. Thus, the instrument had acceptable content validity. A five-point Likert-type scale was used for all items of the instrument for the respondent to have five possible choices for replying. The proposed responses for the communication subscale were: most of the time, quite often, sometimes, rarely, and almost never. The final adapted instrument which contained 26 items is reported in Appendix 2. To check the reliability of the survey instrument for the current study, Cronbach's coefficient alpha was computed; Cronbach's α is .792, which is seen as acceptable.

3.5 Procedure

To begin with, the questionnaires were sent out to all the academicians from technical (teaching scientific and technological disciplines) and non-technical institutions (humanities

and social disciplines) in the North region of India. The respondents were sent an email soliciting their support for the current research. They were introduced to the instruments and explained the aim of the survey: 'to determine the impact of personality traits on communication effectiveness during classroom interaction with the students and the role of communication style as a mediator.' They were requested to carefully read the instructions and give sincere and truthful responses to each and every item on the questionnaire, leaving no question unanswered. They were assured anonymity and confidentiality and told that the information would be used only for research purposes. The email contained a Google link for the respondents, and they voluntarily participated in the study by filling out the questionnaire.

The initial rate of response was very low; three weeks later, another mail was sent to solicit responses. This followed another reminder requesting that those who still had not responded to complete the questionnaires. They were thanked for their valuable time. On the whole, 680 responses were received to our solicitations, out of which 620 responses were complete, valid, and usable. On a further check, 600 data sets were finalised for analysis. The responses to the questionnaires were thoroughly analysed. This approach was chosen because it is beneficial for the researchers to get personalised responses when a series of questions are solicited from the respondents. This approach helps to quantify the responses, which is the postulation for the research (Driessnack, Sousa, & Mendes, 2007).

3.6 Tools and Techniques

There are two principal research methodologies in any discipline: qualitative and quantitative. Different data collection and processing techniques are used in the two approaches. Both strategies have advantages and disadvantages. Researchers must choose a strategy based on the goals of the study. A study method known as qualitative research yields conclusions that the use of statistical methods cannot reach. The data collection methods utilised in qualitative research span a wide range, including participant observation, case studies, focus groups, and in-depth interviews. This study strategy might aid in developing a thorough awareness of various viewpoints. However, analysing qualitative data takes a lot of time and effort. The main drawback of this study strategy is how easily the researcher's personal prejudices might influence the findings. Quantitative research is carried out by gathering measurable data and analysing it statistically. Surveys and other organised procedures are used to gather quantitative data. These techniques necessitate using closed-

ended questions, which makes data processing very simple. The findings are objective and apply to the entire population.

To accomplish the goals of the study, a quantitative research methodology was used. The cross-sectional data was analysed using statistical programme for social sciences (SPSS) version 25.0, developed by IBM and SmartPLS version 3.0. The data's multicollinearity, CMB, and normalcy were examined prior to the analysis method. When respondents provide answers to questions pertaining to both the dependent and independent variables, CMB may take place. The existence of CMB may negatively affect the results of the study. There were efforts made to reduce the likelihood of CMB. Additionally, the CMB was examined using Harman's single-factor test. When two or more independent variables exhibit inter-correlations, this is referred to as multicollinearity. Utilising the variance inflation factor (VIF) values, multicollinearity was examined. The data set has a normal distribution when the values are symmetrically distributed around the mean. Skewness and kurtosis measurements were used to gauge the data's normalcy. Different tools and techniques were employed to test the hypothesised relationships. These tools and techniques are briefly explained in the following sections.

3.6.1 ANOVA

To test hypotheses H1, H4a, H4b, and H4c, a one-way ANOVA was performed. The quantitative dependent variable (communication effectiveness) was continuous data, and the independent variables or grouping variables were categorical data. ANOVA, a parametric test, is a statistical method that researchers employ to test hypotheses. The dependent variable for this method needs to be regularly distributed. According to Mishra et al. (2019), the method compares the means across three or more groups. The analysis of variance is used to draw conclusions regarding means. The means of different independent groups are compared using one-way and two-way ANOVA. A one-way ANOVA is used when there is just one categorical independent variable; when there are two categorical independent variables, a two-way ANOVA is used. The categorical independent variable in a one-way ANOVA must have a minimum of three categories. The categorical independent variables in a two-way ANOVA must have a minimum of two categories.

The first objective was to compare the faculty of technical and non-technical institutions in terms of their communication effectiveness. To examine the impact of the categorical

independent variable, institution (technical or non-technical), on the communication effectiveness of faculty, one-way ANOVA was employed. Hypotheses H4a, H4b, and H4c were related to the fourth objective. The fourth objective was to study the effect of age, gender, and tenure separately on the communication effectiveness of the faculty of technical and non-technical institutions. Thus one-way ANOVA was used to determine whether there was a statistically significant difference between the means of two or more groups of dependent variables. The independent variables, age and tenure, had more than two groups. When an overall statistically significant difference in group means was reported, then a post hoc test (multiple comparison test) as a follow-up to the ANOVA was run. The post hoc was done to identify which pairwise comparison of means contributed to the overall significant difference that was observed in the calculation of the F statistic. It identified exactly which groups differed from each other.

3.6.2 Correlation

A measurement of the relationship between variables is a correlation. In data that are correlated, a change in the magnitude of one variable is correlated with a change in the magnitude of another variable, either in the same direction (positive correlation) or the opposite way (negative correlation). The most popular definition of a linear relationship between two continuous variables when the term 'correlation' is employed is the Pearson product-moment correlation. The Pearson correlation coefficient is widely used for data that are normally distributed or that have a bivariate normal distribution. For continuous data that is not normally distributed, for ordinal data, or for data that contains substantial outliers, a Spearman rank correlation can be employed as a measure of monotonic relationship. The scaled values of the two correlation coefficients are -1 and +1, respectively, with 0 signifying the lack of a linear or monotonic link. The relationship grows increasingly stable and eventually resembles a straight line (Pearson correlation) or a constantly rising or falling curve (Spearman correlation) as the coefficient gets closer to an absolute value of 1.

H2 was related to the second objective: to examine the relationship between personality and communication style among the faculty of technical and non-technical institutions. Pearson product-moment correlation was employed in the study to test hypothesis H2. It evaluated the results' statistical significance and gauged the strength of the link between personality traits and communication of the faculty,

3.6.3 PLS-SEM

The third objective was to study the mediating effect of communication style on the relationship between personality and communication effectiveness of the faculty of technical and non-technical institutions; it was related to H3. To test hypotheses, H3-structural equation modeling (SEM) was used. 'Partial Least Squares Structural Equation Modelling' (PLS-SEM) is an exploratory method that uses data to assess the relationship between latent variables and look at the direction of their relationships in models. 'PLS-SEM is a multivariate analysis approach with increased levels of statistical control compared to its covariance-based counterparts, particularly for small samples (Klarner et al. 2013). It is based on a sequence of regular least squares regressions. Variance-based structural equation modelling (VB-SEM) and covariance-based structural equation modeling (CB-SEM) are two types of SEM. For evaluating models with several latent variables, VB-SEM is favoured over CB-SEM (Henseler et al., 2015). In addition, VB-SEM has stronger statistical power (Hair et al., 2019) and less constraining assumptions than CB-SEM (Talwar et al., 2020). Among the VB-SEM techniques, partial least squares structural equation modeling (PLS-SEM) is extensively used as it can easily handle formative and reflective constructs (Joseph et al. et al., 2019; Matthews et al., 2018). The measuring model is evaluated first to ensure the validity and dependability of the constructs.

In PLS-SEM, CCA aims to confirm the measurement model (Hair et al., 2020). Before data analysis, CCA mandates that constructs and the items or indicators that go with them be defined. The effectiveness of the items or indicators in capturing the construct is investigated using CCA. According to the outer loading values, items and indications are dropped. The constructs' validity and reliability are examined once the items and indicators are removed. Second, the structural model is evaluated to determine how one construct affects another. This phase involves analysing the path. It enables researchers to examine proposed links between various constructs. The sign and size of the path coefficient determine the relationship between the two conceptions. The route coefficients and statistical significance of correlations are used to derive conclusions.

The SEM approach is widely used for data analysis as it helps analyse relationships between multiple independent and dependent variables. It is mostly acknowledged for its significant contributions to behavioural research (Hair et al., 2011) because it facilitates understanding of the relationships between various sets of observable variables (Hair et al., 2013). PLS-SEM

was appropriately chosen for the study since it aims to assess how personality traits and communication styles affect teachers' effectiveness. Additionally, when the theory is underdeveloped, 'PLS-SEM' is more applicable. Mainly, it is employed in exploratory research for proposed theories (Rönkkö & Evermann, 2013; Ravand & Baghaei, 2016). Though PLS-SEM works well with small sample sizes, existing studies have demonstrated that this technique can also be used with large sample sizes (Hair et al., 2019; Matthews et al., 2018). Thus, to use PLS-SEM was appropriate for the current study with a 600 sample size. Since PLS is a non-parametric process, the implications of the loadings were further investigated using a bootstrapping method.

3.7 Summary of the Chapter

The third chapter discusses in detail the methodology used for conducting this research. The chapter provides details regarding the participants, procedure, measurement scales, and tools and techniques used. The instruments used for the current investigation are outlined, along with the justification for choosing these instruments.

Chapter 4

RESULTS AND DISCUSSION

The preceding chapter included details of the research design, sample, instruments used to measure personality, communication style, and communication effectiveness, as well as the procedure used for data collection. After the completion of data collection, the data was analysed using SPSS version 22.0 and Smart PLS version 3.2.0. This chapter deals with analysing the responses and interpreting the results. Descriptive and inferential statistics are employed in the analysis of the responses. The characteristics of answers are described using numbers or graphs in descriptive statistics. They provide information about the sample, which acts as a base for analyses of the responses. Both parametric and nonparametric statistical methods can be used for inferential analysis. Inferential statistics determine if the differences or correlations between variables are statistically significant. Based on inferential statistics, a hypothesis is either accepted or rejected. Inferences and conclusions about the population from which the sample was collected are thus made possible by inferential statistics. Section 4.1 provides the results of descriptive statistics. Section 4.2 includes CMB results, followed by data diagnosis in Section 4.3. Section 4.4 discusses the reliability and validity of the research instruments. Section 4.5 gives the results of hypothesis testing, and Section 4.6 discusses the results. Finally, Section 4.7 summarises the chapter.

4.1 Descriptive Statistics

The descriptive statistics for the variables considered for the study are presented in Table 4.1. Important descriptive information is provided by the mean, standard deviation, skewness, and kurtosis. The sum of all values divided by the total number of values yields the mean, which is a measure of central tendency. A standard deviation represents the dispersion or variation of a data set relative to its mean. Skewness is a metric for the asymmetries in data distribution. If the distribution is skewed to the left or right, the coefficient of skewness is either negative or positive. ‘Kurtosis’ explains how a distribution’s tails are shaped. Both tails contain outliers. Data values that stand out from the rest are called outliers. Outliers are present when the tails are long and absent when the tails are short. An indicator of outliers is the coefficient of kurtosis. A significant kurtosis typically denotes an outlier problem.

Table 4.1

Descriptive Statistics (N= 600)

Construct	Mean	SD	Skewness	Kurtosis
Communication Style				
Expressiveness	3.68	.47	.321	-.384
Preciseness	4.06	.50	-.027	-.066
Verbal Aggressiveness	2.23	.41	.510	.515
Questioningness	3.22	.52	.357	.271
Emotionality	2.53	.56	-.227	.128
Impression Manuplativeness	2.97	.59	-.177	.294
Communication Style	18.72	1.70	.152	-.179
Personality				
Honesty-Humility	3.84	.44	-.374	-.071
Emotionality	3.19	.38	.044	-.082
Extraversion	3.85	.31	-.107	1.721
Agreeableness	3.27	.42	.102	-.532
Conscientiousness	3.94	.28	.156	.439
OpennessToExperience	3.35	.41	-.081	-.144
Personality	21.47	1.18	.188	.021
Communication Effectiveness				
Listening	2.60	.42	-.739	.941
Ability to get the message across	2.53	.80	.019	-1.359
Emotional management in Communication process	2.39	.36	.008	.294
Insight to Communication process	2.51	.39	.339	.268
Assertive Communication	2.98	.44	.235	2.020
Communication Effectiveness	13.03	1.67	.039	-.068

Source: Compilation using SPSS

4.2 Common method bias (CMB)

When respondents provide information about independent and dependent variables, CMB may occur in the research. The presence of CMB may have a negative effect on the research findings. In order to minimise the possibility of CMB, participants were asked to be as truthful as they could be in their responses and were given the assurance of anonymity (Podsakoff et al., 2003). To test CMB, the Harman single-factor test was used. One factor was created for this test with all the questionnaire items combined. The findings showed that the single component explained 29.43 per cent of the variance. The findings suggested that CMB did not exist because the variance explained by the single factor was lower than the recommended threshold of 50 per cent.

4.3 Data Diagnosis

The data were examined for multicollinearity and normality before the analysis process began. The multicollinearity might have a negative impact on the results of the study as the independent variables influence each other. As a result, it becomes challenging to analyse the correlation between each independent variable in the model and the dependent variable. The variance inflation factor (VIF) values were used to test for multicollinearity. VIF values help to assess the severity of multicollinearity. There is a serious multicollinearity issue if the VIF value is greater than 10 (Hair et al., 1995; Kennedy, 1992; Neter, 1989). Researchers (Hocking & Pendelton, 1983; Craney & Surles, 2002) have recommended that for large VIFs, the cut-off values range from 5 to 10. Multicollinearity can be detected when the VIF value is greater than 5, and a severe problem with multicollinearity can be identified when the value is greater than 10. Given that the inner model's VIF values are less than 2, the proposed model does not suffer from multicollinearity. Likewise, VIF values for the outer model are lower than 3 (see Table 4.7), proving the absence of multicollinearity. Before performing statistical analyses, an evaluation of the dataset's normality is required because a normal distribution is an assumption for parametric tests. The data's normalcy was evaluated based on the skewness and kurtosis values.

The values are presented in Table 4.1. The skewness values were within the intended limits of ±1, and the kurtosis values were also within the desired limits of ±2, indicating that the data were normally distributed.

4.4 Reliability and Validity

It is essential to check the reliability and validity of the research instrument. Reliability is the primary concern for studies that use questionnaires. The degree to which a measurement scale produces consistent results can be characterised as reliability (Hammersley, 1987; Heale & Twycross, 2015). Cronbach's alpha and composite reliability (CR) were calculated for each construct to evaluate the reliability of measurement scales. Internal consistency is measured by CR and Cronbach's alpha (Hair et al., 2020; Niclasen et al., 2013). The internal consistency of items within a questionnaire that are related to a particular attribute is calculated using Cronbach's alpha (Nunnally, 1978). All three constructs in the current investigation had Cronbach's alpha values and CR above .70, confirming the constructs' of internal consistency and reliability (Table 4.5).

Validity can be explained as the degree to which a measurement scale produces accurate results. (Hammersley, 1987; Heale & Twycross, 2015). Validity can be categorised into three types: face, content, and construct validity. Face validity is a subjective judgement that determines whether the research instrument measures what it intends to measure (Heale & Twycross, 2015). The measurement scale's content validity assesses if it accurately captures the construct both in terms of content and scope. (Heale & Twycross, 2015; Johnston et al., 2014). Content validity is ascertained based on a thorough analysis of the questionnaire items. The content and face validity of the instruments were ascertained. The measurement scale's construct validity determines whether it performs as predicted by theory (Johnston et al., 2014). Common statistical methods for examining construct validity include confirmatory factor analysis (CFA) and confirmatory covariance analysis (CCA) (DiStefano & Hess, 2005; Hair et al., 2020). CCA was used in this study to examine construct validity. Items with an outer loading value of 0.4 or higher were kept. The elements with low factor loadings were removed and then again the model's fit was assessed. The final model showed a good model fit.

In addition to CFA and CCA, convergent and discriminant validity are frequently employed to show construct validity (Strauss & Smith, 2009; Westen & Rosenthal, 2003). In order to further explore construct validity, convergent and discriminant validity were evaluated. Convergent validity was assessed on basis of average variance extracted (AVE) values. The AVE value for each construct was above 0.5, confirming convergent validity (Hair et al., 2020). The Fornell-Larcker criterion was used to evaluate the discriminant validity. In

research using the PLS-SEM technique, this approach is frequently used to check that the constructs in the study have their individual identity and are not highly correlated with the other constructs in the study. In the Fornell-Larcker criterion, a construct's square root of the AVE value and its correlation coefficients are compared with other model constructs. The square root of a construct's AVE value in a particular model should be higher than the correlation coefficients between that construct and other constructs in the model (Fornell & Larcker, 1981). Given that the Fornell-Larcker criterion was met, discriminant validity for the current investigation was established (Table 4.6)

4.5 Hypotheses Testing

The first objective was to compare the faculty of technical and non-technical institutions in terms of their communication effectiveness. H1: 'There is a significant difference in communication effectiveness between the faculty of technical and non-technical institutions' was related to the first objective. One-way ANOVA was run to analyze differences in communication effectiveness of faculty of technical and non-technical institutions. Faculty from technical institutions included teachers teaching scientific and technological disciplines. Non-technical technical faculty comprised of teachers teaching arts, humanities and social sciences. For the analysis, 'non-technical faculty' was assigned a value of '1' and 'technical' was assigned a value of '2'. One-way ANOVA analyses the means of two or more independent groups to determine if there is statistical evidence for a significant difference between the related population means. The data requirements for a one-way ANOVA were checked. The quantitative dependent variable (communication effectiveness) was continuous data, and the independent variables or grouping variables were categorical data.

Table 4.2

Mean and SD of Communication Effectiveness and its Sub-Variables for Faculty from Technical and Non-Technical Institutions (N-600).

	Non-Technical			Technical		
Dependent Variables	N	M	SD	N	M	SD
Communication Effectiveness	299	13.16	1.71	301	12.89	1.62
Listening	299	2.59	.408	301	2.60	.433

Ability to get the message across	299	2.55	.798	301	2.50	.819
Emotional management in Communication Process	299	2.41	.397	301	2.37	.327
Insight into the Communication Process	299	2.54	.386	301	2.49	.408
Assertive Communication	299	3.05	.506	301	2.91	.364

Source: Compilation using SPSS

Table 4.3

One-way ANOVA for Communication Effectiveness and its Sub-Variables of Faculty from Technical and Non-Technical Institutions (N-600)

		Sum of Squares	Df	Mean Square	*F*	Sig.
Communication Effectiveness	Between Groups	10.844	1	10.844	3.879	.069
	Within Groups	1671.729	598	2.796		
	Total	1682.573	599			
Listening	Between Groups	.003	1	.003	.016	.900
	Within Groups	106.178	598	.178		
	Total	106.181	599			
Ability To Get Message Across	Between Groups	.353	1	.353	.540	.463
	Within Groups	391.160	598	.654		
	Total	391.513	599			
Emotional management in the Communication process	Between Groups	.169	1	.169	1.275	.259
	Within Groups	79.319	598	.133		
	Total	79.488	599			
Insight into Communication process	Between Groups	.384	1	.384	2.425	.120
	Within Groups	94.728	598	.158		
	Total	95.113	599			
Assertive communication	Between Groups	2.960	1	2.960	15.248	.000*
	Within Groups	116.085	598	.194		
	Total	119.045	599			

Source: Compilation using SPSS (* p<.01)

The ANOVA results suggest that the mean of communication effectiveness is not significantly different for technical and non-technical faculty (F (1,598) =3.87, p =.069). It can be concluded that since p >.001 is more significant than our chosen significance level α = 0.05, the results do not warrant the hypothesis (Table 4.3). The institution and subject

specialisation of the faculty do not influence communication effectiveness while interacting with students in a classroom setting. There is no difference in the communication effectiveness of technical institutions' faculty compared to non-technical institutions' faculty. Therefore, H1 is not supported. Further analysis of variance for the sub-variables of communication effectiveness was also conducted in order to see the influence of the institution of faculty based on subject specialisation on the sub-variables of communication effectiveness. The results highlighted that there is no significant difference in 'listening' (F (1,598) =.016, p =.900), 'ability to get the message across' (F (1,598) =.540, p =.463), 'emotional management in the communication process' (F = 1.27, p =.259), or 'insight to the communication process' (F (1,598) =2.42, p =.120), but a significant difference was reported for 'assertive communication' of the faculty (F (1,598) = 15, p = .000).

To test hypothesis 2, the relationship between the personality and communication styles of the faculty of technical and non-technical institutions was examined. The data was collected, and responses on all items were scored, coded, and entered into Statistical Package for the Social Sciences (SPSS) to perform statistical analysis. A Pearson correlation coefficient was calculated to assess the linear relationship between the personality and communication style of the faculty from technical and non-technical institutions. The results indicated a significant positive correlation between these two variables, with n = 600, r = 0.65 and p = 0.000. The findings supported H2: There is a relationship between the Personality and Communication Style of the faculty of technical and non-technical institutions.

Figure 4.1

Scattered Diagram of Correlation between Personality Traits and Communication Styles

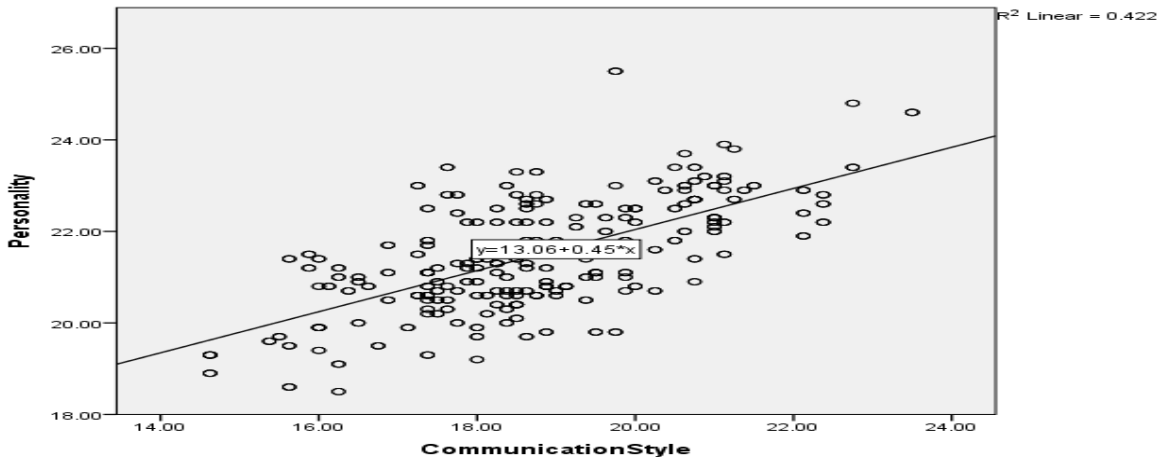


Table 4.4

Correlation Matrix between Personality Traits and Communication Styles

Variables	M	SD	1	2	3	4	5	6	**7**	8	9	10	11	12	13	**14**
1 X	3.68	.47	1	.44**	-.12**	.33**	-.09*	.36**	.57**	.08*	.31**	**.62****	.33**	**.60****	-.07	.53**
2 P	4.06	.50		1	-.42**	.29**	-.25**	.20**	.39**	.10**	-.02	**.26****	.27**	**.35****	-.18**	.22**
3 VA	2.23	.41			1	.04	.50**	.18**	.32**	-.02	.09*	-.11**	**-.46****	-.05	**-.37****	.10*
4 Q	3.22	.52				1	.19**	.32**	.67**	.25**	.13**	.15**	.15**	.22**	**.68****	.53**
5 E	2.53	.56					1	.32**	.52**	.01	.11**	-.09*	.07	-.02	**.54****	.30**
6 IM	2.97	.59						1	.75**	.12**	.06	.27**	**.32****	.28**	.25**	.41**
7 CS	18.72	1.70							1	.17**	.20**	.35**	.52**	.39**	.39**	**.65****
8 H-H	3.84	.44								1	.02	.03	.25**	.28**	.06	.57**
9 EMO	3.19	.38									1	.13**	.13**	.06	.03	.43**
10 EXT	3.85	.31										1	.18**	.40**	-.09*	.45**
11 AGE	3.27	.42											1	.23**	.15**	.65**
12 CON	3.94	.28												1	.01	.56**
13 OE	3.35	.41													1	.42**
14 P	21.47	1.18													.	1

Note: X = Expressiveness; P= Preciseness; VA= Verbal aggressiveness, Q= Questioningness; E= Emotionality; IM= Impression Manuplativeness; C. S= Communication style; H-H= Honesty-Humility; EMO= Emotionality; EXT= Extraversion; AGE= Agreeableness; CON= Consciousness; OE= Openness to Experience; P= Personality . Absolute correlations are noted in boldface. * p< .05, ** p<.01

Source: Compilation using SPSS

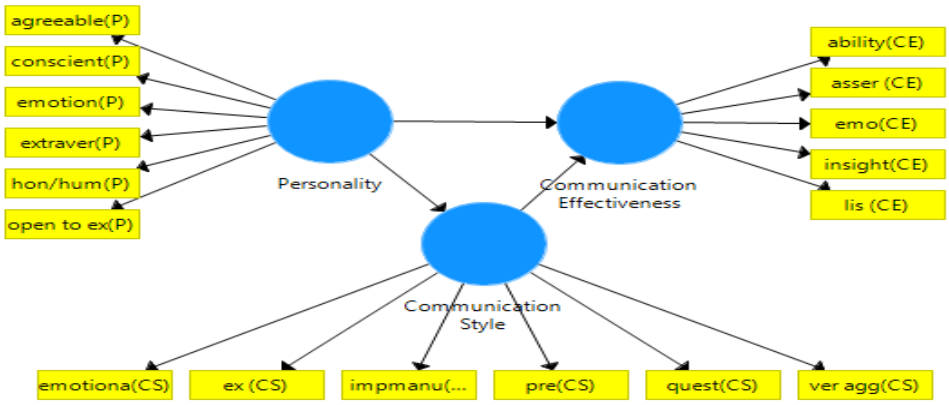
Table 4.4 shows interscale correlations between personality traits and communication styles. 'Extraversion' is positively and significantly related to 'expressiveness' (p<.01) and 'preciseness' (p<.01); 'consciousness' is also positively and significantly associated with 'expressiveness' (p<.01); 'agreeableness' is significantly related to 'expressiveness' (p<.01), 'questioningness' (p<.01); and 'impression manipulativeness (p<.01). 'Openness to experience' is significantly positively related to 'emotionality' (p<.01); and verbal aggressiveness (p<.01). As an exception, CSI 'emotionality' has a very low relationship with personality trait 'emotionality' but it is highly and significantly related to 'openness to experience'.

To test H3: Communication style is a mediator between personality traits and communication effectiveness of the faculty of technical and non-technical institutions, a model was projected and tested using the 'Partial Least Squares Structural Equation Modeling' (PLS-SEM) approach. A model was projected and then analysed using PLS-SEM based on the literature that was available in order to determine the extent to which the personality traits of faculty influence their communication effectiveness and the degree to which their communication style mediates the association between personality and communication effectiveness. For 'structural equation modelling', formative and reflective scales are two distinct types of measurement scales. Latent variables in the formative scale are caused by the indicators and are not interchangeable (Petter et al., 2007; Haenlein & Kaplan, 2004). On the other hand, the reflective scale construct drives the indicators, which are interchangeable and greatly correlated; therefore their validity and reliability have to be thoroughly examined (Haenlein & Kaplan, 2004; Hair et al., 2013; Petter et al., 2007).

The first step in the model analysis measurement was to evaluate the validity and reliability of each construct because the proposed are reflective. The model's specifications must be made in accordance with knowledge of the theory and empirical research (Byrne, 2006), hence, in consistency with Gong (2008) and Jiang (2016), Figure 4.1 presents the postulated model. The first phase in assessing SEM is the measurement of models, followed by the structural model's outcomes (Henseler & Chin, 2010; Chin, 2010), and then the models are validated (Baghaei & Tabatabaee Yazdi, 2016).

Figure 4.2

Hypothesized model of the relationship between Personality Traits and Communication effectiveness



The model fitness was calculated according to the item loadings on the latent variables and the average variance extracted (AVE), the composite reliability score, and the discriminant validity (Ringle et al., 2010). Loadings that are over 0.70 are considered high; if they are between 0.40 and 0.70, they are believed to be satisfactory, provided that if the indicators are removed, it will not increase the reliability of the model (Hair et al., 2011), so variables that had loadings above 0.40 were taken into account. 'Emotionality' and 'Agreeableness' had loadings below 0.40 on personality, so they were discarded. Two indicators of CS also had a weight less than 0.40, so indicators above 0.40 were considered, as shown in Figure 2. The AVE and the composite reliability score are considered optimal if they are above 0.50 and 0.70, respectively (Hair et al., 2011). The AVE and composite reliability values of personality were 0.539 and 0.749, respectively; the AVE of communication style was 0.502 and composite reliability was 0.802; and for communication effectiveness, the AVE was 0.573, and the composite reliability values were 0.811. Cronbach's alpha coefficient calculates the internal consistency of items related to a single trait within a questionnaire (Nunnally, 1978). In the present study, Cronbach's alpha value of all three variables is above.70, confirming the construct's measure of internal consistency and reliability (Table 4.5).

Table 4.5

Measurement Model Analysis

	Loadings min–max	Cronbach's Alfa	Composite Reliability	AVE
CE	0.402 – 0.823	0.759	0.811	0.573
CS	0.600 – 0.846	0.715	0.802	0.502
PER	0.422 – 0.786	0.701	0.749	0.539

Note: CE = Communication effectiveness, CS = Communication style, Per = Personality

Source: Compilation using Smart PLS

The discriminant validity (cross-loadings) was assessed using Fornel and Larcker (1981). According to the Fornell-Larcker testing system (Table 4.6), AVE (the amount of variance estimated by the construct) and shared variance with the other constructs are compared to evaluate discriminant validity. In the matrix in Table 4.6, off-diagonal values indicate correlations between latent constructs. The outcomes thus state that, based on the cross-loadings criterion, discriminant validity exists amongst all the constructs.

Table 4.6

Discriminant Validity according to Fornell–Larcker Criterion

	CE	CS	PER
CE	**0.687**		
CS	0.593	**0.712**	
PER	0.492	0.737	**0.762**

Note: CE = Communication effectiveness, CS = Communication style, Per = Personality
The off-diagonal values indicate the correlation coefficient, whereas the diagonal values (in bold) indicate the square root of AVE.

Source: Compilation using Smart PLS

Table 4.7

Outer and Inner VIF

	Outer VIF		Inner VIF
Personality Traits			
Agreeableness	1.147	Personality > Comm. Effectiveness	2.186
Conscientiousness	1.394	Comm. Style > Comm. Effectiveness	2.186
Extraversion	1.265	Personality > Comm. Style	1.000
Honesty/Humility	1.161		
Communication Style			
Expressiveness	1.507		
Preciseness	1.323		
Questioningness	1.248		
Impression Manuplativeness	1.239		
Communication Effectiveness			
Listening	1.663		
Ability to get the message across	1.717		
Insight into Comm. process	1.234		
Emotional management in Com. Process	1.414		
Assertive communication	1.574		

Source: Compilation using Smart PLS

Table 4.7 shows the variance inflation factor (VIF), whose given value proves the existence of multi-colinearity between exogenous variables. If the VIF value is larger than 10, the model has a severe problem of multicollinearity (Hair et al., 1995; Kennedy, 1992; Neter et al., 1989). There is no issue of multicollinearity in the proposed model, as the VIF values of the inner model are less than 2. Likewise, the VIF values of the outer model are below 3. In addition, the assessment of the structural model contains the significance of the path coefficients after running the bootstrapping method on 5 thousand re-samples (Hair et al., 2011). Only those latent variables, indicators, and paths were engaged in the model that had achieved a 0.05 significance level after bootstrapping analysis. Evaluation of the measurement model established that the reflective construct is valid and reliable.

The structural model was assessed to determine the influence of one construct on another. Bootstrapping was used with 5,000 subsamples. Prior to examining the structural model, its validity and reliability were calculated and established. After that, the composite reliability, AVE, and discriminant validity were assessed in order to calculate the reflective measurement models' outer loadings. The methodology suggested by Hair et al. (2014) for model assessment was adopted. In the first step, the focus was on the direct association between the personality traits of teachers and their communication effectiveness during classroom teaching; subsequently, a mediator was introduced to develop an independent partial model. In the absence of a mediator, the model estimation with a path coefficient of 0.468 ($p = 0.000$) showed that the direct effect was highly significant. The value of R2 (coefficient of determination) for the target construct was 0.290, confirming the model's predictive validity (Hair et al., 2014). This result was supported by Stone Geisser's Q2 value for predictive relevance. On running a blindfolding process with 300 iterations and an omission distance of 7, Stone Geisser's Q2 value of 0.115 was obtained for communication effectiveness outcomes, and as it was above zero, it implied the model's predictive relevance.

Table 4.8

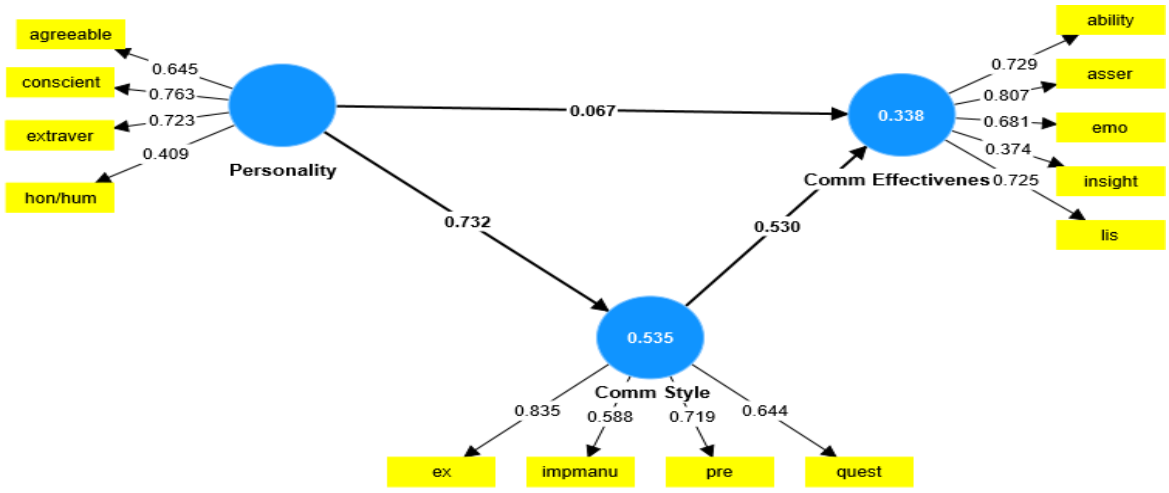
Structural Model Analysis (Mediating Effect of Communication Style)

	Std. path coefficients	t-Statistics	p Value
Per-> CE	0.067	1.428	0.153
Per -> CS	0.732	33.585	0.000*
CS -> CE	0.530	12.911	0.000*

Source: Compilation using Smart PLS (* p<.01)

Figure 4.3

Items loading, Path Coefficient, and R^2 of the Model



Hereafter, communication style's role as a mediator was assessed (Fig. 2). A bootstrapping procedure was run to verify the significance ('T-statistics') of the path coefficients of the inner model (Fig. 4.4). Using a two-tailed t-test at a 5% significance level, the path coefficient is significant if the T-statistics are higher than 1.96. Fig. 4.3 and Table 4.8 show the results, which explicitly indicate that the communication style mediates the relationship between the personality of the teachers and their communication effectiveness during their classroom teaching. The indirect path coefficients 0.732 (p-value 0.000) and 0.530 (p-value 0.000) are highly significant, whereas the direct path coefficient 0.067 (p-value 0.153) has been rendered non-significant (Table 4.8). As seen in the first step, the direct impact of the independent variable, personality traits, on the dependent variable, communication effectiveness, was highly significant (0.468 p-value = 0.000). Nevertheless, when the mediator was introduced, the direct impact became non-significant; thus, there was complete mediation of communication style. Therefore, H3 is supported.

In addition, Table 4.9 highlights that the coefficient of determination (R^2) value of the main construct is 0.353, authenticating the predictive validity of the model and fulfilling the mediation criterion (Hair et al. 2014). Employing the blindfolding procedure, 0.158 Stone Geisser's Q^2 value was obtained for the construct, signifying the predictive relevance of the path model.

Figure 4.4

Mediation effect of Communication Style between Personality Traits and Communication Effectiveness

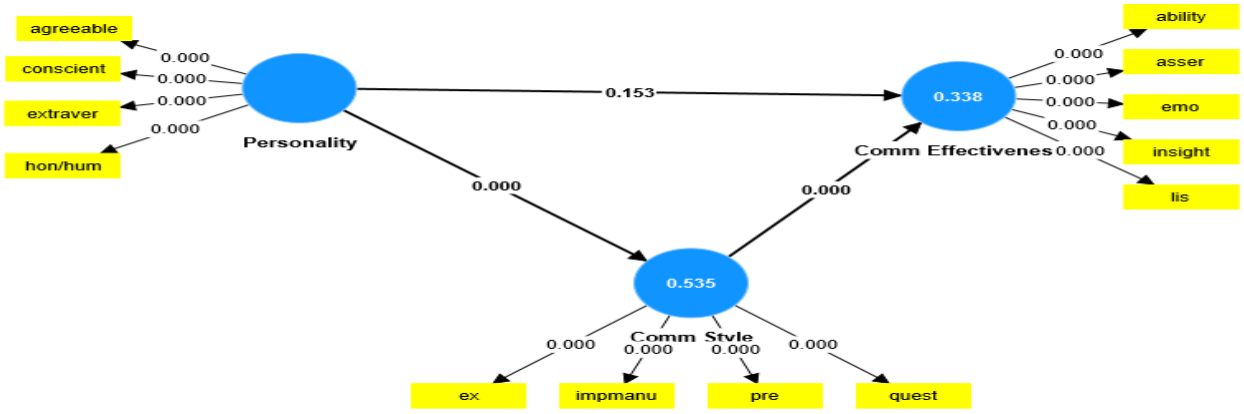


Table 4.9

Predictive Accuracy and Predictive Relevance of the Model

	R^2	Adjusted R^2	Q^2
CE	0.338	0.335	0.147
CS	0.535	0.535	0.258

Source: Compilation using Smart PLS

To establish to what extent the indirect effect of the mediator absorbs the direct effect (Sarstedt et al., 2014), we calculated VAF (variance accounted for) for the model by employing the given formula:

$$VAF = \frac{\text{Indirect effect}}{\text{Total effect}}$$

The VAF value (0.852) was much higher than 0.20, the threshold value (Hair et al., 2014), highlighting the vital role of communication style as a robust mediator in the relationship between teachers' communication effectiveness and their personality traits during classroom teaching.

The fourth hypothesis predicted the demographic differences in communication effectiveness between faculty from technical and non-technical institutions. Gender, age, and tenure of the faculty were categorical variables. For the analysis, 'female faculty' was assigned a value of

‘1’ and ‘male faculty’ was assigned a value of ‘2’; age had three categories: 25–35 years were assigned value ‘1’, 36–45 years were assigned value ‘2’ and value ‘3’ was assigned to faculty above 45 years. For tenure, there were four categories: 1 to 5 years of experience were assigned the value ‘1’, faculty with 6–10 years of experience were assigned ‘2’, the third category of 11–15 years was assigned ‘3’, and finally faculty with tenure of more than 15 years was assigned ‘4’. One-way ANOVAs were computed to test H4a-H4c related to the impact of gender, age, and tenure on the communication effectiveness of faculty.

The result for H4a, ‘Gender plays a significant role in the communication effectiveness of faculty’, indicated a significant difference in the communication effectiveness of males and females. The outcome (Table 4.10) indicated a significant difference in communication effectiveness between males (M = 12.89, SD = 1.73) and females (M = 13.17, SD = 1.60). The value of F is 4.28, which reaches significance with a p-value of .039 (which is less than the.05 alpha level). This means there is a statistically significant difference between the means of the different levels of the gender variable, supporting H4a. The value of F is 4.77, which reaches a significant level as the p-value of.039 (which is less than the.05 alpha level). This means there is a statistically significant difference between the communication effectiveness of female and male faculty. Therefore, H4a was supported.

The results also reported statistically significant differences in sub-variables of communication effectiveness, such as ‘listening’, where a significant difference was observed between males (M = 2.56, SD =.44) and females (M = 2.64, SD =.39), with an F value of 5.27 and a p-value of .022 (which is less than the.05 alpha level). Similarly significant differences between male (M = 2.46, SD =.76) and female (M = 2.60, SD = 84) faculty were witnessed in the faculty’s ‘ability to get the message across.’ The value of F is 4.52, which reaches significance with a p-value of.034 (which is less than the.05 alpha level). For ‘assertive communication’, significant differences between male and female faculty were reported (F = 6.21, p-value =.013). The mean values for males (M = 3.06, SD =.38) were higher than those for female faculty (M = 2.96, SD =.51). There was no gender differences observed for these sub-variables: ‘emotional management in the communication process’ (F =.39, p =.085) and ‘insight into the communication process’ (F =.35, p =.180).

Table 4.10

Between-subjects effect of Gender on Communication Effectiveness and its Sub-variables

Dependent variable & Sub variables	Female Faculty		Male Faculty		*F*(1,598)	Sig.
	Mean	SD	Mean	SD		
Communication Effectiveness	13.17	1.60	12.89	1.73	4.28	.039*
Listening	2.64	.39	2.56	.44	5.27	.022*
Ability to get the message across	2.60	.84	2.46	.76	4.52	.034*
Emotional management in Comm. Process	2.42	.33	2.36	.38	.39	.085
Insight to the comm. Process	3.01	.39	2.96	.42	.35	.180
Assertive communication	2.96	.51	3.06	.38	6.21	.013*

Source: compilation using SPSS (* p<.05)

Table 4.11

Between-subjects effect of Age on Communication Effectiveness and its Sub-variables

Dependent variable & Sub variables	1		2		3		*F*(2,597)	Sig.
	Mean	SD	Mean	SD	Mean	SD		
Communication Effectiveness	12.1	1.58	13.45	.81	13.81	2.1	17.57	.000**
Listening	2.60	.43	2.64	.46	2.54	.30	2.28	.103
Ability to get the message across	2.62	.80	2.55	.80	2.34	.78	5.51	.041*
Emotional management in Comm. Process	2.40	.36	2.38	.36	2.39	.36	2.64	.092
Insight to the communication process	2.54	.40	2.53	.38	2.43	.40	4.01	.019*
Assertive communication	2.83	.49	3.03	.31	3.14	.48	15.07	.000**

Note: 1= age:25-25years, 2=age: 36-45yrears, 3= age above 45years
Source: Compilation using SPSS (* p<.05; ** p<.01)

Hypothesis H4b intended to check whether age has any effect on the communication effectiveness of faculty. A one-way ANOVA (Table 4.11) revealed that there was a statistically significant difference in the communication effectiveness of faculty based on age,

where *F* (2, 598) = 17.57 and p =.000. This shows that statistically, there is a significant difference among three levels of the variable age of the faculty. Thus, H4b is supported. The results also reported statistically significant differences in sub-variables of communication effectiveness: 'ability to get the message across' (F = 5.51, p =.041), 'insight into the communication process' (F = 4.01, p =.019), and 'assertive communication' (F = 15.07, p =.000). There was no significant difference established for 'listening' (F = 2.28, p =.103) and 'emotional management in the communication process' (F = 2.64, p =.092) based on age.

However, between which of the various pairs of means the difference is significant still needs to be identified. For this, the results of Tukey HSD were viewed. Table 4.12 shows the multiple comparisons and significance values for the mean differences between pairs of various levels of faculty age. The descriptive statistics for the communication effectiveness of teachers were computed: teachers' age between 25 and 35 years (M = 12.1, SD = 1.58), teachers' age between 36 and 45 years (M = 13.45, SD =.81), and teachers above 45 years (M = 13.81, SD = 2.1).

In Table 4.12, the Tukey HSD (Honest Significant Difference) results indicated that two different pairings of teacher groups differed significantly in their responses to age. Teachers' ages between 25 and 35 differ significantly in terms of their communication effectiveness when compared to teachers of the age between 36 and 45 years old (mean difference = -1.340*, p =.000). A significant difference was observed in teachers between 25 and 35 years of age and above 45 years of age (mean difference = -1.700*, p =.000); however, the difference was not significant in teachers between 36 and 45 years of age and above 45 years of age (mean difference = -.360, p =.064). The Tukey post hoc results for 'ability to get the message across' reported a significant difference in teachers' ages between 25 and 35 years and above 45 years (mean difference =.27630*, p =.003) and between 36 and 45 years and above 45 years (mean difference =.21467*, p =.032). No difference was reported for teachers aged between 25 and 35 years and 36 and 45 years. For the subscale' insight into communication process,' similar post hoc results were established with significant differences in teachers' ages between 25 and 35 years and above 45 years (mean difference = -.11015*) and between 36 and 45 years and above 45 years (mean difference =.10449*, p =.037). There is no difference in teachers' ages between 25 and 35 years and 36 and 45 years. A substantial difference in teachers' 'assertive communication' according to their age was also noted in the study (Table 4.12).

A Tukey post hoc test showed that teachers with ages between 25 and 35 differ significantly in terms of their assertive communication when compared to teachers with ages between 36 and 45 (mean difference = -.19331*, p =.000). A significant difference was also observed in teachers between 25 and 35 years of age and teachers above 45 years of age (mean difference = -.30912*, p =.000). The difference in assertive communication was also reported between the age group 36–45 years and teachers above 45 years of age (mean difference = -.11581*, P =.030). There was no significant difference between all three categories based on age for the sub-variables listening' of faculty. There was also no significant difference in any category for the sub-variable 'emotional management in the communication process.

Table 4.12

Multiple Comparisons of Post Hoc Tests (Tukey HSD) for Impact of Age on Communication Effectiveness and its Sub-variables

Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.
Communication Effectiveness	1.00	2.00	-1.34031*	.14174	.000
		3.00	-1.70049*	.16005	.000
	2.00	1.00	1.34031*	.14174	.000
		3.00	-.36018	.16033	.064
	3.00	1.00	1.70049*	.16005	.000
		2.00	.36018	.16033	.064
Listening	1.00	2.00	-.04182	.03944	.540
		3.00	.05346	.04464	.454
	2.00	1.00	-.04182	.03944	.540
		3.00	.09527	.04461	.084
	3.00	1.00	.05346	.04464	.454
		2.00	.09527	.04461	.084
Ability to get the message Across	1.00	2.00	.06163	.07530	.692
		3.00	.27630*	.08503	.003
	2.00	1.00	-.06163	.07530	.692
		3.00	.21467*	.08518	.032
	3.00	1.00	-.27630*	.08503	.003
		2.00	-.21467*	.08518	.032
Emotional management in Comm. Process	1.00	2.00	-.03957	.03410	.477
		3.00	.04897	.03851	.412
	2.00	1.00	-.03957	.03410	.477
		3.00	-.08854	.03857	.085
	3.00	1.00	.04897	.03851	.412
		2.00	-.08854	.03857	.085

Insight into the communication Process	1.00	2.00	.00566	.03744	.987
		3.00	-.11015*	.04228	.024
	2.00	1.00	.00566	.03744	.987
		3.00	.10449*	.04235	.037
	3.00	1.00	-.11015*	.04228	.024
		2.00	.10449*	.04235	.037
Assertive communication	1.00	2.00	-.19331*	.04031	.000
		3.00	-.30912*	.04552	.000
	2.00	1.00	.19331*	.04031	.000
		3.00	-.11581*	.04560	.030
	3.00	1.00	.30912*	.04552	.000
		2.00	.11581*	.04560	.030

* The mean difference is significant at the 0.01 level

Source: Compilation using SPSS

The tenure of the faculty was also examined with respect to communication effectiveness. Hypothesis H4c, 'Tenure affects communication effectiveness of the faculty,' is intended to check the effect of teachers' tenure on their communication effectiveness. The outcome indicated a significant impact of tenure on communication effectiveness (Table 4.13).

Table 4.13

Between-subjects effect of Tenure on Communication Effectiveness and its Sub-variables

Dependent variable & Sub variables	1		2		3		4		*F*(2,597)	Sig.
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Communication Effectiveness	12.00	1.61	13.20	1.61	13.47	.89	13.75	1.51	24.06	.016**
Listening	2.75	.36	2.66	.39	2.73	.37	2.65	.42	2.25	.081
Ability to get the message across	2.41	.91	2.53	.77	2.17	.70	3.08	.44	23.73	.000**
Emotional management in Comm. Process	2.37	.36	2.38	.33	2.45	.37	2.38	.38	1.40	.239
Insight into the communication process	2.56	.38	2.56	.38	2.48	.36	2.41	.40	3.60	.031*
Assertive communication	2.79	.47	3.00	.53	3.06	.21	3.16	.34	20.18	.000**

Note: 1= 1-5 yrs of tenure; 2 = 6-10 yrs of tenure; 3 = 11-15 yrs of tenure; 4 = above 15 yrs of tenure.
Source: Compilation using SPSS (* p<.05; ** p<.01)

The value of F is 24.06, which reached significance with a p-value of.016 (which is less than the.05 alpha level). This means a statistically significant difference exists among first level (M= 12, SD = 1.61), second level (M = 13.2, SD = 1.61), third level (M = 13.47, SD = .89) and third level (13.75, SD = 1.51) of tenure of faculty. Thus the results support H4c. The results also reported statistically significant differences in sub-variables of communication effectiveness: 'ability to get the message across' (F = 23.73, p =.000), 'insight into the communication process' (F = 3.60, p =.031), and 'assertive communication' (F = 20.18, p =.000). There was no significant difference established for 'listening' (F = 2.25, p =.081) and 'emotional management in the communication process' (F = 1.40, p =.239), based on tenure of faculty.

Further Tukey post hoc analysis was computed for communication effectiveness and its subscales. The descriptive statistics for instructors' communication effectiveness were calculated for teachers with tenure of 1–5 years (M = 12.0, SD = 1.61), tenure of 6–10 years (M = 13.20, SD =1.61), 11–15 years (M = 13.47, SD =.89), and above 15 years (M = 13.75, SD = 1.51). Table 4.14 shows the multiple comparisons and significance values for the mean differences between pairs of various levels of tenure for faculty. Teachers with tenure of 1–5 years differ significantly in terms of their communication effectiveness when compared with teachers at the second level (mean difference = -1.19963*, p =.000), the third level (mean difference = -1.46532*, p =.000), and the fourth level (mean difference = -1.75391*, p =.000). A significant difference was observed between teachers with 6–11 years of tenure and above 15 years of teaching (mean difference = -.55428*, p =.014). However, there was no significant difference between the second level (5–10 years) and the third level (11–15 years) of tenure. Similarly, no difference was reported for the third and fourth levels of tenure.

For 'ability to get the message across' there was statistically no difference observed for the first (1–5 years) and second (6–10 years) levels of tenure; however, there was a significant difference in the first level between the third level (11–15 years) of the teacher's tenure (mean difference =.24082*, p =.025). The first level also differed with the fourth level (above 15 years) of tenure (mean difference = -.66896*, p =.000), and there was a significant difference among the second and third levels (mean difference =.35848*, p =.000). Second and fourth levels (mean difference = -.55130*, P =.000) A significant difference was reported between the third and fourth levels (mean difference = -.90978*, p =.000). 'Insight into the communication process' showed no differences in the first, second, and third levels of tenure;

nonetheless, a significant difference was noted in the first and fourth levels (mean difference =.15136*, p =.007). The second level also significantly differed from the fourth tenure level (mean difference =.14769*, p =.010). For subscale 'assertive communication', the first level of tenure was statistically significantly different from the second level (mean difference = -.20903*, p =.000), the third level (mean difference = -.27049*, p =.000), and the fourth level of tenure (mean difference = -.36959*, p =.000). A significant difference was also found between the second and fourth levels (mean difference = -.16056*, p =.009). There was no difference in the assertive communication of faculty at the third and fourth levels of tenure. No statistically significant difference was reported in any of the four levels of tenure for the sub-variables 'listening' and 'emotional management in the communication process.'

Table 4.14

Multiple Comparisons of Post Hoc Tests (Tukey HSD) for Impact of Tenure on Communication Effectiveness and its Sub-variables

Dependent Variable	(I) Tenure	(J) Tenure	Mean Difference (I-J)	Std. Error	Sig.
Communication Effectiveness	1.00	2.00	-1.19963*	.16638	.000
		3.00	-1.46532*	.17521	.000
		4.00	-1.75391*	.18272	.000
	2.00	1.00	1.19963*	.16638	.000
		3.00	-.26569	.17590	.432
		4.00	-.55428*	.18338	.014
	3.00	1.00	1.46532*	.17521	.000
		2.00	.26569	.17590	.432
		4.00	-.28859	.19142	.434
	4.00	1.00	1.75391*	.18272	.000
		2.00	.55428*	.18338	.014
		3.00	.28859	.19142	.434
Listening	1.00	2.00	.08065	.04190	.219
		3.00	.01753	.04412	.979
		4.00	.09870	.04602	.140
	2.00	1.00	-.08065	.04190	.219
		3.00	-.06312	.04430	.484
		4.00	.01805	.04618	.980
	3.00	1.00	-.01753	.04412	.979
		2.00	.06312	.04430	.484
		4.00	.08117	.04821	.333
	4.00	1.00	-.09870	.04602	.140
		2.00	-.01805	.04618	.980

		3.00	-.08117	.04821	.333
Ability to get the message Across	1.00	2.00	-.11766	.08107	.468
		3.00	.24082*	.08537	.025
		4.00	-.66896*	.08902	.000
	2.00	1.00	.11766	.08107	.468
		3.00	.35848*	.08570	.000
		4.00	-.55130*	.08935	.000
	3.00	1.00	-.24082*	.08537	.025
		2.00	-.35848*	.08570	.000
		4.00	-.90978*	.09327	.000
	4.00	1.00	.66896*	.08902	.000
		2.00	.55130*	.08935	.000
		3.00	.90978*	.09327	.000
Emotional management in Comm. Process	1.00	2.00	-.00488	.03957	.999
		3.00	-.07544	.04167	.269
		4.00	-.00434	.04346	1.000
	2.00	1.00	.00488	.03957	.999
		3.00	-.07057	.04184	.332
		4.00	.00054	.04361	1.000
	3.00	1.00	.07544	.04167	.269
		2.00	.07057	.04184	.332
		4.00	.07111	.04553	.401
	4.00	1.00	.00434	.04346	1.000
		2.00	-.00054	.04361	1.000
		3.00	-.07111	.04553	.401
Insight into comm. Process	1.00	2.00	.00367	.04279	1.000
		3.00	.08037	.04506	.282
		4.00	.15136*	.04699	.007
	2.00	1.00	-.00367	.04279	1.000
		3.00	.07670	.04523	.327
		4.00	.14769*	.04716	.010
	3.00	1.00	-.08037	.04506	.282
		2.00	-.07670	.04523	.327
		4.00	.07099	.04923	.474
	4.00	1.00	-.15136*	.04699	.007
		2.00	-.14769*	.04716	.010
		3.00	-.07099	.04923	.474
Assertive communication	1.00	2.00	-.20903*	.04617	.000
		3.00	-.27049*	.04862	.000
		4.00	-.36959*	.05071	.000
	2.00	1.00	.20903*	.04617	.000
		3.00	-.06146	.04881	.589
		4.00	-.16056*	.05089	.009

3.00	1.00	.27049*	.04862	.000
	2.00	.06146	.04881	.589
	4.00	-.09910	.05312	.244
4.00	1.00	.36959*	.05071	.000
	2.00	.16056*	.05089	.009
	3.00	.09910	.05312	.244

* The mean difference is significant at the 0.01 level (Source: compilation using SPSS)

4.6 Summary of Hypothesis Testing

Based on the existing theories and studies, six research hypotheses were formulated. Different tools and techniques were used to test the hypotheses. The outcomes were based on descriptive and inferential statistics. Table 4.15 shows the summary of the hypotheses testing.

Table 4.15

Summary of Hypothesis Testing

Hypothesis	Outcome (Based on data analysis)
H1: There is a significant difference in the communication effectiveness of the faculty of technical and non-technical institutions.	Not supported
H2: There is a relationship between Personality and Communication Style of the faculty of technical and non-technical institutions.	Supported
H3: Communication style is a mediator between personality traits and the communication effectiveness of the faculty of technical and non-technical institutions.	Supported
H4a: Gender plays a significant role in the communication effectiveness of the faculty.	Supported
H4b: Age affects the communication effectiveness of the faculty.	Supported
H4c: Tenure affects the communication effectiveness of the faculty.	Supported

4.7 Discussion

The personality traits of faculty in educational institutions are crucial in ensuring effective teaching practices for effective learning. Teachers' personality traits impact their pedagogical skills for teaching and their communication styles while interacting with students. It is imperative for teachers to understand the critical role of personality, the basics of communication, their communication style, and the impact of all of this on communication effectiveness. The current study conducted in the northern region of India endeavoured to identify communication styles among faculty from higher education institutions mediating between their personality traits and communication effectiveness, leading to enhanced performance and student satisfaction. It also aimed to compare the communication effectiveness of faculty from technical and non-technical institutions. A total of six hundred faculty members, both from technical and non-technical institutions, participated by filling out self-reported structured questionnaires.

RO1 intended to compare the faculty of technical and non-technical institutions on their communication effectiveness. There was no significant difference ($F(1, 598) = 3.87$, $p = .069$) in the communication effectiveness of faculty from technical and non-technical institutions; therefore, H1 was not supported. The results align with prior studies where no association was found between students' perceptions of the relationship between quality of instruction and student performance or between the quality of instruction and teacher specialisation (Johansson & Myrberg, 2019). According to Tärnvik (2007), students are no longer expected to be passive absorbers of information. The instructor now serves as a facilitator and is not required to be an expert in any particular field to be effective. In addition to modelling their instruction after previous professors, teachers often draw from an array of knowledge and prior experiences (Oleson & Hora, 2013), which may be similar for faculty with technical or non-technical backgrounds. Teachers cannot be effective without integrating technology and leveraging technical resources as imperative pedagogical tools (Ertmer & Ottenbreit-Leftwich, 2010), eliminating the distinction between technical and non-technical faculty.

There has been a substantial change in the teaching criteria; regardless of the subject or field being taught, classroom instruction is now very objective-oriented and student-centred. This radically changing learning environment significantly affects teachers' identities and approaches to teaching, and the implementation of student-centred pedagogy maximises the

effectiveness of the teachers (Keiler, 2018). In student-centred instruction, teachers had to prepare differently for the class, which had to be in accordance with the student's requirements rather than the content that had to be shared (Jony, 2016). The increased importance placed on student response surveys in the contemporary educational environment has led to a highly adaptive level of instruction. In order to effectively facilitate learning, teachers needed a more humanistic approach to teaching (Nuckles, 2000).

The mean values between faculty from technical and non-technical institutions differed only in one sub-variable of communication effectiveness, 'assertive communication' ($F = 15.42$, $p = .000$). The mean values highlighted that faculty from non-technical institutions were more assertive than faculty from technical institutions. According to Fijewska (1992), assertiveness is the ability to express oneself completely and thoroughly when in contact with others. It is the demonstration and externalisation of one's thoughts and information and thus helps to achieve the previously set goals (Townend, 2002). The fact that non-technical topics are theory-based and that teachers of these subjects must lay the fundamental foundation of the subjects' contents during instruction may cause the difference in assertiveness. As a result, the pedagogical approach used in these subjects must be more elaborate and assertive. In contrast, technical courses are both theoretical and practical, making students more responsive and participatory. Faculty from technical institutions are consequently less assertive in the classroom.

RO2 examined the relationship between personality traits and communication styles among the faculty of technical and non-technical institutions. To answer RO2, the Pearson correlation coefficient was employed for the personality traits and communication styles of HEXACO-PI-R and CSI, respectively. In line with the view that one's style of communicating is an expression of personality, a strong correlation was observed between communication style and personality traits ($r = .65$, $p < .01$); thus, H2 was supported. The findings are similar to prior studies where personality and communication styles have been found to be closely related (Beatty & McCroskey, 1998; Leung & Bond, 2001; McCroskey et al., 2004; De Vries et al., 2011). The expressiveness of faculty very strongly correlated with HEXACO extraversion ($r = .62$, $p < .01$). Similar results were reported by De Vries (2011), where a strong relationship was reported between the extraversion trait of HEXACO and expressiveness style in students and community samples and their research on university students, Naqvi & Ahmed (2015) highlighted that their extraversion personality traits were

significantly correlated with expressiveness. Aligning with the studies mentioned above, Table 4.4 also indicated that teachers' verbal aggressiveness had a strong but negative correlation with HEXACO questioningness; however, openness to experience was highly positively correlated with questioningness. ($r = .68$, $p < .01$). A substantial correlation between agreeableness and CSI impression manipulativeness was found.

The current investigation indicated a few differences from De Vries et al. (2011). The earlier study found a weak association between the consciousness personality characteristic and CSI expressiveness. However, according to the current study's findings based on a sample of faculty, a strong association exists between CSI expressiveness and HEXACO consciousness ($r = .60$, $p < .01$), which was noticed during faculty interactions with students in the classroom. Kottawatta (2019) also noted a favourable and significant association between the expressive communication style and conscientiousness, extraversion, agreeableness, and openness to experience personality traits. The precise style of faculty was moderately but significantly correlated with HEXACO conscientiousness ($r = .35$, $p < .01$). A weak relationship was identified between CSI emotionality and HEXACO emotionality in the faculty sample of the current study. These results are contrary to the study by De Vries et al. (2011), where a strong correlation was found between CSI emotionality and HEXACO emotionality.

The low relationship between the HEXACO emotionality trait and the emotional communication style of faculty in Indian educational institutions can be attributed to power relations and the role of culture. Hofstede's theory maintains that the four statistically independent characteristics of power distance, uncertainty avoidance, individualism, and masculinity, are tied to culture and have an impact on work settings. These dimensions apply to both workplaces and educational institutes within a culture (Hofstede, 2001; Hofstede et al., 2010). According to Zhu, Tian, and Liu (2022), different power dimensions affect classroom interaction, and power distance negatively influences the expression of naturally felt emotions. Studies done in Chinese culture have supported the premise that teachers' emotions have both an individual and sociocultural basis (Zembylas, 2007; Benesch, 2018), and expressions of emotion by teachers tend to be undemonstrative and prudently regulated to uphold interpersonal harmony and status hierarchies (Lee & Yin, 2010; Yin & Lee, 2012).

RO3 intended to study the mediating effect of communication style on the relationship between personality traits and communication effectiveness among the faculty of technical and non-technical institutions. The proposed hypothesis was that communication style is a

mediator between personality traits and the communication effectiveness of the faculty of technical and non-technical institutions. In order to achieve this, a model based on the existing literature was projected and tested using PLS-SEM. The findings suggest that communication style significantly influences the relationship between personality and communication effectiveness. Even though it is positive, the direct impact of the personality traits and effectiveness of the faculty becomes insignificant. This demonstrates that, to a vast extent, the teachers' communication style explains the impact of personality traits on communication effectiveness. It is consistent with the findings of the study by De Vries et al. (2011), which emphasise that personality traits manifest themselves in a variety of ways, concluding that a person's ability to communicate with others depends on how he or she behaves in particular. Their personality traits influence the effectiveness of a teacher's instruction, and their personality significantly influences the style of their teaching (Safarie &Tarlani-aliabadi, 2014). Additionally, their style significantly influences teachers' communication and effectiveness as educators while dealing with students in a classroom setting (Dhillon & Kaur, 2021). People's personalities can impact how well they communicate and can successfully lead others, and personalities are crucial in developing communication competence (McCroskey et al., 2006; Berne, 2011; Grant et al., 2011; Layton, 2013).

The results of the current study, which are consistent with the earlier research literature, show that the personality traits' conscientiousness' (organisation, diligence, perfectionism, and prudence) and 'extraversion' (social self-esteem, social boldness, sociability, and liveliness), with loadings of 0.763 and 0.723, respectively, emerged as significant predictors contributing to improved communication effectiveness of the teachers. The effects of 'agreeableness' and 'honesty-humility', which have relatively lower loading coefficients of 0.645 and 0.409, respectively, are also substantial. The results align with a substantial body of research linking conscientiousness-related indicators to worker performance and retention across professions. Higher levels of conscientiousness are associated with being achievement-focused, incredibly accountable, and organised, which leads to successfully completing tasks (John et al., 2008; Salgado, 2003; Barrick & Mount, 1991). Teachers' conscientious personality traits have a positive impact on students' extrinsic and intrinsic knowledge and their motivation levels (Hazrati-Viari et al., 2012; Khalilzadeh & Khodi, 2021). Studies have revealed that conscientiousness, academic success, and instructor value addition and evaluation ratings are all significantly positively correlated (Conard, 2006; Wagerman & Funder, 2007; Noftle &

Robins, 2007; Bastian et al., 2017). Several teacher meta-analyses identified a favourable relationship between students' Big Five domains and academic success, which was predicted mainly by conscientiousness (Daal et al., 2014; Poropat, 2009; O'Connor & Paunonen, 2007).

The findings are consistent with past research demonstrating that teachers' extraversion was a confirmatory trait and that their assertive behaviour was connected with a number of professional performance measures (Emmerich et al., 2006; Clayson & Sheffet, 2006; Ionescu, 2013). The characteristics of agreeableness, conscientiousness, extraversion, and openness were favoured by students in teachers, and there was also a favourable relationship between intrinsic and extraversion motivation (Komarraju et al., 2009; Eryilmaz, 2014). Students' thinking and desire for self-improvement were favourably connected with teachers' extraversion qualities, and teachers' extraversion features had a favourable impact on students' intrinsic motivation and knowledge (Khalilzadeh & Khodi, 2018).

In addition to extraversion and consciousness, the 'agreeableness' trait (forgivingness, gentleness, flexibility, and patience) of teachers' personality traits also positively influenced their communication effectiveness. The existing literature has also supported equivalent outcomes: high agreeableness personality traits are helpful, caring, and kind (John et al., 2008), and they create environments that are welcoming and supportive in order for pupils to learn (Pianta & Hamre, 2009). The highest predictor of work performance for occupations requiring interpersonal contacts, such as teaching, is agreeableness (Mount et al., 1998). According to Klassen et al.'s (2017) list of traits for good teachers, agreeableness is conceptually associated with the communication and empathy aspects of those traits. This trait gauges how well someone converses, actively listens, solicits advice, and modifies their communication style. Findings from empirical studies in the teaching field also indicate the significance of agreeability in students' views of effective teaching. Instructors' agreeableness was the most significant predictor of overall teacher rating, individual rapport, and enthusiasm (Kim & MacCann, 2018). Teachers' agreeableness was the best predictor of students' reports of personal support from teachers (Kim et al., 2018). 'Honesty-Humility' (sincerity, fairness, greed avoidance, modesty) as a personality trait of faculty had a lower loading (.402).

Nonetheless, it has implications for their effectiveness. These results are in line with the research by Vieluf et al. (2013), which reported a favourable relationship between teachers'

self-efficacy and humility. According to research findings, forgiveness and humility have a beneficial relationship (Dwiwardani et al., 2014; Çardak, 2013). The results of this investigation are consistent with the existing body of knowledge.

The analysis of communication style's role as a mediator has shown that personality traits of faculty influenced their communication effectiveness mainly through CSI's 'expressiveness' (talkativeness, conversational dominance, humour, and informality) and 'preciseness' (structuredness, thoughtfulness, substantiveness, and conciseness) styles. The outcomes are consistent with a study by Kirinić (2021), which concluded that preciseness and emotionality were most frequently selected by teachers when communication style dimensions were assessed. However, when the questionnaire items were analysed in accordance with the traits of the communication style dimensions, questioningness and expressiveness appeared in first and second place, respectively. The results concur with the existing literature, emphasising how teachers' expressive styles strengthen their immediacy with students' needs, further enhancing the rapport between teachers and students and leading to an improved student-teacher relationship. The focus of expressiveness (enthusiasm) was not only on the content of the message; instead, it had a much stronger effect on the outcomes achieved (Awamleh & Gardner, 1999; Giles et al., 2012). Implementing precision techniques will prove to be an incredibly useful tool for the teacher who genuinely works to improve their effectiveness (Merbitz et al., 2004).

The role of 'questioningness' and 'impression manipulativeness' as mediators between personality traits and communication effectiveness is also found to be significant, but with a lesser loading at 0.644 and 0.588, respectively. 'questioningness' (unconventionality, philosophicalness, inquisitiveness, and argumentativeness) also emerged as a key predictor leading to the effectiveness of the teachers because, as facilitators of communication, they play multiple roles, which include being an asker, listener, and responder. The findings align with studies in the past that supported the idea that questioning was an essential technique for promoting positive, critical, and creative thinking among students and enhancing their motivation (Shanmugavelu et al., 2020). To ensure effectiveness in classroom interaction, a teacher should be able to pose and ask good questions to the students, which fosters the teacher-student relationship (Capel et al., 1996). Questioning also inclines students to listen attentively and critically analyse what the instructor says about the teaching and learning material (Jahnning, 2004). Additionally, asking questions from students is a highly effective

way to elicit their thoughts, challenge their understanding, and increases their involvement in class (Golkar, 2003). The mediating effect of CSI's 'impression manipulativeness (ingratiation, charm, inscrutableness, concealingness) on teacher effectiveness was low but significant.

Contrary to the study by Kirinić (2021), the results of the present study highlighted that 'emotionality' (sentimentality, worrisomeness, tension, and defensiveness) and also 'verbal aggressiveness' (angriness, authoritarianism, derogatoriness, and non-supportiveness) styles had negative loadings as mediators between personality traits and the effectiveness of teachers. They had an inverse effect on the faculty's ability to communicate effectively during classroom interactions with the students. The findings were in line with past research, which found that students found their professors' aggressive expressions very inappropriate. In contrast to assertive expressions, which were positively linked to students' effect, aggression was negatively associated with students' effect (McPherson et al., 2003). According to De Vries et al. (2010), a leader's verbal aggression negatively correlates with being a human-centred leader. Rovai (2003) opined that when people communicate in an open manner and have a friendly style, they feel more connected to one another. A controlling or dominant communication style was linked to lower levels of intrinsic motivation (Noels et al., 1999). An authoritarian and verbally aggressive communication style severely harms the effectiveness of communication. The emotional style of communication discussed in RO2 did not impact effectiveness, mainly due to cultural differences. In an Indian educational setting, differences in power dimensions have a negative impact on classroom engagement, and power distance has a detrimental effect on how people express their naturally occurring emotions.

According to a study by Bakker-Pieper and De Vries (2013), when the characteristics of leaders were predicted, and the importance of the communicative behaviour of leaders was emphasised, both the expressive style and the precise style of communicating showed incremental validity. Bayko (2013) states that a rig manager ability to communicate safety rules is most significantly predicted by his precise style of communicating. De Vries, Bakker-Pieper, & Oostenveld (2010) found that the precise style of the leader described task-oriented leadership and the leader's performance. The results of the current study are consistent with those of other studies and highlight that the preciseness of the teachers, just like managers

and leaders, is strongly associated with their pedagogical effectiveness while teaching their students in the classroom.

'Conscientiousness' and 'extraversion' traits of personality and the strong mediating effect of 'expressiveness' and 'preciseness' facilitate teachers to have better student-teacher interactions in the classroom and enhance their performance. Extraversion is a personality trait that comprises the traits of expressiveness, and extraversion has a strong positive link with preciseness. While conscientiousness had a high chance of being precise, extraversion as a personality attribute predicted expressiveness (De Vries et al., 2011; Naqvi & Ahmed, 2015). Additionally, teachers' 'agreeableness' and 'honesty-humility' personality traits boosted their effectiveness in communication. These conclusions are per the previous literature confirming that agreeableness is significantly and positively related to teachers' performance and well-being (Ziskis, 2010; Marzuki, 2013; Aftab et al., 2017). Humility and forgiveness are found to be positive predictors of teachers' self-efficacy (Powers et al., 2007; Sezgin & Erdoğan, 2018).

RO4 was proposed to study the impact of age, gender, and experience on the communication effectiveness of the faculty of technical and non-technical institutions. Based on existing literature, the proposed H4a was: 'Gender plays a significant role in the communication effectiveness of faculty'. The result for H4a indicated that there is a significant difference in communication effectiveness between male and female faculty while interacting with students ($F = 4.77$, $p = .039$). Therefore, H4a was supported. This finding is similar to prior studies based on the argument about gender differences in faculty and student interaction, where the potential role of gender was found to be a significant variable when it comes to understanding connections between pupils and instructors in a formal classroom situation (Hopf & Hatzichristoo, 1999; Canada & Pringle, 1995 Duffy et al., 2001). Bachen, McLouglin, and Garcia (1999), & Feldman (2007) found that female instructors performed better than male instructors based on students' feedback. In contrast to career outcomes, where masculine influence strategies are more effective than feminine ones, feminine communication tends to have a more significant positive influence on pedagogical outcomes (Smith et al., 2013; Weinberg et al., 2015). Educators' and learners' genders could peculiarly influence the nature of classroom interaction (Rashidi& Naderi, 2012).

On further analysis of gender differences for sub-variables of communication effectiveness, 'listening' (teacher's ability to listen actively, as opposed to passive listening), a significant

difference was observed between males with an F value of 5.27 and a p-value of .022 (Table 4.10). Similarly, significant differences were witnessed in the faculty's ability to get the message across' (teacher's ability to deliver a clear message to others). The value of F is 4.52, which reaches significance with a p-value of.034. Similar outcomes have been demonstrated several times in the past, highlighting gender differences in the treatment of students by their teachers in educational institutions (Huston, 2006; Miller & Chamberlin, 2000). Compared to male teachers, female teachers talk less and listen more as their communication focuses on personal and emotional matters. Students whom female teachers taught outperformed those who were taught by male teachers (Feldman, 2007; Zuzovsky, 2003). Female teachers practised cooperative educational methods such as tutorials, working in learner clusters, and deciding modes of assignments following non-hierarchical pedagogical patterns. Women were polite to others, listened with empathy, remembered what was said and used respectful gestures when communicating with others (Starbuck, 2003; Adler et al., 1993). Women educators were acknowledged as more sympathetic by their pupils and also showed more understanding towards students' opinions than men instructors (Basow, 1995). Women educators were more courteous and focused more on maintaining discipline in class (Lacey et al., 1998; Basow, 2000). Female teachers were viewed as more successful in creating a participatory atmosphere for students (Ifegbesan, 2010).

For the subscale' assertive communication' (teacher's ability to express diverse viewpoints and to stand up for those opinions), the descriptive results (Table 4.10) showed that males scored higher than female faculty. These results are supported by past research establishing that, compared to female teachers; male teachers were more assertive as well as stricter (Lacey et al., 1998), and male teachers displayed better teaching attitudes compared to female teachers. Students perceived male instructors as experts in their field (Quari & Bhat, 2015; Basow, 2000). Male teachers were ranked higher than female teachers on student ratings due to their greater expertise and superior leadership abilities in the classroom. They spoke with more authority, employed meaningful voice tones, and outperformed female teachers in terms of performance (Boring, 2017; Arbuckle & Williams, 2003). Men's communication patterns were frequently associated with authority and professionalism. They were inclined to organise their conversations in a more competitive manner, whereas women displayed linguistic politeness and conversed amicably (Adler et al., 1993). However, the results posited no significant gender difference between the two subscales, 'emotional management in the communication process' and 'insight into the communication process.'

It was proposed that there is a difference in the communication effectiveness of faculty belonging to different age groups. The findings obtained from descriptive statistics and one-way ANOVA support the hypothesis (H4b) that age affects the communication effectiveness of the faculty (Table 4.11). There was a significant difference in three age categories (25–35 years, 36–45 years, and above 45 years) ($F = 17.57$, $p = .000$). For the subscales of communication effectiveness, descriptive results showed that faculty differed in 'ability to get the message across' ($F = 5.51$, $p = .041$), 'insight into the communication process' ($F = 4.01$, $p = .019$), and 'assertive communication' ($F = 15.07$, $p = .000$). The outcomes of the study can be explained in light of the study by Nyagah and Gathumbi (2017), which shows that older teachers have a greater impact on students' learning than middle-aged and younger teachers. Similarly, Aloka and Bojuwoye (2013) highlighted that older teachers with more classroom experience are more mature and circumspect than younger teachers when dealing with student disciplinary issues. Senior teachers' classroom management and teaching effectiveness are better than that of their younger colleagues (Zafer & Aslihan, 2012). However, the results contradict the conclusion drawn by Sivasakthi and Muthumanickam (2012) that instructors under the age of 30, mature or middle-aged instructors between the ages of 30 and 40, and older teachers over the age of 40 do not significantly differ in their effectiveness as teachers.

In order to determine which of the several pairs of means had a significant difference, the results of Tukey HSD were examined. Table 4.12 shows the multiple comparisons and significance values for the mean differences between pairs of various levels of faculty. The results indicated that two different pairs of teacher groups were significantly different in their responses to their age. Teachers aged between 25 and 35 years ($M = 12.1$) differed significantly in terms of communication effectiveness when compared to teachers aged between 36 and 45 years ($M = 13.45$). A significant difference was observed in teachers between 25–35 years and above 45 years of age ($M = 13.81$); however, the difference was not significant in teachers between 36–45 years and above 45 years of age. This shows that teachers' effectiveness during classroom interactions after a certain age becomes static, but teachers who are middle-aged and above are more effective in communication, classroom organisation, and competence than younger teachers (Martin & Smith, 1990).

The Tukey post hoc results (Table 4.12) for 'ability to get the message across' reported a significant difference in teachers' ages between 25 - 35 years and above 45 years and

between 36 - 45 years and above 45 years. There is no difference in teachers' ages between 25 and 35 and between 36 and 45. For the subscale' insight into communication process,' similar post hoc results were established with significant differences in teachers' ages between 25 and 35 years and above 45 years and between 36 and 45 years and above 45 years. There is no difference in teachers' ages between 25 and 35 years and between 36 and 45 years. A possible reason for this is that with age and experience, teachers gain confidence and more clarity and in-depth knowledge about the subject contents they share with their students. They have better clarity while delivering both academic and non-academic messages to students. As teachers mature in age and gain years of experience, they gain insight into how the communication process works to bring about optimal communication effectiveness. Age is associated with experiences, and the latter could also be an influential factor that reflects the teachers' careers (Burroughs et al., 2019).

A substantial difference in teachers' 'assertive communication' according to their age was also noted in the study (Table 4.12). Teachers' assertive communication is measured as their ability o to express differing viewpoints and to stand up for those differing viewpoints. A Tukey post hoc test showed that teachers between 25 and 35 were significantly different in their assertiveness compared to teachers between 36 and 45. A significant difference was also observed between teachers between 25 and 35 years of age and teachers above 45 years of age. The difference in assertiveness was also reported between the age group 36–45 and teachers above 45 years of age. As faculty members get older, they become more assertive and are able to communicate more authoritatively while remaining fair and empathetic towards their students. With age, teachers become more confident and self-assured and do not feel threatened when confronted with doubts or queries from the students or if anything unexpected occurs during classroom interactions. Instead, they can handle such situations by expressing their opinions more assertively while at the same time allowing students to voice their ideas.

The H4C that tenure affects the communication effectiveness of the faculty was also confirmed. It was found that communication effectiveness was significantly different for four levels of tenure (1–5 years, 6–10 years, 11–15 years, and above 15 years), with an F value of 24.06, reaching a significance level of 0.16 (Table 4.13). Descriptive results showed that for subscales of communication effectiveness, faculty differed in 'ability to get the message across' ($F = 23.73$, $p = .000$), 'insight into the communication process' ($F = 3.60$, $p = .031$),

and ‘assertive communication’ (F = 20.18, p =.000). Research findings by Unal and Unal (2012) also supported similar outcomes: teachers who had added years of experience exhibited significantly different approach towards class management when compared to teachers with fewer years of experience. They had better control of their classrooms, more effective in their interactions with students, and were better at decision-making. Putman (2012) demonstrated a significant correlation between teachers’ experience and their higher level of self-efficacy in engaging students and managing their classrooms. Teachers’ experience made them more effective in instructing and teaching their students. They also demonstrated better classroom management abilities (Rakib et al., 2017; Tugay, 2015). Another viewpoint is that there is no relation between teacher experience and the student’s performance and achievements (Luschei & Chudgar, 2011; Blomeke et al., 2016; Gustaffsson & Nilson, 2016).

Tukey HSD’s results were analysed to ascertain which of the numerous pairs of mean values had a significant difference. Table 4.14 shows the multiple comparisons and significance values for the differences in mean values between pairs of different tenure levels for faculty. Teachers with tenure of 1–5 years (M = 12.0) significantly differ in terms of their communication effectiveness when they were compared with second-level tenure of 6–10 years (M = 13.20), third-level tenure of 11–15 years (M = 13.47), and fourth-level tenure above 15 years (M = 13.75). A significant difference was observed between teachers with 6–11 years of tenure and those with more than 15 years of teaching. However, no significant difference was found between the second and third levels of tenure.

Similarly, no difference was reported for the third and fourth levels of tenure. A possible explanation for this can be that teachers’ age and teaching experience are associated with the quality of their teaching performance (Ahmadi, 2021). However, it is not always observed that there is a perfect linear relationship between instructor experience and student learning (Klitgaard & Hall, 1974; Murnane & Phillips, 1981).

For ‘ability to get the message across’, the difference was between the first and third levels of a teacher’s tenure. The first level also differed from the fourth level of tenure, and there was also a significant difference among the second, third, and fourth levels. The findings support the evidence from the literature, as Stuhlman and Pianta (2009) revealed that observable characteristics of teachers, such as education and experience, did not correlate with improved productivity beyond the first few years of their experience. Any advantage of more

experience typically appears in the first five years of teaching (Rockoff, 2004; Ackerman et al., 2006; NyeClotfelter et al., 2010). 'Insight into the communication process' showed no differences in tenure's first, second, and third levels; nonetheless, a significant difference was noted in the first and fourth levels. The second level was also significantly different from the fourth level of tenure. Experienced teachers get an insight into how the communication process works to accomplish the desired goals, which determine educational success (Rakib et al., 2017). For the subscale' assertive communication', the first tenure level significantly differed from the second, third, and fourth levels. A significant difference was also found between the second and fourth levels. The results are consistent with earlier studies that proposed that inexperienced teachers did not have assertive skills in managing student behaviour and were thus less effective.

In contrast, teachers with years of experience responded in a proficient manner when dealing with students' behaviour, availing themselves of the benefits of experience (Rivkin et al., 2000; Hagger & McIntyre, 2006). Tsouloupas (2011) also opined that teachers with additional experience had higher self-beliefs in their ability to control their class assertively and manage challenging student behaviours. In contrast, less experienced teachers were less confident and less effective in their abilities to handle students with problem behaviours.

4.8 Summary of the Chapter

The fourth chapter deals with the testing of the research hypotheses. Before starting the analysis process, checking for CMB, multicollinearity, and normal distribution is vital. This chapter presents details regarding descriptive statistics, CMB, data diagnosis, reliability and validity. The findings are presented according to the research objectives and hypotheses. Based on the study findings, the chapter mentions the status of each hypothesis. The study's findings are also compared with the results of existing studies.

Chapter 5

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The present chapter covers an over-review of the present study. Section 5.1 of this chapter summarises the significant findings drawn from data analysis. The significance of the study is elucidated in section 5.2. Section 5.3 gives the conclusion of the study. Implications of the study are discussed in section 5.4. Section 5.5 indicates the limitations of the research. The final section, 5.6, provides suggestions for future studies

5.1 Summary

The current research aimed to explore the impact of personality traits on the communication effectiveness of faculty from technical and non-technical institutions during classroom teaching and to determine the mediating role of their communication style. Explicitly, it was an endeavour to explore the best predictors among diverse components of communication style and personality traits that lead to enhanced communication effectiveness of faculty. The study also attempted to explore the difference in communication effectiveness between technical and non-technical faculty. Finally, the effects of gender, age, and tenure on the communication effectiveness of the faculty were examined. A review of extant studies of these constructs revealed the relationship between personality traits, communicative variables and teachers' communication styles. Literature has also reported an influence of teachers' age, gender, teaching experience and subject specialisation on their communication, behaviour, teaching style, class performance and their relation with students.

Based on previously reported theoretical and experimental research, it was hypothesised that there is a relationship between the Personality and Communication Style of the teaching faculty of technical and non-technical institutions, and style mediates between personality traits and the communication effectiveness of faculty. It was also hypothesised that the communication effectiveness of the faculty of technical institutions differs from the communication effectiveness of non-technical institutions, and gender, age and tenure affects the communication effectiveness of the faculty.

To investigate the hypotheses mentioned above, the HEXACO-PI-R model of personality (Ashton et al., 2004; Ashton & Lee, 2008), an adapted version of the Communication Styles Inventory (De Vries et al., 2013) and communication effectiveness instrument developed by Loy (2006) were administered to six hundred faculty members teaching in technical and non-technical institutions in the northern region of India. After the completion of data collection, SPSS version 22.0 and Smart PLS version 3.2.0 were used to analyse the data. The results of self-reporting questionnaires were analysed using descriptive and inferential statistics. The characteristics of answers were described using numbers or tables in descriptive statistics. They provided information about the sample, which acted as a base for analyses of the responses. Based on inferential statistics, a hypothesis was either accepted or rejected.

A Pearson correlation coefficient was calculated to measure the linear relationship between personality traits and communication style among faculty from technical and non-technical institutions. The results indicated a significant positive correlation between these two variables. Further, it was found that CSI 'expressiveness' correlated most strongly with HEXACO 'extraversion' and HEXACO' consciousness.' A substantial correlation was also reported between HEXACO 'agreeableness' and CSI' impression manipulativeness'. CSI' verbal aggressiveness' had a strong but negative correlation with HEXACO' questioningness'; however, CSI' openness to experience' had a high positive correlation with 'questioningness.' The 'precise style' of faculty moderately but significantly correlated with HEXACO 'conscientiousness'; nonetheless, a weak relationship was identified between CSI 'emotionality' and HEXACO 'emotionality' in the faculty sample of the study.

In order to determine the extent to which faculty members' personality traits affect their ability to communicate effectively and the degree to which their communication style mediates the association between personality and communication effectiveness, a model was proposed and analysed by employing PLS-SEM Communication style emerged as a robust mediator between teachers' communication effectiveness and their personality traits during their classroom interaction. The study identified 'conscientiousness' and 'extraversion' personality traits as significant predictors resulting in enhanced communication effectiveness of teachers. The conscientiousness and extraversion traits of instructors enhanced their knowledge-sharing attitude and students' knowledge-accumulating behaviour. In addition, the 'agreeableness' and 'Honesty-Humility' traits of teachers' personalities had lower loading; nonetheless, they positively influenced teachers' classroom communication

effectiveness. The role of communication style as a mediator revealed that faculty members' personality traits influenced their communication effectiveness mainly through CSI expressiveness' and 'preciseness.' Although the CSI 'questioningness' and 'impression manipulativeness' had less loading, they were still significant mediators between personality traits and the communication effectiveness of faculty.

Faculty from technical and non-technical institutions were equally effective communicators; no significant difference was reported in the study. However, the technical and non-technical institutions' faculty differed only in one sub-variable of communication effectiveness; 'assertiveness.' The mean values highlighted that faculty from non-technical institutions were more assertive than faculty from technical institutions. The result indicated the existence of gender differences in communication effectiveness. For subscales of communication effectiveness, 'listening' and 'ability to get the message across,' the mean values reported a significant difference between female and male faculty; females scored higher than males. However, for the subscale' assertiveness,' it was found that male faculty scored higher than female faculty. The results posited no significant gender difference between the two subscales, 'emotional management in the communication process' and 'insight into the communication process.'

Another significant finding of the research was the influence of age on the communication effectiveness of faculty in three age categories (25–35 years, 36–45 years, and above 45 years). For the subscales of communication effectiveness, the results showed that based on age, faculty differed in 'ability to get the message across', 'insight into the communication process', and 'assertiveness.' Differences were also identified for several pairs of means based on the results of Tukey HSD. The results of the study also confirmed that the different levels of tenure (1–5 years, 6–10 years, 11–15 years, and above 15 years) affect the communication effectiveness of the faculty. The results showed that for subscales of communication effectiveness, faculty differed in 'ability to get the message across', 'insight into the communication process', and 'assertiveness.' Tukey HSD results observed differences in several pairs of tenure.

5.2 Significance of the Study

The excellence of educational institutes can be established and enriched by consistent and effective communication between teachers and students. Effective classroom communication

is not only about good teaching practices but also effective interpersonal skills. An important area of focus for researchers in the past has been determining the personality traits and communication styles that affect teachers' performance. The faculty's communication effectiveness was instrumental in responding to the requirements of the students and building teacher-student associations, which helped students to perform better academically and feel more satisfied. The current study attempted to explore the interrelationship among personality traits, communication style and effectiveness of teachers. It also analysed the differences in effectiveness between the faculty of technical and non-technical institutions and the impact of gender, age, and tenure on communication effectiveness.

The outcomes of the study are not only consistent with the existing body of research, but they also contribute to the literature by adding new dimensions. It analyses how personality traits affect instructors' ability to communicate effectively by gaining comprehension of their communication style and determining the most reliable indicators of personality and style, enhancing communication effectiveness.

The current study is significant in its approach as it is based on the self-evaluation of faculty of their communication effectiveness. On the other hand, past research was mainly centred on students' evaluation of their instructors and their satisfaction with the teachers' communication skills. Additionally, the study has attempted to make a comparative analysis to identify differences in the communication effectiveness of teachers from technical and non-technical institutions.

Teachers now need to find strategies to adapt to the new environment since the role of the student in contemporary higher education has evolved from being a passive knowledge-receiver to that of an active learner. The world of education demands that we find strategies to enhance critical thinking abilities in addition to deeper understanding. The current research will assist teachers in facilitating their students to achieve these objectives by using effective communication. The interactive styles of educators with their students are very crucial. If the teacher uses engaging techniques to show material through interaction, the outcomes will be evident right away ((Duţă, 2010, 2012). Personality traits and communication styles play a critical role in teachers' communication effectiveness during classroom interactions, further enhancing students' learning and academic satisfaction. In order to help students communicate more effectively in the future, teachers need to focus on the development of effective communication skills while interacting with the students.

5.3 Conclusion

Effective communication in the educational field depends on the ability of the teacher to articulate her or his thoughts and ideas clearly, concisely, and confidently. To be an effective communicator, an instructor must continuously alter content and style of communication to match students' requirements. A classroom is a dynamic communication environment. Regular and productive teacher-student interactions contribute to effective classroom communication. Effective teacher communication is essential for students' academic success and, eventually, for their professional success. Teachers' self-evaluation of their communication effectiveness gives them an opportunity to reflect carefully and honestly on the critical elements of the interactions during the teaching and learning process. The role of teachers' personality traits cannot be disregarded in relation to the style they adopt while interacting with the students in the classroom, which ultimately determines their effectiveness.

The research results revealed that the personality traits of teaching faculty strongly influence their communication effectiveness while interacting with the students in the classrooms, and their communication styles considerably mediate the relationship between their personality traits and classroom communication effectiveness. The study discovered that 'extraversion' and 'conscientiousness' are important predictors of teachers' improved communication effectiveness through their 'expressive' and 'precise' styles, which promote pedagogical efficiency and classroom effectiveness. Faculty from technical and non-technical institutions were equally effective communicators, with no discernible differences. However, gender, age and tenure had an impact on the communication effectiveness of faculty of higher educational institutions. Females were more effective, better listeners and had a better ability to get the message across to their students. However, males were more assertive than females. Teachers communicated more effectively with age; nonetheless, there was stagnation beyond a certain age. Similarly, tenure had an impact on the communication effectiveness of faculty, but their effectiveness became static after specific years of experience.

It can be concluded that effective teaching and building relationships with students involve effective communication of teachers, which is influenced by their personality traits and styles of communicating. Thus, it is crucial to promote effective communication to develop interpersonal relationships between teachers and students and promote excellence in

education. In order to establish interpersonal ties with pupils and society at large, communication competency is essential (Codina, 2004).

5.4 Implications of the Study

The study's findings contribute to the body of knowledge already available on variables associated with faculty's personality traits, communication style and communication effectiveness. The current study makes theoretical contributions by presenting an empirical study of the HEXACO model of personality and its relationship with CSI (De Vries et al., 2013) in the context of teachers' communication effectiveness during classroom interaction with their students. Previous studies suggested that the Big Five personality factors were connected to instructors' teaching methods and had an impact on their performance. However, the current study adds to the body of literature already available on the personality features of teachers while concentrating on their communication style by exploring a novel model, that is, HEAXCO, in the area of communication effectiveness of teachers. The effectiveness of teachers is shown to be influenced by specific HEXACO model dimensions through particular communication styles. The earlier studies on personality traits and communication styles have been advanced by applying PLS-SEM (Partial least squares structural equation modeling) to develop a model for the influence of personality traits and the mediation role of communication style on teacher communication effectiveness.

The study also makes significant practical contributions. Teachers' personality traits and styles have an impact on the learning environment in the classroom; hence it is vital to consider them while conceptualising the effectiveness of teachers and schools. The research has implications for the teaching faculty to self-assess and reflect on their communication effectiveness by understanding their personality traits and styles of communicating. The importance of teacher self-evaluation cannot be overstated because it increases teachers' awareness of the importance of proving their own ability, helps novice teachers, and expands older teachers' career satisfaction (Akram & Zepeda, 2015). The study will benefit instructors in self-identifying and promoting specific communication styles associated with particular personality traits. This reflective practice of their personality traits and style will assist them to critically examine their concepts and beliefs about teaching to become more effective in future. If teachers effectively communicate in their classrooms, they can design a learning experience that sustains the students' interest and keeps them motivated.

The study will also facilitate teachers to reflect on their classroom communication effectiveness with regard to age and years of experience. According to the study, teachers' communication effectiveness remained constant beyond a particular age and level of experience. Enhancement in teachers' effectiveness and overall performance is a continuous process. To strengthen the teaching-learning processes, educators should continuously work to improve their communication skills. (Florence, Olubunmi & Esther, 2022). Their teaching efficiency cannot become static after certain age and years of experience. The study will help them to keep improving their effectiveness and become more productive by adopting desired personality traits and styles of communication.

The findings of the research have important significance for institutions since they can design professional training and development programmes for the faculty based on the relationship recognised among the personality traits, communication style and effectiveness of faculty. Teacher training and education should facilitate reflective, self-assessing practices and promote such practices as a critical and active habit to improve teachers' pedagogical ability. Teachers' styles of communicating and personality traits impact the learning environment in the classroom as well as students' comprehension and retention of information. Therefore, they should be taken into account when conceptualising the effectiveness of institutions and teachers. By understanding the integral role of a teacher's personality and style, the teaching profession can be given a fresh direction that will eventually boost students' participation in class, academic performance, interpersonal abilities and social skills.

The study will benefit academicians' pedagogical effectiveness as they will be able to adopt the most appropriate style of interacting as preferred by the students. This will assist them in establishing a favourable learning atmosphere in the classroom for the students to comprehend the shared knowledge and information.

5.5 Limitations of the Study

The research environment for the study was constrained because it was carried out in selected Indian institutions, which limited the applicability of the findings, and the outcomes could not be generalised. Furthermore, as the current study was cross-sectional, the connections presented between personality, style and effectiveness of teachers may not accurately reflect the whole picture. Therefore, it is necessary to investigate this relationship based on longitudinal data acquired from academic institutions worldwide. The study considered only

one variable, ‘teacher personality traits’, as an antecedent to the variable ‘communication effectiveness’ in the model. Despite significantly impacting the teachers’ effectiveness, it cannot be the sole determinant. Additional factors, including cultural context, institutional attributes related to the subject area, and course content, can also have a significant impact on how effectively teachers communicate. Instructors sometimes adjust their communication styles (possibly due to an institution’s culture or some unwritten communication rules in the teaching profession), which could be a limitation of the study.

5.6 Future Scope for Research

Considering the abovementioned limitations, future research should be conducted on teaching faculty from colleges and universities worldwide in order to verify the outcomes. The data for the study was restricted to teachers’ measure of the relationship between personality traits and their communication style based on self-report questionnaires. In order to understand this relationship better which ultimately affects teachers’ performance in the classroom, future research should incorporate students in assessments that require direct observation. It is recommended to conduct more research on the subject to completely comprehend teachers’ communication effectiveness. The communication traits of teachers can be made effective by employing the evidence-based framework of the HEXACO and CSI; this theory can be further refined and expanded across several other professional settings. There is a need for further research using this framework in settings where communication (verbal, para-verbal, and nonverbal) is the primary behaviour being displayed. These settings include leadership, sales, consulting, counselling, law, and medicine.

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Appendix I

Communication Style Questionnaire

QUESTIONNAIRE ON COMMUNICATION STYLE:

PLEASE BE CANDID. YOUR PRIVACY IS IMPORTANT TO YOU AND TO US!
All your responses to the entire survey are CONFIDENTAL.

THANK YOU FOR YOUR PARTICIPATION

Directions: Please mark the option to your frequency of occurrence with each item.

Name: _____

Gender: Male ☐ Female ☐

Work Experience: 1-5 years □ 6-10 years □ 11-15 years □ 15 years and above □

Institution: Technical ☐ Non- Technical ☐

Subject Teaching: Technical ☐ Non- Technical ☐

	Almost Never	Rarely	Some times	Quite often	Most of the time
1. I manage to make my class humorous and make students laugh.	☐	☐	☐	☐	☐
2. I think carefully before I say something.	☐	☐	☐	☐	☐
3. I expect my students to obey me when I ask them to do something.	☐	☐	☐	☐	☐
4. In discussions, I often put forward unusual point of view.	☐	☐	☐	☐	☐
5. I always have a lot to say about my subject.	☐	☐	☐	☐	☐
6. My class room interactions are clear and logically structured.	☐	☐	☐	☐	☐
7. I tell students the whole story, even when this is not required.	☐	☐	☐	☐	☐
8. I use flattery to get students in a favorable mood.	☐	☐	☐	☐	☐
9. When I'm worried about something, I find it hard to talk about my topic in class.	☐	☐	☐	☐	☐
10. When my students criticize and comment on me, I am visibly hurt.	☐	☐	☐	☐	☐

11. I am easy going when dealing with students.	☐	☐	☐	☐	☐
12. I get my message across with few words.	☐	☐	☐	☐	☐
	Almost Never	Rarely	Some times	Quite often	Most of the time
13. During my interaction with students, I try to find out about the background of their opinion.	☐	☐	☐	☐	☐
14. I take a lead and direct the discussion in the class.	☐	☐	☐	☐	☐
15. I have at times made students look like fools.	☐	☐	☐	☐	☐
16. I like to provoke my students by making bold statements.	☐	☐	☐	☐	☐
17. I have problem addressing a large group of students very calmly.	☐	☐	☐	☐	☐
18. If something displeases me in the class, I explode with anger.	☐	☐	☐	☐	☐
19. My class room interaction enhances the knowledge of the students.	☐	☐	☐	☐	☐
20. I can listen well and take time for students if they want to talk to me.	☐	☐	☐	☐	☐
21. I like to talk with students about the deeper aspects of our life.	☐	☐	☐	☐	☐
22. During my interaction with the students, I am easily overcome by emotions.	☐	☐	☐	☐	☐
23. I use my charm and skills to manage the class.	☐	☐	☐	☐	☐
24. I can manage to hide negative feelings towards my students.	☐	☐	☐	☐	☐
25. I decide how the topic will be discussed in the classroom	☐	☐	☐	☐	☐
26. With only some words I can clarify and justify my point to my students.	☐	☐	☐	☐	☐
27. I always show a lot of understanding for student's problems	☐	☐	☐	☐	☐
28. I address my students in a very casual manner.	☐	☐	☐	☐	☐
29. I react somewhat irritably in the class and snap at students.	☐	☐	☐	☐	☐
30. I have humiliated students in front of a class.	☐	☐	☐	☐	☐
31. My conversation with students is about important topic.	☐	☐	☐	☐	☐
32. My jokes draw attention of the students.	☐	☐	☐	☐	☐
33. I can handle the subject in an organized way	☐	☐	☐	☐	☐

	Almost Never	Rarely	Some times	Quite often	Most of the time
34. I weigh and choose my answers carefully.	☐	☐	☐	☐	☐
35. I like to talk on topics other than my subject.	☐	☐	☐	☐	☐
36. Students can tell that I am emotionally touched by some topics of conversation.	☐	☐	☐	☐	☐
37. Students can easily make out when their behavior disturbs me.	☐	☐	☐	☐	☐
38. Whenever I am stressed, I am unable to express myself properly.	☐	☐	☐	☐	☐
39. When I feel students should do something, I ask for it in a demanding tone of voice.	☐	☐	☐	☐	☐
40. By making controversial statements, I often force students to express a clear opinion.	☐	☐	☐	☐	☐
41. In conversations, I often come forward with spontaneous ideas.	☐	☐	☐	☐	☐
42. I engage in philosophical conversations.	☐	☐	☐	☐	☐
43. I ask a lot of questions just to find out why students feel the way they do.	☐	☐	☐	☐	☐
44. Students can notice when I am worried or feel anxious.	☐	☐	☐	☐	☐
45. Nasty remarks from the students bother me a lot.	☐	☐	☐	☐	☐
46. I use my appearance to bring about effectiveness in teaching.	☐	☐	☐	☐	☐
47. To be considered likeable, I say things my students like to hear.	☐	☐	☐	☐	☐
48. I hold back negative feedback to my students	☐	☐	☐	☐	☐

Appendix II

Communication Effectiveness Questionnaire

Directions: Please mark the option to your frequency of occurrence with each item

	Almost Never	Rarely	Some times	Quite often	Most of the time
1. I manage to explain my ideas clearly.	☐	☐	☐	☐	☐
2. I find it hard to express my feelings.	☐	☐	☐	☐	☐
3. I find interest in what others have to say.	☐	☐	☐	☐	☐
4. I address problems directly without blame or judgment.	☐	☐	☐	☐	☐
5 I tend to postpone discussing touchy topics.	☐	☐	☐	☐	☐
6. I find it easy to see things from someone else's point of view.	☐	☐	☐	☐	☐
7 The best way to help others understand me is to tell them what I feel, think, and believe.	☐	☐	☐	☐	☐
8 My weaknesses are no one else's business and I am better off hiding them.	☐	☐	☐	☐	☐
9 I tend to jump to conclusions.	☐	☐	☐	☐	☐
10 I pretend to listen even if my mind drifts away.	☐	☐	☐	☐	☐
11 When I know what the other person is going to say, I answer right away instead of waiting for them to finish.	☐	☐	☐	☐	☐
12 I become defensive when I am being criticized.	☐	☐	☐	☐	☐
13 I can detect the mood of others by looking at them while we are conversing.	☐	☐	☐	☐	☐
14 If I have something relevant to add, still I wait for the speaker to finish.	☐	☐	☐	☐	☐
15 People don't get what I am saying.	☐	☐	☐	☐	☐
16 I ask questions for clarification and understanding.	☐	☐	☐	☐	☐
17 I feel it is all right to ask for what I want or to explain how I feel.	☐	☐	☐	☐	☐
18 I am able to confront someone who has hurt my feelings.	☐	☐	☐	☐	☐
19 When trying to explain something, I ask my listeners if they are following me.	☐	☐	☐	☐	☐
20 While listening, I think about what I am going to say as soon as I have my chance.	☐	☐	☐	☐	☐
21 I naturally take more space in a conversation.	☐	☐	☐	☐	☐
22 I feel comfortable with the amount of eye contact I make with other people, and believe they feel comfortable with it too.	☐	☐	☐	☐	☐
23 I try to understand the message from the speaker's point of view.	☐	☐	☐	☐	☐

24 I am able to resolve problems without losing control of my emotions.	☐	☐	☐	☐	☐
25 When I talk to someone, I try to put myself in the other person's shoes.	☐	☐	☐	☐	☐
26. I get so caught up in what I have to say that I am unaware of the expressions and reactions of my listeners.	☐	☐	☐	☐	☐

Appendix III

HEXACO-PI-R

(OBSERVER REPORT FORM)

DIRECTIONS

On the following pages you will find a series of statements. Please read each statement and decide how much you agree or disagree with that statement. Then write your response in the space next to the statement using the following scale:

5 = strongly agree
4 = agree
3 = neutral (neither agree nor disagree)
2 = disagree
1 = strongly disagree

Please answer every statement, even if you are not completely sure of your response

1 _____ He/she would be quite bored by a visit to an art gallery.
2 _____ He/she plans ahead and organizes things, to avoid scrambling at the last minute.
3 _____ He/she rarely holds a grudge, even against people who have badly wronged him/her.
4 _____ He/she feels reasonably satisfied with himself/herself overall.
5 _____ He/she would feel afraid if he/she had to travel in bad weather conditions.
6 _____ He/she wouldn't use flattery to get a raise or promotion at work, even if he/she thought it would succeed.
7 _____ He/she is interested in learning about the history and politics of other countries.
8 _____ He/she often pushes himself/herself very hard when trying to achieve a goal.
9 _____ People sometimes say that he/she is too critical of others.
10 _____ He/she rarely expresses his/her opinions in group meetings.
11 _____ He/she worries about little things.
12 _____ If he/she knew that he/she could never get caught, he/she would be willing to steal a [illegible].
13 _____ He/she would enjoy creating a work of art, such as a novel, a song, or a painting.
14 _____ When working on something, he/she doesn't pay much attention to small details.
15 _____ People sometimes think that he/she is too stubborn.
16 _____ He/she prefers jobs that involve active social interaction to those that involve working [illegible].
17 _____ When he/she suffers from a painful experience, he/she needs someone to make [illegible].
18 _____ Having a lot of money is not especially important to him/her.
19 _____ He/she thinks that paying attention to radical ideas is a waste of time.
20 _____ He/she makes decisions based on the feeling of the moment rather than on careful [illegible].

21 _____ People think of him/her as someone who has a quick temper.

22 _____ On most days, he/she feels cheerful and optimistic.

23 _____ He/she feels like crying when he/she sees other people crying.

24 _____ He/she thinks that he/she is entitled to more respect than the average person is.

25 _____ If he/she had the opportunity, he/she would like to attend a classical music concert.

26 _____ When working, he/she sometimes has difficulties due to being disorganized.

27 _____ His/her attitude toward people who have treated him/her badly is “forgive and forget”.

28 _____ He/she feels that he/she is an unpopular person.

29 _____ When it comes to physical danger, he/she is very fearful.

30 _____ If he/she wants something from someone, he/she will laugh at that person’s worst

31 _____ He/she has never really enjoyed looking through an encyclopedia.

32 _____ He/she does only the minimum amount of work needed to get by.

33 _____ He/she tends to be lenient in judging other people.

34 _____ In social situations, he/she is usually the one who makes the first move.

35 _____ He/she worries a lot less than most people do.

36 _____ He/she would never accept a bribe, even if it were very large.

37 _____ He/she has a good imagination.

38 _____ He/she always tries to be accurate in his/her work, even at the expense of time.

39 _____ He/she is usually quite flexible in his/her opinions when people disagree with him/her.

40 _____ The first thing that he/she always does in a new place is to make friends.

41 _____ He/she can handle difficult situations without needing emotional support from anyone

42 _____ He/she would get a lot of pleasure from owning expensive luxury goods.

43 _____ He/she likes people who have unconventional views.

44 _____ He/she makes a lot of mistakes because he/she doesn’t think before he/she acts.

45 _____ Most people tend to get angry more quickly than he/she does.

46 _____ Most people are more upbeat and dynamic than he/she generally is.

47 _____ He/she feels strong emotions when someone close to him/her is going away for a long

48 _____ He/she wants people to know that he/she is an important person of high status.

49 _____ I don’t think of him/her as the artistic or creative type.

50 _____ People often call him/her a perfectionist.

51 _____ Even when people make a lot of mistakes, he/she rarely says anything negative.

52 _____ He/she sometimes feels that he/she is a worthless person.

53 _____ Even in an emergency he/she wouldn’t feel like panicking.

54 _____ He/she wouldn’t pretend to like someone just to get that person to do favors for

55 _____ He/she finds it boring to discuss philosophy.

56 _____ He/she prefers to do whatever comes to mind, rather than stick to a plan.

57 _____ When people tell him/her that he/she is wrong, his/her first reaction is to argue with

58 _____ When he/she is in a group of people, he/she is often the one who speaks on behalf of

59 _____ He/she remains unemotional even in situations where most people get very

60 _____ He/she'd be tempted to use counterfeit money, if he/she were sure he/she could get