

**EXPLORING TEACHERS' ALTRUISM AND EMPATHY IN
PRIMARY SCHOOLS OF WEST BENGAL**

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Jadavpur University for Award of the Degree of*

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Submitted by

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Under the supervision of

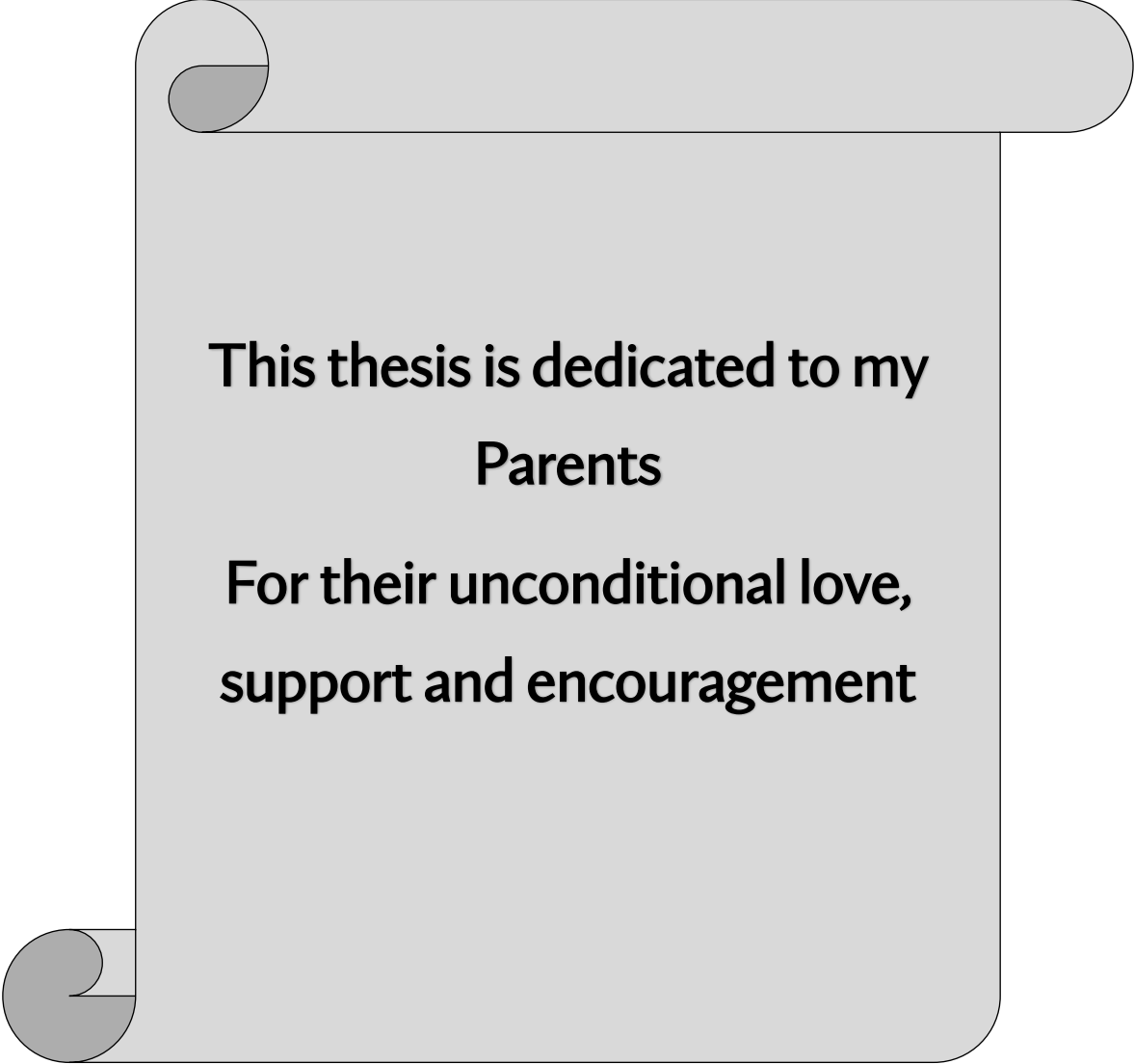
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DEPARTMENT OF EDUCATION

JADAVPUR UNIVERSITY

KOLKATA

2025



**This thesis is dedicated to my
Parents**

**For their unconditional love,
support and encouragement**

Certificate

Certified that the thesis entitled “**Exploring Teachers’ Altruism and Empathy in Primary Schools of West Bengal**” submitted by me for the award of the Degree of Doctor of Philosophy in Arts at Jadavpur University is based upon my work carried out under the supervision of Prof. Muktipada Sinha, Professor, Department of Education, Jadavpur University and that neither this thesis nor any part of it has been submitted before for any degree or diploma anywhere / elsewhere.

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Acronyms Index

Acronyms	Full Form
ABQ	Altruistic Behaviour Questionnaire
α (Alpha)	Reliability Coefficient (Cronbach's Alpha)
ANOVA	Analysis of Variance
AUT	Autonomy
BA	Bachelor of Arts
CC	Cost to the Helper (Hamilton's Rule)
df	Degree of Freedom
EC	Empathic Concern (IRI subscale)
EM	Environmental Mastery
F	F-test Value
FS	Fantasy (IRI subscale)
H₀	Null Hypothesis
HS	Higher Secondary
IABC	Inventory of Altruistic Behaviour in Children
IECA	Interpersonal Empathy & Compassion Assessment
IRI	Interpersonal Reactivity Index
M	Mean Value
MA	Master of Arts
MANOVA	Multivariate Analysis of Variance
MD	Mean Difference
N	Sample Size / Number of Respondents
NS	Not Significant
OBC	Other Backward Classes
OPW	Overall Psychological Well-Being
PAM	Perception-Action Model
PD	Personal Distress (IRI subscale)
PERMA	Positive Emotion, Engagement, Relationships, Meaning, Accomplishment
PG	Personal Growth

PIL	Purpose in Life
PRWO	Positive Relation with Others
p-value	Probability Value
PWB	Psychological Well-Being
r	Coefficient of Correlation
r²	Coefficient of Determination (Regression Analysis)
RSES	Rosenberg's Self-Esteem Scale
SA	Self-Acceptance
SC	Scheduled Caste
Sd / SD	Standard Deviation
SE	Self-Esteem
SES	Socioeconomic Status
S	Significant
SPSS	Statistical Package for the Social Sciences
SRA	Self-Report Altruism Scale
SSMAB	Scale of School Managers' Altruistic Behaviours
ST	Scheduled Tribe
t-value	Independent Sample t-test Value
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Emergency Fund
UNRWA	United Nations Relief and Works Agency
WHO	World Health Organization
WEMWBS	Warwick-Edinburgh Mental Well-Being Scale

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Appendix IV Plagiarism Report

Abstract

The main purpose of this study was to assess the altruistic and empathetic behaviors of primary school teachers and investigate the correlation between teachers' altruism and empathy across various districts in West Bengal, including Jalpaiguri, Alipurduar, Coochbehar, Hooghly, South 24 Parganas, and Howrah. A quantitative descriptive survey method and a cross-sectional survey research design were employed to gather quantitative data through a questionnaire. The target population for this study consisted of all government-aided primary school teachers in West Bengal. A multistage sampling method was used to select the schools, while a simple random sampling technique was applied to choose the teachers who participated. The dependent variables in this study were teachers' altruism and empathy, while thirteen independent or background variables were also considered. A self-developed Teachers' Altruism Scale and the Toronto Empathy Questionnaire (TEQ) were used for data collection. The study reveals several key findings regarding teachers' altruism and empathy across various demographic factors. Female teachers exhibited higher altruism and empathy compared to male teachers, with significant differences in both cases. Married teachers demonstrated higher levels of altruism, while unmarried teachers showed higher empathy, with both differences being statistically significant. Teachers from general categories outperformed those from SC, ST, and OBC categories in both altruism and empathy. Additionally, teachers from nuclear families exhibited higher altruism and empathy than those from joint families. Teachers with higher secondary education showed more altruism and empathy than those with graduate or master's degrees. Teachers from arts backgrounds also demonstrated greater altruism and empathy compared to those in science and commerce disciplines. Rural school teachers showed higher altruism and empathy than their urban and semi-urban counterparts. Furthermore, membership in social organizations was associated with higher altruism, though no significant correlation was found with empathy. Teachers who chose teaching as their first career exhibited higher altruism, while no significant differences were found based on work experience or religion. Correlation analysis showed a negative relationship between birth order and altruism, indicating that later-born teachers tend to exhibit less altruistic behavior. Altruism and empathy were weakly positively correlated, though the correlation was not statistically significant.

Keywords: *Altruism, Empathy, Primary School Teachers, West Bengal, Demographic Factors*

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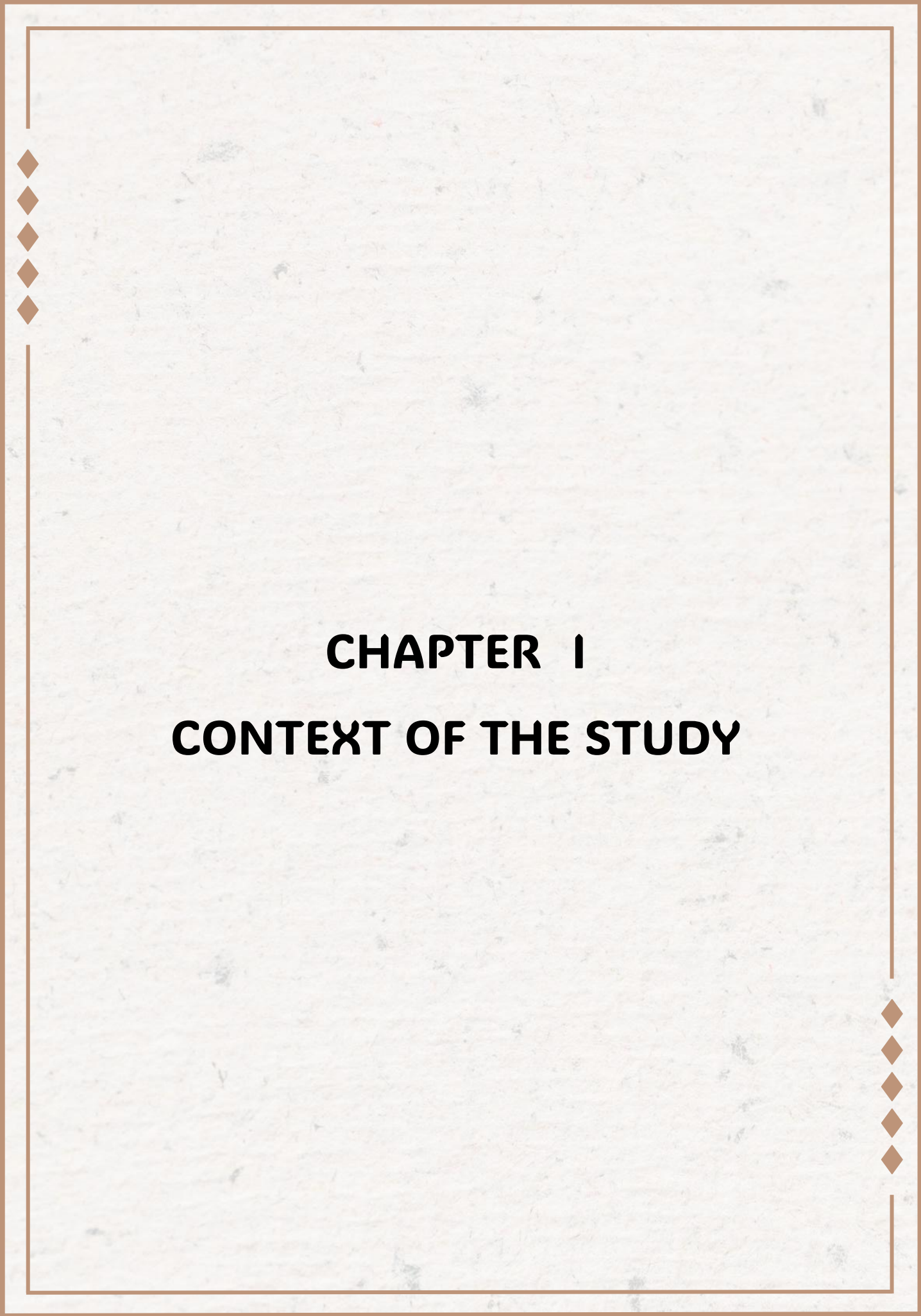
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CHAPTER I
CONTEXT OF THE STUDY

CHAPTER I

CONTEXT OF THE STUDY

"The greatest sign of success for a teacher... is to be able to say, 'The children are now working as if I did not exist.'" – Madam Maria Montessori

1.1 Introduction

Teachers play a vital role in shaping not only the academic growth of children but also their emotional development. In primary education, where students are at a sensitive stage of life, teachers' altruism and empathy can strongly influence learning, motivation, and overall well-being (Batson, 2011). Altruism means acting selflessly for the benefit of others, while empathy is the ability to understand and share someone else's feelings (Eisenberg, 2000). These qualities are especially important in primary schools, where teachers must meet diverse needs, create inclusive classrooms, and support children's emotional growth (Hoffman, 2008). In the socio-cultural setting of West Bengal, exploring these traits in teachers offers valuable insights into how they impact effective teaching and student outcomes.

Although many studies worldwide have explored teacher-student relationships, little empirical research has measured altruism and empathy specifically among primary teachers in West Bengal. Existing work mostly relies on qualitative research, which provides useful observations but is harder to generalize. This study aims to fill that gap by using standardized tools to measure these traits and examine how they influence students' learning and well-being.

This research is grounded in established theories of prosocial behavior. Social Learning Theory (Bandura, 1977) explains that altruism and empathy grow from observation and reinforcement. Teachers who model positive, caring behaviors encourage students to adopt the same. The Empathy-Altruism Hypothesis (Batson, 2011) highlights that genuine empathy motivates selfless actions, showing how teachers' emotional concern can translate into effective teaching. Self-Determination Theory (Deci & Ryan, 1985) adds that teachers with strong intrinsic motivation are more likely to show empathy and altruism naturally, which in turn improves their teaching practice. These perspectives

suggest that empathy and altruism help create engaged, motivated learners in West Bengal's classrooms.

Primary education in West Bengal encounters several hurdles, including socio-economic disparities, first-generation learners, and linguistic diversity, all of which create additional challenges for both students and teachers (Banerjee, 2013). Moreover, overcrowded classrooms, inadequate resources, and the emotional strain on educators further complicate the teaching-learning process (Singh, 2019). In these difficult conditions, teachers' emotional intelligence, particularly their ability to empathize and demonstrate altruism, plays a crucial role in creating a supportive and effective learning environment (Ghosh & Basu, 2017). While emotional intelligence has gained global recognition as a critical component of effective teaching, there remains a scarcity of comprehensive research in India that explores these dimensions in the context of primary education, highlighting the need for further empirical studies in this area.

The implications of this study are wide-reaching. For teachers, it can create deeper self-awareness about how their empathy and altruism influence their practice and student relationships. For school leaders and teacher educators, it highlights the need to integrate emotional intelligence training into teacher preparation and development programs, not just focus on academic or technical skills (Jennings & Greenberg, 2009). For policymakers, the findings provide evidence for including empathy, altruism, and mental health competencies in teacher evaluation frameworks to enhance education quality. Most importantly, students benefit directly from classrooms where teachers lead with empathy and selflessness, creating safe, inclusive, and motivating learning spaces.

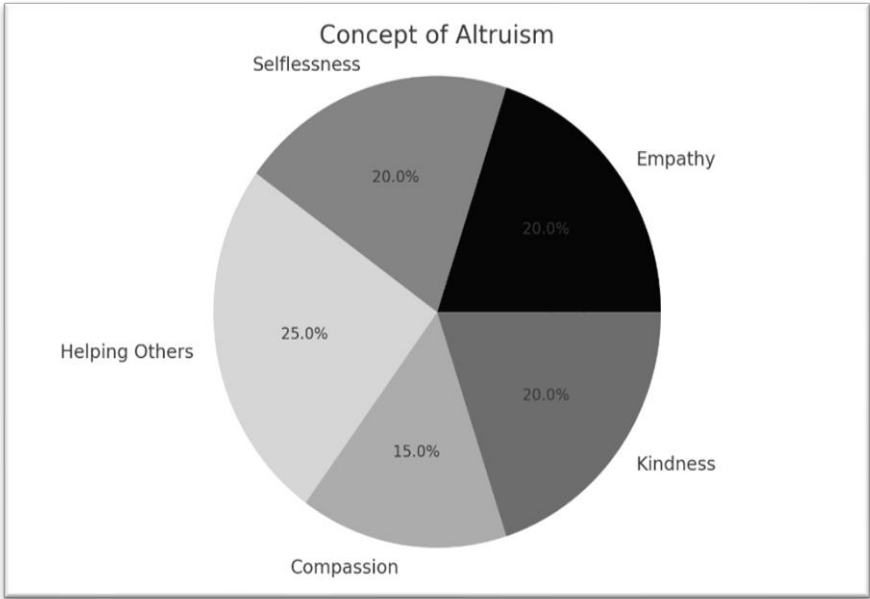
In the Indian context, where cultural and emotional values strongly shape education, this research fills an important gap. It provides robust, empirical evidence on how teachers' altruism and empathy influence student engagement, motivation, and achievement in West Bengal. By combining theoretical insights with a rigorous quantitative approach, the study aims to guide teacher training, improve policy design, and strengthen student well-being in primary schools.

1.2 Concept of Altruism

Altruism means helping others without expecting anything in return. It is about caring for people and doing good for them simply because it feels right (Batson, 2011). Scientists and philosophers have studied altruism to understand why people help others, even when it is difficult or costly for them (Fehr & Fischbacher, 2003). Some believe that humans are naturally kind and have evolved to help others. Others think people help because it makes them feel happy and connected (Sober & Wilson, 1998). One explanation is that people help their family members because they share the same genes. This is called kin selection, and it explains why parents take care of their children and why siblings support each other (Hamilton, 1964). Another idea is reciprocal altruism, which means people help others because they believe kindness will be returned in the future (Trivers, 1971). Some researchers argue that people help when they feel empathy, meaning they understand and share someone else's emotions (Batson, 1991). Brain scan studies show that helping others triggers the release of chemicals in the brain, making people feel good, like when they eat their favorite food or listen to music (Decety & Jackson, 2004). Altruism can also be learned. Parents, teachers, and society teach children to be kind and helpful. Watching others perform good deeds makes people more likely to do the same (Bandura, 1977). Many religions and cultures view altruism as a moral value. Religious leaders like Buddha, Jesus, and Mahatma Gandhi taught that helping others makes the world a better place (Singer, 1981). Even in economic experiments, people show kindness by sharing money, proving that not everyone acts selfishly (Henrich et al., 2005). However, some scientists argue that pure altruism may not exist. They believe that even when people seem selfless, they might still gain something in return, such as happiness, praise, or a good reputation (Trivers, 1971). In real life, altruism plays a vital role in many fields. Teachers who genuinely care about their students create a better learning environment, making children feel safe and motivated (Noddings, 2005). In hospitals, doctors and nurses show altruism by taking care of patients, even when they are tired or stressed (Oliner & Oliner, 1988). Many people volunteer or donate money to help others, even if they do not know them personally (Bekkers & Wiepking, 2011). Research suggests that helping others benefits not only the receiver but also the helper by increasing happiness and reducing stress (Lyubomirsky, Sheldon, & Schkade, 2005). Acts of kindness activate parts of the brain that create feelings of reward and satisfaction (Harbaugh, Mayr, &

Burghart, 2007). During tough times, such as natural disasters or pandemics, altruism brings communities together and encourages mutual support (Penner et al., 2005). However, too much altruism can be overwhelming. Some people, especially caregivers and social workers, may feel emotionally drained when they give too much and neglect their well-being (Figley, 2002). The diagram below provides a clear understanding of altruism.

Figure 1.1 Concept of Altruism



This highlights the importance of balancing helping others with self-care. Altruism is a powerful force that strengthens individuals and communities. While some debate whether it is truly selfless, research shows that acts of kindness benefit both the giver and the receiver. Encouraging altruism can make society more compassionate and connected. Future studies can explore ways to balance altruism and self-care to ensure long-term kindness and well-being.

1.2.1 Roots and Correlates of Altruism

The French philosopher Auguste Comte first introduced the term "altruism" in the 19th century. In his work on 'positivism', he used it to describe a selfless care for others' well-being, setting it apart from egoism. Comte viewed altruism as a moral duty and a key element in promoting social harmony. Altruism, or helping others without expecting anything in return, comes from a mix of different factors like evolution, psychology, and social influences. These factors explain why people do good things for others, even when it costs them something. Understanding these causes helps explain why people act kindly and how these actions are shaped by both internal feelings and external influences. From an evolutionary perspective, altruism might have developed because it helped humans survive and reproduce. There are two main ideas that explain this: kin selection and reciprocal altruism. Kin selection, introduced by Hamilton (1964), says people are more likely to help their relatives because it helps pass on shared genes. Reciprocal altruism, introduced by Trivers (1971), suggests that people help others with the expectation that they will receive help in return later. Both types of altruism are beneficial for survival, whether by helping family members directly or forming helpful relationships with others. Psychologically, altruism comes from emotions and thoughts. A big part of this is empathy, which is the ability to understand and share others' feelings. The empathy-altruism hypothesis by Batson (1991) suggests that people help others when they feel empathy for them, wanting to ease their suffering. Research shows that people with high empathy are more likely to help others (Batson et al., 2003). Also, feelings like guilt and shame can drive altruism because people may act selflessly to reduce their discomfort (Haidt, 2003). Social and cultural factors also influence altruism. In many cultures, helping others is encouraged by morals, religion, and community expectations (Schwartz, 1977). Parents, teachers, and peers teach and show altruistic behavior, which children and teens often imitate. Social norms, like the idea that people should return favors, also encourage altruistic actions (Gouldner, 1960). Personal traits also affect altruism. People who are more agreeable, empathetic, and motivated to help are more likely to engage in selfless actions. Studies show that people with high agreeableness, which means they are caring and cooperative, are more likely to help (Carlo et al., 2007). Also, people who see themselves as moral are more likely to act altruistically (Aquino & Reed, 2002). Socioeconomic status (SES) and life experiences also play a role. For example, people with

higher SES might donate more money to charity, while those with lower SES may volunteer more (Piff et al., 2010; O'Neill et al., 2011). Life experiences, like seeing others help or facing personal challenges, can also make someone more likely to help others. The situation also matters when it comes to altruism. People are more likely to act selflessly in emergencies or when they feel a personal connection to the person in need (Darley & Batson, 1973). However, the presence of others can sometimes prevent people from helping, as they might assume someone else will take action (Latané & Darley, 1970).

The reasons people act altruistically are complex, involving biological, emotional, social, and situational factors. Altruism comes from the combination of internal feelings, like empathy and moral emotions, and external influences, such as cultural norms and past experiences. Understanding these factors can help create environments that encourage kindness and benefit society as a whole.

1.2.2 Altruism: Definitions, Theories, and Models

1.2.2.1 Defining Altruism

At its heart, altruism means acting with the aim of improving someone else's well-being, even when it may cost us something. It is important to separate this from behaviours that look helpful but are actually done for selfish reasons. Thinkers and researchers usually explain altruism in two main ways:

- **Behavioural or Evolutionary View:** - In biology, altruism is defined only by its outcome. An act is considered altruistic if it lowers the helper's chances of survival or reproduction, while boosting those chances for another (West et al., 2007). The puzzle is: how can such costly behaviour survive in evolution if natural selection generally favours self-interest?
- **Psychological View:** - Here the focus is on motivation. Real altruism is guided by the true wish to improve another's life, often driven by *empathy* (Batson, 2011). This is different from egoistic helping, where a person helps but their final goal is to feel good themselves; such as avoiding guilt, gaining praise, or building reputation.

This section looks at the main theories and models that explain why altruism exists, explored both biologically and psychologically.

1.2.2.2 Key Theoretical Frameworks

- **Kin Selection and Inclusive Fitness Theory:-** Proposed by W.D. Hamilton (1964), this theory explains altruism through genes rather than individuals. Natural selection favours actions that help one's relatives because they share the same genes. Hamilton's Rule states:

$$C < B \times r$$

Where:-

- CC = Cost to the helper
- BB = Benefit to the receiver
- rr = Genetic relatedness

If the benefit, weighted by relatedness, is greater than the cost, altruism will spread. This is why animals often help close kin—for example, squirrels giving alarm calls or worker bees protecting their queen.

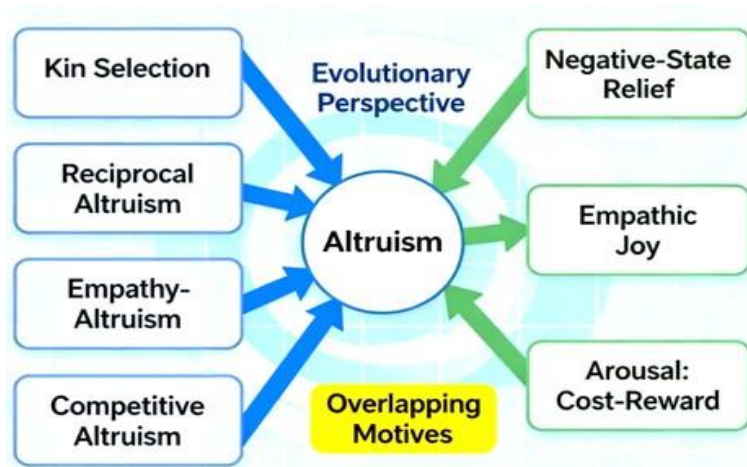
- **Reciprocal Altruism (Tit-for-Tat Model):-** Robert Trivers (1971) suggested that altruism can work between non-relatives if there is an expectation of future return. This requires:
 - Repeated interactions over time
 - Ability to recognise and remember others' behaviour
 - Mechanisms to punish cheaters who take but never give

This explains cooperation in species like vampire bats, who share food with roost-mates (Carter & Wilkinson, 2013). It also underlies human traditions of reciprocity and social contracts.

- **Empathy-Altruism Hypothesis:-** Social psychologist C. Daniel Batson (1991) argued that empathy can create truly altruistic motives. When people deeply share another's feelings, they aim to reduce the other's distress, not just their own. Research shows that when empathy is low, people escape from uncomfortable situations. But when empathy is high, they help even if escape is easy, showing their real goal is the other's welfare.

- **Competitive Altruism and Signalling:-** This view, common in evolutionary psychology, sees altruism as a way to show off qualities like wealth, intelligence, or cooperative nature (Gintis et al., 2001; Zahavi, 1975). Costly helping acts work as “signals” of reliability. In human groups, people may compete to be more generous because it raises their status, popularity, or attractiveness (Hardy & Van Vugt, 2006).

Figure 1.2: Visual diagram showing integration of altruism key theoretical frameworks



1.2.2.3 Major Motivational Models

Building on these theories, psychologists have offered several pathways explaining why people help:

- **Negative-State Relief Model (Egoistic):** Helping reduces the helper’s own bad feelings (sadness, guilt). The focus is on improving one’s mood, not the victim’s suffering (Cialdini et al., 1987).
- **Empathic Joy Hypothesis (Egoistic):** People help because they expect to share in the joy or relief of the person helped. The act is driven by the positive emotions it creates for the helper (Smith et al., 1989).
- **Arousal: Cost-Reward Model:** Witnessing distress raises uncomfortable arousal. People then “weigh” the costs of helping (danger, effort) against the costs of not helping (guilt, shame). They act in the way that reduces tension at the least cost to themselves (Dovidio et al., 1991; Piliavin et al., 1981).

Altruism is a layered and complex process. From an evolutionary angle, it is shaped by strategies that still support survival of genes or individuals (kin selection, reciprocity, signalling). From a psychological angle, the debate centres on whether we help for others' sake or mainly for ourselves. Strong evidence, especially from Batson, shows that empathy can lead to genuine altruism.

In everyday life, a single act of charity may combine many motives at once. For example, it might:-

- Help a relative (kin altruism, Hamilton, 1964)
- Carry an expectation of future return (reciprocal altruism, Trivers, 1971)
- Be motivated by empathetic concern (Batson, 1991)
- Increase social reputation (competitive altruism, Hardy & Van Vugt, 2006)

To truly understand altruism, we need to integrate biology, psychology, and social science. Human helping behaviour is rarely simple—it often has many overlapping causes that combine to make altruism one of the most fascinating parts of human nature.

1.2.3 Importance of Altruism

Altruism, which means caring about others' well-being without expecting anything in return, is important for creating positive social and emotional results. In schools, especially in primary schools, altruism helps create a caring and understanding atmosphere. Teachers' selfless actions not only affect how students grow emotionally and socially but also help shape the overall school environment. Research shows that when teachers act altruistically, it improves the relationship between students and teachers and makes the classroom a better place for learning. Teachers who are kind, understanding, and care about their students' well-being build trust and respect in their classrooms. This trust creates a safe space where students feel valued, which helps them do better in school and feel emotionally stable. Studies show that when teachers focus on their students' needs, students are more motivated and involved in their work (Karami & Hajjaliasghari, 2019). Altruism also helps students grow socially. Teachers who show empathy and care act as role models, teaching students the importance of helping others and being part of a community. Research suggests that when students see altruistic actions, they are more likely to do the same, which leads to a kinder school culture (Kokkinos, 2020). This can

help reduce bullying and encourage students to work together, making the school a friendlier place. In addition, altruism helps prevent teacher burnout, which is a common problem in schools. Teachers who see their job as more than just work and feel good about helping others are more satisfied with their jobs and feel emotionally fulfilled. A study by Hakanen, Bakker, and Demerouti (2005) found that teachers who are altruistic are less likely to experience burnout and are happier with their careers, which makes them more likely to stay in the teaching profession. Also, altruism is linked to better mental health. People who do selfless things often feel happier, less stressed, and more satisfied with life. In teaching, teachers who practice altruism feel more fulfilled and emotionally strong (Post, 2005). This not only helps their own mental health but also improves how they interact with students. Altruism in schools is key to building positive relationships, improving social development, and promoting well-being. It helps create a supportive environment for both teachers and students, leading to better academic performance, emotional health, and job satisfaction. Encouraging altruistic behavior in teachers can help build a caring and successful school community.

1.2.4 Teacher Altruism: Why It Is Needed

Teacher altruism; when teachers willingly put in effort to support students beyond their formal duties or personal gain; is not just a noble quality but an essential part of good education. Its value is broad, influencing how students learn, how schools function, and how teachers sustain themselves in the profession.

Firstly, altruism directly benefits students both academically and emotionally. When teachers show genuine care and go beyond the minimum requirements, they create safe, encouraging classrooms. This strengthens the bond between teacher and student, which in turn boosts engagement, motivation, attendance, achievement, and social growth (Cornelius-White, 2007; Roorda et al., 2011). An altruistic teacher willingly spends extra time with struggling students, supports those in distress, and constantly reminds learners of their abilities—often sacrificing their own personal time and energy to do so.

Secondly, altruism builds a positive school environment and culture. Teachers who share resources freely, help new colleagues adjust, and collaborate for the overall good of the school, create strong networks of trust and cooperation (Tschannen-Moran, 2014). This atmosphere reduces stress and feelings of isolation among staff, allowing teachers to

support one another. In turn, students benefit by learning in a school environment shaped by generosity, teamwork, and mutual respect.

Finally, altruism is vital for teacher well-being and professional survival. Teaching is demanding and emotionally draining, which makes burnout and leaving the profession common risks. However, when teachers find meaning in making a real difference in students' lives, the hardship feels worthwhile. Altruism gives them a sense of purpose beyond themselves, helping them sustain their motivation, passion, and resilience, even during stressful times (Brackett et al., 2010). This deeper sense of meaning helps protect against exhaustion and encourages teachers to remain committed to their profession.

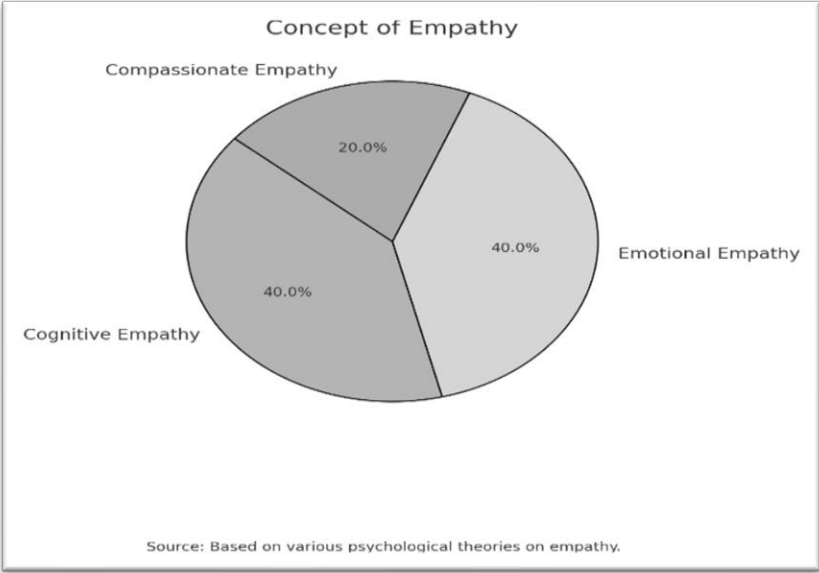
1.3 Concept of Empathy

Empathy is the ability to understand and share the feelings of others. It involves noticing and recognizing what others are feeling, imagining their emotions, and responding with kindness. Empathy helps in forming good relationships, promoting social harmony, and encouraging selfless acts of kindness.

The term of "Empathy" originated with German philosopher and psychologist Theodor Lipps. "Empathy" comes from the German word *Einfühlung*, meaning "feeling into," and was first used in the 1800s to describe the emotional connection with others' experiences. It differs from sympathy, which is more about feeling sorry for someone, while empathy is about deeply understanding their emotions and offering both emotional and mental support (Davis, 1983). Psychologists say there are two main parts of empathy: emotional and cognitive. Emotional empathy is when you share or mirror someone else's emotions. For example, if someone is sad, an empathetic person might feel sadness too. Cognitive empathy is the ability to understand someone's thoughts or perspective without feeling the same emotions (Jolliffe & Farrington, 2006). Empathy can be natural but also learned over time. It depends on many factors like biology, personal experiences, and the social environment. Empathy is when we understand and share how someone else feels. There are three main types of empathy: Emotional Empathy: Feeling what someone else feels. Cognitive Empathy: Understanding what someone else is thinking or going through. Compassionate Empathy: Taking action to help someone after understanding their feelings and needs. These types of empathy help us build stronger

connections with others and provide support. here's a conceptual breakdown of how the sections might be distributed. Let's assume an equal distribution for simplicity:

Figure 1.3 Concept of Empathy



Source: (Davis, M. H. 1983)

Studies show that specific areas of the brain are involved in processing empathy, suggesting that it's not just a psychological experience but also a biological one (Decety & Jackson, 2004). Empathy is important for children, as those who are more empathetic tend to have better social skills and emotional control (Karni-Visel et al., 2021). In schools, teachers who respond empathetically to students can improve student well-being, motivation, and learning (Saarni, 1999). Empathy is also crucial for moral development. Evidence suggests that empathetic people are more inclined to assist others and express concern for their needs (Batson, 1991). It drives people to act in ways that reduce others' suffering. However, empathy can sometimes be overwhelming, especially in jobs like healthcare and teaching. This is known as "empathy fatigue" and highlights the need to maintain emotional boundaries while still being caring (Figley, 1995). Empathy is a mix of emotional connection, understanding, and caring responses. It is vital for building relationships and promoting harmony in society. As research continues, we understand that empathy is not just a trait but also a skill that can be developed for the benefit of individuals and communities.

1.3.1 Empathy: Definitions, Theories, and Models

1.3.1.1 Definitions and Core Components

Empathy is a rich and layered concept that plays a central role in how people connect with each other. It allows us to both *understand* and *share* the emotional experiences of others, making it vital for kindness, moral values, and building strong relationships (Cuff et al., 2016).

Researchers generally divide empathy into two main parts—*affective empathy* and *cognitive empathy* (Davis, 1983; Decety & Jackson, 2004).

- **Affective Empathy (emotional empathy):** - This is the ability to *feel* another person's emotion directly. It often happens automatically, almost like emotions are contagious. For example, we may feel upset when we see someone crying or feel warmth and compassion that pushes us to help when someone is struggling (Batson, 2009).
- **Cognitive Empathy (perspective-taking or theory of mind):** - This is the ability to *understand* what another person is going through by reasoning about their thoughts, feelings, or intentions. It involves stepping into their shoes mentally without actually sharing their emotions (Decety & Lamm, 2006).

Another key difference within empathy is: -

- **Empathic Concern vs. Personal Distress:** - Both are emotional reactions, but they lead to very different outcomes. *Empathic concern* is other-focused and makes us feel compassion and motivates us to help. *Personal distress*, however, is self-focused—when we feel anxious or overwhelmed due to someone else's suffering, we may end up avoiding them to calm ourselves instead of helping (Eisenberg & Eggum, 2009).

1.3.1.2 Key Theoretical Frameworks

Over the years, several theories have been suggested to explain how empathy works.

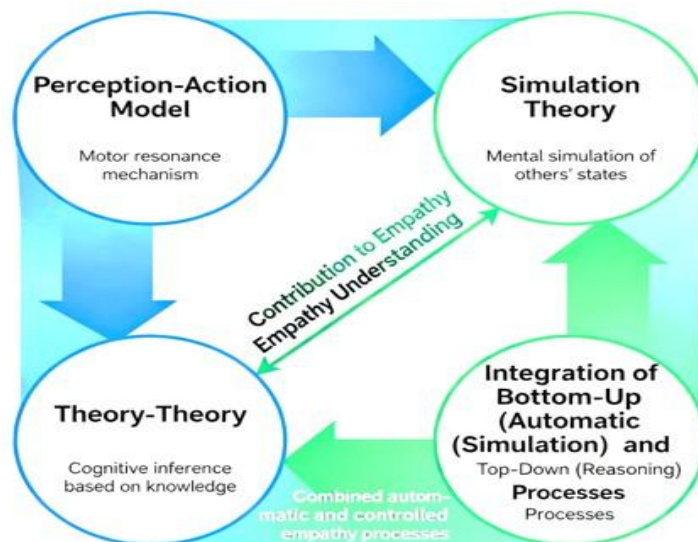
- **Perception-Action Model (PAM):** - Proposed by Preston and de Waal (2002), this model suggests that when we see or imagine someone experiencing an emotion, our own brain automatically activates the same emotional patterns. This prepares

us to understand and respond to them. The discovery of *mirror neurons*—brain cells that fire both when we act and when we witness the same action—supports this view (Rizzolatti & Craighero, 2004).

- **Simulation Theory:** - This is closely related to PAM. It says we don't deduce others' feelings through reasoning; instead, we "simulate" them inside ourselves. It's as if we create a small version of their experience in our minds, giving us direct insight into how they feel (Gallese, 2003).
- **Theory-Theory:** - This view argues that we rely on a kind of "folk psychology," or everyday understanding of how beliefs, desires, and feelings shape behaviour. Here, empathy is more of a thinking process where we predict others' states through reasoning, not just simulation (Gopnik & Wellman, 1992).

Modern researchers suggest that both processes—automatic simulation (bottom-up) and thoughtful reasoning (top-down)-work together in different situations (Decety & Meyer, 2008).

Figure 1.4: Visual diagram showing integration of empathy key theoretical frameworks



1.3.1.3 Major Process Models

Beyond these broad theories, some detailed models explain the step-by-step process of empathy:-

- **Empathy and Seligman's PERMA Model**

Although Seligman's (2011) well-being theory does not list empathy as a separate pillar, it is deeply woven into all five parts of the PERMA framework. Empathy acts like a catalyst; it strengthens each element and helps people move towards real human flourishing.

Empathy is at the heart of Positive Relationships (R). The ability to understand and share another person's emotions is key to forming strong, trusting, and supportive bonds (Seligman, 2011). It improves communication, helps resolve conflicts with care, and makes it easier to offer comfort—all of which are essential for long-lasting, healthy relationships.

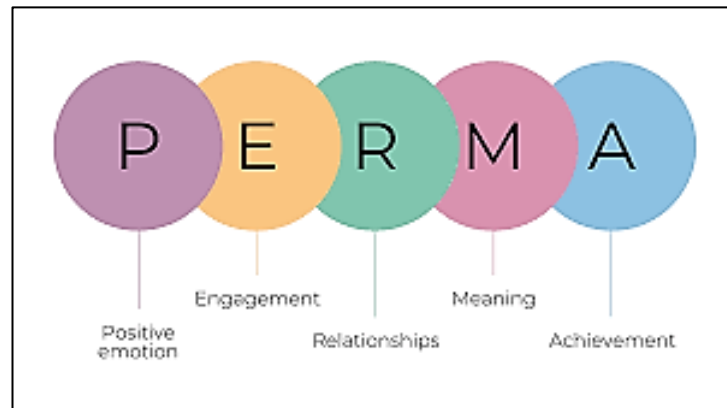
Empathy also enhances Positive Emotions (P). While commonly linked with sharing sadness or distress, empathy can also bring *empathic joy*—the ability to feel happiness when others succeed or thrive (Morelli et al., 2015). Small acts of empathy can spark feelings of warmth, compassion, and satisfaction, all of which contribute to a more joyful and emotionally fulfilling life.

Empathy connects strongly with Meaning (M). Recognising our ties to others and helping them in times of need provides a powerful sense of purpose. Empathic action makes people feel part of something larger than themselves, which reflects a deeper, eudaimonic sense of well-being (Seligman, 2011).

Finally, empathy also supports Engagement (E) and Accomplishment (A). In classrooms, teams, or workplaces, the ability to understand others' views leads to better cooperation and flow during group activities. It also inspires people to pursue goals that not only serve themselves but also positively affect others, making their successes more meaningful.

In short, empathy is the invisible thread that ties all elements of PERMA together. It transforms well-being from an individual pursuit into a shared and connected experience, enriching both personal growth and collective human flourishing.

Figure 1.5 PERMA Model



- **The Empathic Process Model (Decety & Jackson, 2004):** - This model outlines four key stages as -
 - *Affective Sharing* – automatically sharing the other’s feelings
 - *Self-Other Awareness* – keeping the boundary between “my feelings” and “their feelings”
 - *Mental Flexibility* – consciously adopting another’s perspective
 - *Emotional Regulation* – managing our own emotions so we can respond with care rather than feeling overwhelmed
- **Cue-Based Model of Empathic Responding (Zaki, 2014):**- This model shows that empathy depends on many factors. It starts with cues like facial expressions or tone of voice. Then, the person’s traits, mood, relationships, and the social context (e.g., being in a group) shape the response. In short, empathy arises from an interaction between the signals we perceive, who we are, and the situation we are in.

1.3.1.4 Clinical and Developmental Considerations

Empathy is not fixed—it grows over time and can differ from person to person.

- **Development:**- Signs of empathy appear very early. Newborns often cry when hearing another baby cry, which is an early form of emotional sharing. As children grow, they develop the ability to understand others’ perspectives, which relies on the growth of brain areas like the prefrontal cortex (Eisenberg & Eggum, 2009).

- **Deficits:-** Some conditions are marked by empathy difficulties. For example, autism spectrum disorder (ASD) is usually linked with challenges in cognitive empathy—understanding what others think or feel (Baron-Cohen, 2009). In contrast, people with psychopathy can understand emotions (intact cognitive empathy) but lack the emotional sharing part (affective empathy). This allows them to manipulate others without guilt (Blair, 2005).

Empathy is a complex mental and emotional process that blends both sharing another's feelings and reasoning about their perspective. It works through both bottom-up processes like simulation and top-down processes like perspective-taking and regulation. While empathy is essential for social bonds and moral behaviour, it is shaped by personal traits, context, and developmental differences. Understanding its emotional, cognitive, and regulatory sides is crucial in fields like psychology, neuroscience, and education.

1.3.2 Importance of Empathy

Empathy is very important for teachers, especially in primary schools, where young children need emotional support, understanding, and encouragement. When teachers are empathetic, they can build strong connections with students, create a positive classroom atmosphere, and help children grow both academically and emotionally. Empathy helps teachers form close relationships with students, making them feel safe and respected in class (Cornelius-White, 2007). In primary schools across West Bengal, where students come from different economic and social backgrounds, empathetic teachers can understand their needs better and make every child feel important. Many students deal with stress, anxiety, or problems at home, which can affect their learning. Teachers who show empathy can notice these struggles and provide emotional support, helping reduce stress at school (Jennings & Greenberg, 2009). This is especially important in West Bengal, where many children face financial difficulties. Empathy helps teachers understand the different learning needs of students, making sure that every child feels included (Davis, 1994). In government and rural schools in West Bengal, where classrooms often have students with different abilities and backgrounds, empathetic teachers ensure that everyone gets fair attention and encouragement. When teachers show empathy, students learn to be kind, cooperative, and supportive toward their classmates (Batson, 2011). By acting as role models, teachers help create a school culture where students help and care for each other. Empathetic teachers often feel more satisfied

with their jobs because they see the difference they make in students' lives (Roffey, 2012). In West Bengal, where teachers face challenges like large class sizes and limited resources, empathy helps them stay motivated and committed to teaching.

Empathy helps teachers keep students engaged and improves learning. When teachers understand what students are feeling and the challenges they face, they can adjust their teaching methods to meet different needs. This leads to better academic performance (Cornelius-White, 2007). Studies show that when teachers are empathetic, students feel more motivated, confident, and able to think and learn better (Meyers et al., 2019). In West Bengal, where many children struggle with financial difficulties, an empathetic teacher can make a big difference by offering encouragement and emotional support. Teachers who show empathy can manage their classrooms more effectively. Instead of using harsh discipline, they understand students' feelings and guide them with care (Jennings & Greenberg, 2009). This approach reduces conflicts, improves teamwork among students, and helps everyone feel included (Wubbels et al., 2016). In West Bengal's crowded and under-resourced schools, empathetic teachers can prevent behavior problems and create a peaceful learning space. West Bengal has students from many different backgrounds, including those from poor families, first-generation learners, and marginalized groups. When teachers show empathy, they understand these challenges and adjust their teaching to support students better (Mishra, 2021). For example, a child from a low-income family might not finish homework because they have no electricity at home. An empathetic teacher would understand this and offer alternative ways to help instead of scolding the child. Empathy is especially important in classrooms with students who have special needs, learning difficulties, or emotional struggles. Research shows that empathetic teachers are more likely to adapt their teaching to support these students (Davis, 1994; Sharma & Sokal, 2015). In West Bengal, where inclusive education is still developing, empathetic teachers play a key role in making sure children with disabilities or learning difficulties feel included. Empathetic teachers set an example of kindness and cooperation. Research shows that when teachers act with empathy, students learn to be more caring and develop strong social skills (Batson, 2011; Roffey, 2012). This is especially important in primary schools, where early lessons in empathy can shape children's attitudes toward kindness for life. Empathy doesn't just help students—it also makes teaching more rewarding. Teachers who form emotional connections with their students feel happier in their jobs and experience less stress (Spilt et al., 2011).

1.3.3 Teacher Empathy: Why It Is Needed

Teacher empathy; the ability to understand what students are going through and connect with their feelings; is not just a “nice to have” quality but a key skill for effective teaching. Its importance lies in how it shapes the classroom climate, helps student growth, and strengthens teaching practices.

First, empathy is crucial for building trusting teacher-student relationships. When students feel that their teacher understands them and respects their feelings, the classroom becomes a safe and welcoming space. Such emotional safety encourages students to take risks in learning, participate actively, and engage more deeply (Cornelius-White, 2007). Empathetic teachers notice both words and body language, which helps them pick up signs of confusion, anxiety, or frustration early. By responding with care, they make students more open to learning and guidance (Roorda et al., 2011).

Second, empathy helps improve behavior and reduce conflict. Instead of reacting to misbehavior with quick punishment, empathetic teachers look for its deeper causes. A child’s disruptive actions may come from learning difficulties, family struggles, or peer problems. By addressing these root causes, teachers create a classroom that is supportive rather than harsh. Students learn better emotional control and conflict resolution by observing how their teacher models empathy and understanding (Jennings & Greenberg, 2009).

Third, empathy makes teaching more effective and fair. When teachers empathize with their students, they become more sensitive to differences in abilities, backgrounds, and learning needs. This allows them to adapt lessons, give the right support, and prepare materials that match students’ readiness levels. Such responsiveness is central to inclusive and culturally sensitive teaching, and it plays a major role in reducing achievement gaps (Gay, 2018).

Finally, empathy also benefits teachers themselves. By understanding a student’s struggles without taking misbehavior as personal disrespect, teachers can reduce their own stress. This prevents frustration from turning into burnout. Empathy helps teachers stay connected to the human side of education—the personal stories, dreams, and challenges of their students. This connection keeps passion for teaching alive, even during difficult times (Brackett et al., 2010).

1.4 Altruism and Empathy in Primary School Teaching

The main purpose of primary school teachers is to foster children's knowledge, emotions, and socio-emotional skills. However, in many schools, greater emphasis is placed on cognitive skills, while emotions, sensitivity, and affective aspects receive comparatively less attention. As a result, children may achieve high grades and acquire various competencies, but often fail to nurture healthy human relationships. This imbalance contributes to the emergence of negative traits among children, such as aggression, deriving pleasure from others' suffering (schadenfreude), harming others, and jealousy.

The influence of technology, mobile phones, and the internet has further intensified negative attitudes and emotions, making issues such as school violence and bullying increasingly common in the school environment.

At the primary stage, children tend to view teachers as role models—sometimes even valuing them more than their parents. For instance, in the event of a conflict at home, children may justify their stance by saying, “My teacher taught me this, so it must be right.” In this way, teachers play a decisive role in shaping children's values.

Teachers can also cultivate and transmit essential human values through their own conduct, particularly altruism and empathy. Altruism refers to extending oneself beyond personal needs to engage with and support others, while empathy involves sharing in another's joy or experiencing another's pain. Through everyday actions and interactions, primary school teachers can play a pivotal role in fostering altruistic and empathetic behavior in children from a very young age.

1.5 Relationship Between Altruism and Empathy

In primary education, the link between altruism and empathy is important for creating positive relationships between students and teachers. It helps build a supportive and caring classroom atmosphere where students feel understood and motivated to help each other. Empathy is the ability to understand and share the feelings of others, and it plays a key role in encouraging people to act kindly, like helping or comforting those in need. When people feel empathy, they are more likely to help others because they understand and care about their emotions (Batson, 2011). Research shows that empathy has two parts: cognitive and emotional. Cognitive empathy helps people understand what others

are thinking or feeling, while emotional empathy involves sharing their feelings. Both types of empathy can make people want to help those who are struggling (Davis, 1994; Eisenberg & Lennon, 1983). For instance, when people are asked to imagine how someone else feels in a tough situation, they are more likely to offer help (Batson et al., 1997). Besides encouraging immediate acts of kindness, empathy also has lasting effects on social and moral behavior. People with high empathy often feel a stronger sense of moral duty, which motivates them to help others regularly (Cohen & Strayer, 1996). In fact, empathy can predict not only helping behaviors but also a willingness to cooperate with others, which shows that empathy helps build positive, helpful traits over time (Karni et al., 2011). Additionally, teaching empathy is crucial for promoting kindness, especially in schools and caregiving settings. Studies show that children who are taught to develop empathy often become more helpful and caring as they grow (Carlo et al., 2011). This suggests that empathy is an essential part of developing altruistic values in individuals and communities.

1.6 Altruism and Empathy in Education

Altruism and empathy are key aspects of education that greatly affect the relationships between teachers, students, and classmates. Altruism, which means caring for others without expecting anything in return, and empathy, the ability to understand and feel what others are going through, are especially important in primary schools. When teachers show these qualities, they help create a positive environment for learning, emotional growth, and overall development of children. Studies show that teachers who display altruism and empathy can make a big difference in how a classroom works and how well students do. Empathetic teachers can understand and respond to their students' emotional needs, showing care and concern. This is especially important in primary schools, where children are still learning how to manage their emotions. Teachers who show empathy help students feel safe and supported, which leads to better emotional control, more resilience, and better academic performance (Roorda et al., 2011). Empathy also helps teachers form strong relationships with their students, which can lead to greater student involvement and motivation (Parker et al., 2004). When teachers act altruistically, such as going beyond what is expected to help students, they help build a trusting and caring classroom community. Teachers who prioritize their students' well-being also set examples of kindness, which can influence students' behavior. Altruism in

the classroom can also encourage students to work together and help each other, as they often copy their teacher's actions (Batson, 2011). Having empathetic and altruistic teachers can also reduce bullying and improve the overall school atmosphere. Teachers who understand students' emotions are better able to manage conflicts and create an inclusive environment where all students feel valued, regardless of their background. Empathetic teachers are more likely to create fair and equal opportunities for all students (Hochschild & Scovronick, 2003). These qualities are not just important in the classroom but also help shape the emotional and social development of students. Children learn by watching their teachers, and when teachers show empathy and altruism, they help students develop positive attitudes toward others. These qualities can also improve emotional health and well-being for both students and teachers (Jennings & Greenberg, 2009). However, teaching with empathy and altruism can be challenging, especially in stressful situations. Teachers can become emotionally drained if they don't have the support they need. Schools should provide resources to help teachers manage stress so they can continue showing these important qualities without harming their own health (Collie et al., 2012).

In final thoughts, empathy and altruism are vital for creating good relationships and helping students grow both emotionally and academically. Teachers who show these qualities play a key role in creating a positive learning environment. Schools must support teachers in maintaining these traits, benefiting both students and the whole school community.

1.7 Significance of the study

This study, which explores the relationship between altruism and empathy among primary school teachers in West Bengal, carries importance on several levels: theoretical, practical, and policy-related. The insights gained will not only deepen the understanding of teacher psychology but also improve the quality of schooling and educational practice.

From a theoretical angle, this research contributes meaningfully to psychology and education. The empathy-altruism hypothesis, most notably developed by Batson (2011), is well-recognised in social psychology. However, it has rarely been examined within the Indian context and, even less so, among school teachers. Most of the studies conducted so far have mainly concentrated on Western contexts, individualistic societies. This study

tests whether the same principles apply in a collectivist culture like India. Can a teacher's empathic concern reliably predict selfless acts to support students, even in this cultural context?

If the results confirm the theory, it strengthens its global value. If not, it may reveal important cultural differences, broadening our understanding of how empathy motivates altruism across societies. Additionally, this study links two psychological factors; empathy and altruism; that are often discussed but less often studied together in real educational settings. By doing so, it strengthens knowledge of what truly drives teacher motivation and prosocial behaviour in schools.

On a practical level, this research speaks directly to teachers, school leaders, and educators. For teachers, it can improve self-awareness. Learning about the link between empathy and altruism may inspire them to reflect on their daily actions and relationships with students. This kind of reflection can support both professional growth and emotional development.

For school leaders and teacher educators, the findings provide evidence that teacher skills must go beyond subject knowledge and teaching techniques. If empathy and altruism are strongly connected, it highlights the need to include socio-emotional skills—such as emotional awareness, perspective-taking, and regulation—in teacher training programs. Both pre-service and in-service training could include workshops on empathy and emotional well-being, which may help reduce teacher stress, prevent burnout, and increase overall job satisfaction. For students, the benefits are most direct. Teachers who act altruistically out of true empathy create classrooms that are more nurturing, safe, and inclusive. In such classrooms, children feel understood, supported, and valued as individuals. This sense of psychological safety helps students take risks in their learning, engage more actively, and develop both academically and socially. By showing this connection, the study highlights a clear pathway to improving student well-being and achievement.

At the policy level, the study contributes data that state education departments and policymakers can use in shaping improvements in schooling. In West Bengal, and more broadly in India, education reforms often focus on content, assessment, or infrastructure. This study makes the case that teacher well-being and socio-emotional competence are

not “soft extras” but central to teaching quality. The findings can encourage policymakers to formally integrate empathy, emotional intelligence, and mental health modules into teacher education and training. By embedding these skills into the framework of the West Bengal Board of Primary Education, policymakers would be making a long-term investment in both teachers and students. This step can directly influence the learning climate, equipping schools to support not only academic growth but also the holistic well-being of children.

In sum, the study is not just an academic exercise. It closes an important theoretical gap, provides practical advice for teacher training and school leadership, and offers clear policy directions. Above all, it aims to promote stronger, more empathetic classrooms in which every child in West Bengal can thrive—academically, emotionally, and socially.

1.8 Rationale of the study

In primary schools, teachers do more than just teach subjects. They also help shape the social and emotional growth of young children. Two important qualities that guide how teachers connect with students, coworkers, and the school community are altruism and empathy. Altruistic teachers care deeply about the well-being of others without expecting anything in return, while empathetic teachers can understand and respond to their students' feelings and experiences. Such qualities foster a nurturing, inclusive, and supportive classroom environment, which plays a vital role in a child's holistic growth. However, in West Bengal, primary schools often encounter unique challenges arising from socio-economic constraints, cultural diversity, and limited resources. Many students come from poor or disadvantaged backgrounds and may deal with emotional and social problems that affect their school performance. Teachers who show strong altruism and empathy are better able to handle these challenges by building positive relationships with students, promoting inclusive teaching methods, and supporting students' emotional needs. Even though these qualities are clearly important, there hasn't been much research on how altruism and empathy are present among primary school teachers in West Bengal. Learning how these traits appear in local schools can give valuable information about teacher behavior, classroom interactions, and student success. Additionally, understanding what factors influence these qualities—such as training opportunities, work conditions, and cultural background—can help create strategies to strengthen altruism and empathy in teachers.

This study aims to address this gap by carefully examining the levels of altruism and empathy among primary school teachers in West Bengal. The results could guide educational policies, improve teacher training programs, and influence how schools are managed, ultimately leading to better learning experiences and outcomes for students.

1.9 Operational definitions

i) Teachers' altruism

Teachers' altruism can be understood as the genuine concern and willingness of primary school teachers to care for and support others without expecting any personal reward. Within the school setting, this quality becomes visible in the way teachers help, guide, and stand by their students, colleagues, and the wider community.

For the purpose of this study, altruism has been explained through five major dimensions. Two of these – Helpfulness (adapted from the *Helping Attitude Scale*, Gary Nickell, 2000) and Gratitude (adapted from the *Gratitude Scale*, McCullough et al., 2002) – were taken from existing standardized measures. The remaining three dimensions were identified and refined by the researcher in consultation with experts to suit the context of primary education. Together, the five dimensions are:

- a. Helpfulness – the readiness to extend assistance and cooperation to students and colleagues.
- b. Gratitude – the ability to acknowledge and appreciate positive actions, relationships, and experiences.
- c. Commitment to Students' Well-Being – the sense of responsibility for nurturing the overall growth and welfare of learners.
- d. Moral Responsibility and Ethical Behavior – acting with fairness, honesty, and adherence to professional ethics in school life.
- e. Charity – the generosity to contribute one's resources, time, or effort for the good of others.

In this study, a higher level of altruism is reflected when teachers score strongly across these dimensions, whereas lower levels suggest a weaker orientation toward selfless and prosocial behavior.

ii) Teachers Empathy

Teacher empathy has been described as the teacher's capacity to notice, understand, and appropriately respond to the emotions, perspectives, and needs of their students, both inside the classroom and in personal situations.

iii) Semi-Urban

Semi-urban areas are settlements that share characteristics of both rural and urban life. Such regions often have better infrastructure, improved connectivity, and access to basic services like education, healthcare, and markets when compared to rural areas. At the same time, they may lack the full range of facilities, economic activities, and population density required to be considered completely urban. In this way, semi-urban spaces act as transitional zones between villages and cities, reflecting a mix of traditional and modern features.

iv) Membership in Social Organization

Membership in a social organization refers to an individual's active association with formal or informal groups such as clubs, unions, community bodies, cultural associations, or professional organizations. Being part of such groups provides opportunities for social interaction, collective decision-making, sharing of resources, and mutual support. It often reflects a person's sense of belonging, civic participation, and commitment to community life.

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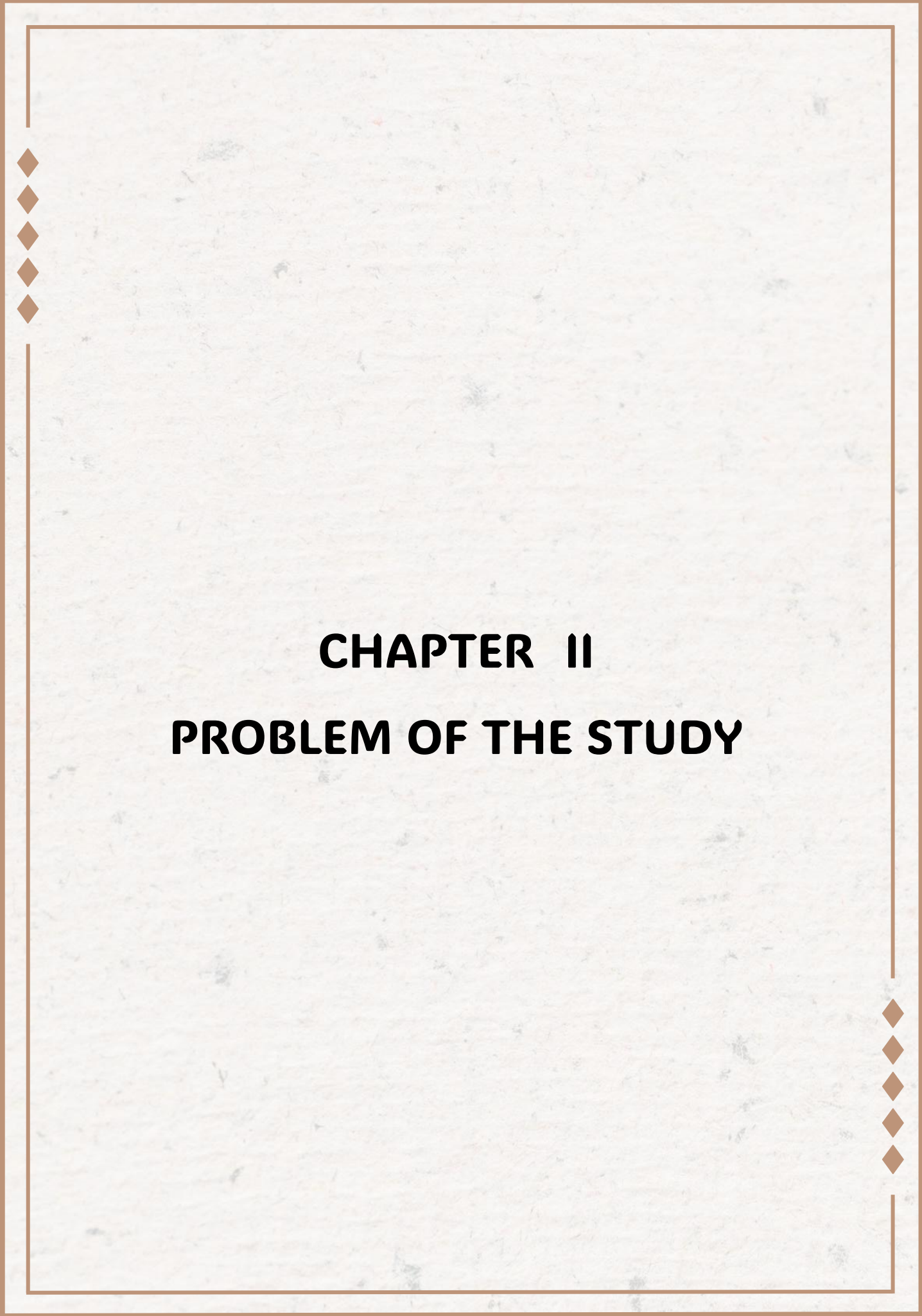
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CHAPTER II
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This chapter presents the review of related literature, identifies the knowledge gap, outlines the key research questions, states the objectives, delimitations, and hypotheses, and explains how these elements guided the researcher in selecting and pursuing the research problem.

2.1 Review of Related Literature

To review the existing work in altruism and empathy, the researcher first examined both theoretical and empirical studies on altruism and empathy in education, with a gradual focus on primary school teachers in India, particularly West Bengal. Major academic databases such as ERIC, EBSCOhost, ProQuest, PsycINFO, Shodhganga, and Crossref were searched, and Publish or Perish software was used to access additional resources from Crossref and Google Scholar. Only a limited number of studies specifically examined Indian teachers, and very few focused on primary schools in West Bengal. This highlights a clear research gap in understanding how altruism and empathy shape teacher–student relationships and classroom practices in this context. The present study therefore aims to address this gap by exploring these dimensions among primary school teachers in West Bengal.

2.1.1 Reviews on Altruism

Merton (1982) conducted a study on professional altruism, focusing on how altruism becomes institutionalized within society and creating a framework to classify altruistic behaviors. The study involved 57 female inclusive education teachers aged 30 to 55. Of these, 11 worked in correctional schools, while 46 were employed in correctional classes within mainstream schools. All participants were familiar with the principles of inclusive education, as their classes included both students with disabilities and non-disabled students, and they incorporated inclusive practices into their teaching. A small portion (15%) had participated in specialized grant programs and training related to inclusive education. The majority of teachers exhibited pseudo-altruistic behavior (50.8%) or reciprocal altruism (21%), while fewer aligned with "pure altruism" (8.7%) or "trivial

altruism" (7.5%). The study highlights the varying degrees of altruism present in the professional behavior of teachers in inclusive education settings.

Konaklı, T. (2013) conducted a study titled *Impact of School Managers' Altruist Behaviors Upon Organizational Cynicism: The Case of Kocaeli, Turkey*, which aimed to explore how the altruistic behaviors of school managers affect organizational cynicism. The study analyzed the relationship between teachers' perceptions of their managers' altruistic behaviors and their views on cynicism within the organization. The sample consisted of 250 teachers from 15 primary schools in Izmit/Kocaeli, Turkey, selected through random sampling. Data were collected using two instruments: the Scale of School Managers' Altruistic Behaviors (developed by the researchers) and the Organizational Cynicism Scale. The data were analyzed using SPSS 15 and Lisrel 8.7 software. The results indicated that the Scale of School Managers' Altruistic Behaviors included dimensions such as solidarity and empathy. The findings revealed that teachers perceived organizational cynicism at a moderate level and showed a significant negative relationship between organizational cynicism and school managers' altruistic behaviors. Among the dimensions, only empathy had a significant effect on organizational cynicism, suggesting that empathy in school managers plays a crucial role in reducing cynicism among teachers.

Banerjee et al., (2014) A study was undertaken to investigate the attitudes of school teachers from secondary education in the Purulia district of West Bengal toward the teaching profession. The main objective of this research was to assess how these teachers perceive and value their profession. The research adopted a survey approach, specifically the normative survey method. A representative sample of 180 teachers (male and female) from the Social Science and General Science streams was selected. Data was collected using an attitude scale, and the significance of the difference between the means of the two groups was analyzed using the 'CR' test. The findings revealed that secondary school teachers in Purulia have an attitude toward the teaching profession that is neither highly favorable nor unfavorable, indicating a satisfactory or average outlook.

Mandal et al. (2016) conducted a study titled *Altruism and Interest in Literature at the Higher Secondary Level*, which explored the relationship between altruism and students' interest in literature among higher secondary students. The study involved 800 students aged 17 and above from rural and urban schools in the Birbhum district of West Bengal.

The researchers used an adapted Altruism Scale and a specially developed Interest in Literature Scale to assess these traits. The results showed that female students were generally more altruistic and had a greater interest in literature than male students. Additionally, the study found a significant positive relationship between altruism and interest in literature. Students with higher levels of altruism were more likely to engage with literature, while those with lower altruism levels showed less interest. These findings suggest that fostering altruism could encourage greater interest in literature among students.

Buragohain et al. (2016) conducted a study titled *Teaching Altruistic Behaviour among Adolescent Students*, which explored the role of altruism-building exercises in fostering altruistic behavior among adolescent students. Altruism is vital for promoting collective well-being in society, but it has received limited attention in Indian psychological research. This study aimed to address that gap within the Indian context. Research in positive psychology suggests that altruism is linked to self-concepts characterized by high empathy, a strong internal locus of control, reduced egocentrism, and a sense of social responsibility. Therefore, developing skills to nurture altruistic behavior has become increasingly important. The researchers designed and implemented an altruism-building exercise for a group of adolescent students. The findings clearly demonstrated that altruistic behavior could be effectively taught and developed through such exercises. This study highlights the potential for structured interventions to foster altruism and its positive impact on young people's social development and well-being.

Pande, D. (2016) conducted a study titled *A Study of Altruistic Behavior of Pupil-Teachers and Their Attitude Towards Environment*, which investigated whether altruistic behavior influences the environmental attitudes of pupil-teachers. The study also explored how their educational background affects both their altruism and environmental outlook. Altruism, defined as actions or feelings aimed at benefiting others without personal gain, is linked to well-being, health, and longevity. It includes traits like benevolence, charity, compassion, and friendship, expressed through pro-social behaviors. Teachers, as role models for future generations, are expected to foster a positive attitude toward both people and the environment. The Supreme Court has emphasized the importance of integrating sustainable development education into teacher training. The study involved 72 students enrolled in a two-year B.Ed. program at RIE Bhopal. They completed Penny

Jain's Altruism Test and R.R. Singh's Environmental Attitude Scale. Statistical analysis showed a positive correlation between altruistic behavior and environmental attitudes, with students displaying higher altruism also tending to have more favorable attitudes toward the environment.

Sagnak et al. (2017) conducted a study titled *Authentic Leadership and Altruism: The Mediating Role of Meaningfulness*, which explored how a sense of meaningfulness mediates the relationship between authentic leadership and teachers' altruistic behavior. The study involved 356 teachers who were randomly selected from 14 primary and secondary schools in Nigde. Three data collection tools were used, all of which were translated and back-translated for accuracy and adapted to the educational context. The validity and reliability of the scales were confirmed before analysis. Data were analyzed using Pearson correlation coefficients and structural equation modeling. The results showed that authentic leadership was positively associated with both teachers' altruistic behavior and their sense of meaningfulness at work. Additionally, a significant positive correlation was found between altruistic behavior and meaningfulness. The study concluded that meaningfulness fully mediated the relationship between authentic leadership and altruistic behavior, emphasizing that a purposeful work experience plays a key role in encouraging altruistic actions among teachers.

Ozor, T. (2018) conducted a study on *Influence of Locality on Altruistic Behavior Among Teachers*, which explored how the location of a teacher's workplace affects their altruistic behavior. The study involved 480 secondary school teachers, with 275 from urban areas and 205 from rural areas, all selected from 14 secondary schools in Enugu State, Nigeria (seven from urban Enugu North and seven from rural Igbo-Etiti). The Self-Report Altruism (SRA) Scale, developed by Rushton et al. (1981), was used to measure teachers' self-reported altruistic behaviors. This scale assesses the frequency of voluntary actions aimed at helping others without expecting personal gain. The study employed a cross-sectional survey design and analyzed the data using one-way analysis of variance (ANOVA). The results revealed that locality significantly influenced altruistic behavior, with rural teachers showing higher levels of altruism than their urban counterparts, contrary to the initial hypothesis. The study recommends promoting altruistic behaviors, especially in urban areas, to address the increasing individualism in Nigeria.

Sajan et al. (2018) conducted a study on *Altruism of Secondary School Teachers in Relation to Their Gender*, which aimed to compare altruistic tendencies between male and female secondary school teachers. The study found that most individuals appeared willing to prioritize their personal achievements, even at the expense of disappointing others. This suggests that altruistic personality traits are essential for building strong and meaningful relationships. Altruism, along with its underlying motives, seemed to be more deeply embedded in the teaching profession compared to other fields. Based on this observation, the researchers investigated gender differences in altruism among secondary school teachers. The study involved a sample of 300 teachers from secondary schools in the Palakkad district, using an altruism assessment scale to identify any gender-based differences in altruistic behavior. The findings offered insights into how male and female teachers may differ in their altruistic tendencies, emphasizing the importance of altruism in the teaching profession.

Septiana, D. (2018) conducted a study titled *The Influence of Emotional Intelligence, Self-Efficacy, and Altruism on Teachers' Competence in Inclusive Elementary Schools*, which investigated how these personal attributes relate to teachers' effectiveness in inclusive classrooms. The study had two main objectives: (1) to explore the levels of emotional intelligence, self-efficacy, altruism, and teaching competence among teachers in inclusive elementary schools in Karanganyar District, and (2) to examine the impact of emotional intelligence, self-efficacy, and altruism on teacher competence. Using a quantitative ex-post facto design, the research found that teachers' emotional intelligence was at a medium level, while self-efficacy, altruism, and teaching competence were high. Statistical analysis showed significant positive correlations between emotional intelligence and teaching competence ($r = 0.560$), self-efficacy and competence ($r = 0.535$), and a strong correlation between altruism and competence ($r = 0.711$). Additionally, emotional intelligence, self-efficacy, and altruism collectively had a significant impact on teacher competence ($F = 39.742$). The study concluded that higher emotional intelligence and altruism are linked to greater teaching competence, highlighting the importance of these qualities in inclusive education settings.

Palta, A. (2019) conducted a study titled *Examining the Attitudes and Opinions of Teachers about Altruism*, which aimed to explore teachers' attitudes and views on altruism. The study involved 289 teachers and employed a mixed research design. Data

were collected using the "Teacher Altruism Scale" developed by Yavuzer et al. (2006), along with an Altruism Interview Form designed by the researcher. The study used the Independent Samples T Test, Kruskal-Wallis Test, and content analysis for data analysis. The quantitative results showed that teachers' altruistic attitudes did not significantly differ based on gender, marital status, reasons for choosing the teaching profession, or factors like teaching subject or years of experience. The qualitative findings revealed that most teachers believed their colleagues focused on addressing needs related to teacher training and often shared educational topics. These findings suggest that while demographic factors did not impact altruistic attitudes, teachers recognize the importance of collaboration and professional development in fostering altruism in the education environment.

Li, C. (2019) explored the influence of gratitude on the forgiveness of rural primary school teachers in the northwest region of Yunnan Province, specifically examining the mediating role of altruism. The study aimed to analyze the interconnections among gratitude, altruism, and forgiveness within this demographic and to investigate how altruism might mediate the relationship between gratitude and forgiveness. A total of 1,912 teachers participated, with data collected through the Attitude, Gratitude, and Forgiveness Questionnaires. The findings indicated that the teachers generally exhibited higher-than-average levels of altruism, gratitude, and forgiveness. Gender differences were observed, with male teachers scoring higher in altruism, while female teachers demonstrated greater levels of gratitude. Teachers with less teaching experience displayed higher levels of gratitude, while those with more experience were found to have higher forgiveness scores. Additionally, teachers holding senior or ungraded titles scored higher in forgiveness compared to those with other professional titles, and senior-title teachers also scored better in altruism than their less experienced counterparts. The results confirmed a strong positive correlation among gratitude, altruism, and forgiveness, suggesting that both gratitude and altruism contribute positively to forgiveness. The study also concluded that altruism plays a crucial mediating role in the relationship between gratitude and forgiveness among rural primary school teachers.

Neli et al. (2019) conducted a study titled *Altruistic Behavior of Students in SMA N 1 Kampung Dalam Padang Pariaman Regency and Its Implications for Guidance and Counseling*, which investigated the altruistic behaviors of high school students,

particularly in response to concerns about a lack of empathy toward peers in need. Altruistic behavior was defined as voluntary actions that assist others without expecting any reward. The study aimed to explore students' altruistic behaviors across seven areas: sharing, cooperating, helping, contributing, honesty, generosity, and consideration for others' rights and well-being. The research involved 601 students, with a sample of 240 selected using simple random sampling. Data were collected through a questionnaire and analyzed using descriptive statistics. The results showed that students exhibited moderate levels of sharing, high levels of cooperation and helping, and very high levels of donating. Honesty, generosity, and consideration for others' rights and well-being were also high. Based on these findings, the study recommended that Guidance and Counseling teachers provide services like informational support, content mastery, and group guidance to further encourage and develop altruistic behavior.

Lubis et al. (2020) conducted a study on *The Impact of Altruism, Emotional Intelligence, and Decision Making on Work Performance of Indonesian Guidance and Counseling Teachers*. This research aimed to examine how altruism, emotional intelligence, and decision-making influence the work performance of guidance and counseling teachers in junior high schools in Deli Serdang, North Sumatra, Indonesia. The study involved 259 teachers from both public and private schools, with a sample size of 175 teachers. Using an ex-post facto research design, data were collected through questionnaires, and the instruments were validated for both content and construct. The results indicated that altruism influenced work performance and decision-making, with effects of .203 and .259, respectively. Emotional intelligence also contributed to work performance and decision-making, with effects of .135 and .352. Additionally, decision-making was found to have a moderate impact on work performance (.286). Overall, altruism, emotional intelligence, and decision-making had moderate effects on work performance, which was categorized as moderate with some higher levels. The study recommends that school principals focus on enhancing teachers' altruism, emotional intelligence, and decision-making skills.

Ibrahim, F. (2020) conducted a study titled *Building Character of Altruism Praxis in English Teaching and Learning at MAN Karawang*, which explored the practice of altruism in English teaching and learning activities at a Senior High School. The study, conducted as a case study at MAN Karawang, focused on identifying the presence of altruistic behaviors in the classroom. Data were collected through three methods: observation,

interviews, and audiovisual materials. The findings revealed that three key factors of altruism-prosocial behavior, empathy, and aversive-arousal reduction-were evident in classroom activities, with prosocial behavior being the most prominent. The study concluded that MAN Karawang has successfully contributed to fostering altruistic practices in its English teaching and learning environment. This was demonstrated through behaviors such as students following the teacher's instructions, lending items to classmates, and using positive language during discussions. The study emphasizes the importance of encouraging and sustaining altruistic behaviors to create a positive learning environment.

Nainggolan et al. (2020) conducted a study titled *Character Building of Altruism in English Textbooks of Senior High School*, which examined the presence of altruistic traits in English textbooks for grades X, XI, and XII. Using content analysis, the study analyzed the words, phrases, and clauses in reading texts, dialogues, and tasks that reflect altruistic values. In the grade X textbook, traits like 'pro-social behavior' and 'environmental care' were commonly found, while 'giving empathy' was absent from reading texts and 'reducing inequality' was missing from both reading texts and dialogues. In the grade XI textbook, 'giving empathy' and 'pro-social behavior' appeared in dialogues and tasks, but not in reading texts; 'environmental care' was only in dialogues and tasks, and 'reducing inequality' was not included at all. In grade XII, 'giving empathy,' 'pro-social behavior,' and 'environmental care' were present across reading texts, dialogues, and tasks, while 'reducing inequality' appeared only in tasks. The study highlights the inconsistent inclusion of altruistic values in the textbooks, suggesting a missed opportunity to foster students' altruistic behavior.

Yigit et al. (2020) conducted a study titled *Investigation of Physical Education Teachers' Altruism Features*, which aimed to examine whether the altruism levels of physical education and sports teachers vary based on certain factors. The study involved 126 teachers (35 women and 91 men) working as physical education and sports instructors in secondary-level primary schools and high schools in Kutahya province. Data were collected using a 'Personal Information Form' developed by the researcher and a 20-item Altruism Scale created by Ersanli and Cabuker (2015). The Altruism Scale, designed to measure altruism within the context of Turkish society and culture, includes two factors and demonstrated good reliability with a Cronbach's Alpha coefficient of $\alpha = 0.76$. Data

analysis was performed using SPSS 22 software, and statistical tests like the Mann-Whitney U test and the Kruskal-Wallis test were used to examine differences across independent sample groups. The findings showed no significant differences in altruism levels based on variables such as gender, age, workplace, school type, or years of experience. Overall, the teachers exhibited consistently high levels of altruism.

Eynur et al. (2020) conducted a study titled *A Study on the Altruism Levels of Physical Education Teachers in Kütahya*, which examined the altruism levels of physical education teachers in the region. A total of 105 teachers participated, with 53.3% female and 46.7% male. Data were collected using the Altruism Scale developed by Ersan and Çabuker. Statistical analysis was performed using Independent Samples T-test and ANOVA, with Bonferroni and Tamhane tests applied when necessary. For data that did not meet the normal distribution, Mann-Whitney U and Kruskal-Wallis H tests were used. The results revealed significant differences between male and female teachers in the selfishness sub-dimension. The place of residence also influenced the teachers' total altruism scores, with those living in towns and cities showing notable differences in self-sacrifice, selfishness, and altruism. Additionally, a significant difference was found between college and institute graduates, with college graduates scoring lower in selfishness, indicating that they displayed less selfish behavior compared to their institute graduate counterparts.

Istiqomah et al. (2020) conducted a study titled *Fostering Altruism in Elementary School*, which highlighted the importance of altruism in maintaining social harmony, particularly in diverse societies like Indonesia. The study emphasized that individuals are more likely to show altruistic behavior toward those who share similarities with them, such as gender, ethnicity, religion, or race, making it difficult to foster altruism in multicultural settings. The study suggests that cultivating altruism from an early age is essential, with the ideal developmental window occurring around 11-12 years old, typically in the fifth grade. This makes elementary school the most effective stage for nurturing altruistic behavior. The article explores strategies for fostering altruism at the elementary school level, drawing on Batson's altruistic empathy hypothesis. Since empathetic actions often align with altruistic behavior, focusing on empathy-based approaches presents a promising pathway to encourage altruism in young learners. This study underscores the importance of empathy in fostering altruism in diverse classroom environments.

Florentina, (2021) a study titled *The Influence of Leadership Style, Spiritual Leadership, Altruistic Behavior, Through the Climate of Teacher Independence, Against Teacher Performance* was conducted in Catholic private primary schools in Pontianak. The study aimed to explore how various leadership factors influence teacher performance and to examine the role of leadership style, spiritual leadership, and altruistic behavior, supported by a climate of teacher independence, in shaping teacher performance. The research focused on three main areas: personal factors such as skills, family background, work experience, social status, and demographics; psychological factors like perception, roles, attitudes, personality, motivation, and job satisfaction; and organizational factors including structure, job design, leadership, and reward systems. The goal was to identify the root causes of challenges in the education system and suggest potential solutions. Using a descriptive quantitative approach and a small sample size, the study sought to inspire school principals and future leaders to manage schools more effectively, motivate teachers, and encourage teacher trainees to excel as educators and mentors while fostering dedication and enthusiasm in teaching.

Angriani et al. (2021) conducted a study to investigate the effect of altruism and organizational culture on the social competence of science teachers in public junior high schools in Dumai. The study aimed to explore how organizational culture and altruism, both individually and collectively, influence teachers' social competence. The sample consisted of 71 science teachers, and data were collected through questionnaires focusing on social competence, organizational culture, and altruism. Using both descriptive and inferential statistical analyses, the results showed that organizational culture and altruism had a positive and significant impact on teachers' social competence, jointly explaining 52.10% of the variance. This suggests that when organizational culture and altruistic values are well-established within schools, the social competence of teachers is significantly improved. The study highlights the importance of fostering a supportive organizational culture and promoting altruism to enhance teachers' ability to engage effectively with students and colleagues.

Mehmood et al. (2022) conducted a study that explored how training deputy ministers in effective altruism influences their altruistic behavior. The study found that the training led to a 0.4–0.6 sigma increase in altruistic actions. Ministers who received the training demonstrated a better understanding of others' perspectives, as shown by a significant

increase in blood donations, particularly when blood banks needed their specific blood type. Additionally, they improved in strategic decision-making and became more involved in activities such as visiting orphanages and volunteering at underprivileged schools. The training also had a lasting effect on their policy decisions, as one year later, ministers were 50–100% more likely to choose social policies and recommended over four times more funding for such initiatives. The study identified that a heightened interest in learning about empathy, driven by a book lottery in the experimental design, was the key mechanism behind these changes. The findings suggest that effective altruism is a simple but impactful method for promoting prosocial behavior, even among high-level policymakers.

Patnaik et al. (2022) conducted a study titled *Who Is Responsible for Students' Challenging Behaviour? A Study of the Causal Attributions of Teachers to Challenging Behaviour in Primary Schools in West Bengal, India*. The study aimed to explore how teachers in primary schools across West Bengal understand and explain the causes of challenging behaviors in their classrooms. Data was collected through semi-structured interviews with 21 teachers from both government and private schools. The research focused on identifying the types of challenging behaviors teachers observed, their interpretations of the causes, and the strategies they suggested for managing these behaviors. Teachers categorized challenging behaviors into four main types: aggression, disruption, excessive talking, and noncompliance. The causes were grouped into five categories: home and parental factors (e.g., family violence, parents' busy schedules), social factors (e.g., socioeconomic challenges), student-related factors (e.g., disabilities), school and teacher-related factors (e.g., large class sizes), and government or policy-related factors (e.g., the ban on corporal punishment). Most teachers advocated for proactive strategies like improving teaching methods, collaborating with parents, and building positive relationships with students, while some suggested reactive approaches like discipline and threats.

Reddy, M. (2022) conducted a study titled *Altruistic Behaviour among Secondary School Teachers in Medchal-Malkajgiri District*, which aimed to evaluate the altruistic behaviors of secondary school teachers in this district. The study used a descriptive survey method with a sample of 200 teachers selected through stratified random sampling. Data were collected using a researcher-designed questionnaire with 40 statements. The

independent variable in the study was the secondary school teachers, and the dependent variable was their altruistic behavior. Statistical tools, including frequency counts, percentages, mean, standard deviation (S.D.), t-tests, and ANOVA, were used for data analysis. The findings revealed that a large majority (86.86%) of teachers demonstrated altruistic behavior in both their professional and personal lives. Additionally, the study found no significant differences in altruistic behavior based on gender, type of school management, subject taught, or years of teaching experience. These results suggest that altruistic behavior is prevalent among teachers, regardless of these demographic factors.

Indriana et al., (2023) Carried out research on Altruism Viewed from Self-Compassion and the Role of Fathers in Students. Many students tend to work independently, appearing isolated and not reliant on others. This study explores the relationship between self-compassion, perceptions of fatherhood, and altruism among psychology students at Universitas Diponegoro. The research examines whether college students' self-compassion and views on fatherhood are connected to their level of generosity. A total of 40 fourth-semester psychology students participated in this study. Data were gathered using the Self Compassion Scale, the Perceived Fatherhood Scale, and the Altruism Scale, and multiple linear regression was applied for analysis. The findings highlight the importance of students adopting an altruistic mindset, as empathy enables them to better understand and address complex challenges. By cultivating empathy, they can more effectively engage with and explore the concerns of others. Furthermore, they should develop key altruistic traits, such as low egoism, a strong sense of social responsibility, and an internal locus of control.

Plaza, A. (2023) conducted a study titled *Reevaluating Auguste Comte's Philosophy of Altruism among Teachers*, which examined the level of altruism among teachers and their willingness to sacrifice for the well-being of others. Using a quantitative descriptive-survey design, the research explored participants' demographic backgrounds, such as gender, age, marital status, years of teaching experience, and grade level taught, alongside their altruistic behaviors and the factors motivating their actions. The study included 31 male respondents (45%), 36 female respondents (52%), and 2 participants who did not disclose their gender. The majority of participants (41%) were aged 20–24, with only 3% aged 55–59. In terms of teaching experience, 46.38% had 0–3 years, and 1.45% had 24–27 years. Regarding marital status, 71.01% were single, and 17.39% were married. Most

participants taught at the Junior High level (42.03%), followed by Primary (29%) and Senior High (19%). The study aimed to understand how these factors influenced altruistic behaviors in the teaching profession.

Musallam, F. (2023) conducted a study titled *Altruism among the Teachers Working at UNRWA Schools in Jordan*, which explored the presence of altruism among teachers at UNRWA schools in Jordan. The study involved 150 male and female teachers selected from these schools. A two-part survey was used to collect data: the first part gathered demographic information, while the second part focused on teachers' altruistic actions toward students, colleagues, and school administration. The results showed a significant difference in attitudes toward altruism, with female teachers displaying more altruistic attitudes than their male counterparts. However, no significant differences were found in the overall attitudes of the respondents toward the specific areas of altruism being examined. The study suggests that while altruism is present among teachers at UNRWA schools, gender plays a role in shaping their attitudes toward altruistic behaviors.

Bogunovich et al., (2023) Pursued an investigation on Professional Reciprocal Altruism in Education: PRAE in Practice. Professional Reciprocal Altruism in Education (PRAE), as a grounded theory, provides a powerful framework for understanding how altruism—the primary motivation for many who choose the teaching profession—functions as a shared value. It encourages teachers to move beyond isolated practices and engage meaningfully within the professional Community of Practice (CoP). By aligning their personal values, attitudes, and cultural perspectives with those of the CoP, educators can harmonize their authentic and professional selves. This alignment nurtures intrinsic motivation, driving their ongoing growth and development for the benefit of their students, community, and the profession as a whole. Such active engagement also helps combat issues like compassion fatigue and empathy burnout.

Barman, P. (2024) A study was conducted to examine the attitudes of secondary school teachers towards inclusive education in the Purulia district of West Bengal. Employing a descriptive survey method, the research involved a sample of 150 secondary school teachers selected through stratified random sampling. A researcher-designed questionnaire was used to assess teachers' attitudes toward inclusive education. Data were analyzed using mean, standard deviation, and t-tests. The findings indicated that teachers' attitudes were generally neutral, neither strongly positive nor negative.

Additionally, the study found a significant difference in attitudes between rural and urban teachers, while no significant gender-based differences were observed.

2.1.2 Reviews on Empathy

Sladoje-Bosnjak, B. (2012) conducted a study titled *Perceived Empathy of Teachers and Students' Metacognitive Strategies*, which explored the relationship between teachers' perceived empathy and students' use of metacognitive strategies. The study also examined whether teachers' empathy could predict students' metacognitive strategies. Teachers' empathy was assessed using six components: suffering, positive sharing, crying, emotional attention, feeling for others, and identification, all analyzed through the lens of attribution theory. Students evaluated their teachers' empathy and reported their own metacognitive strategies, which included awareness of cognitive functioning, planning cognitive activities, and monitoring their cognitive processes. The research involved 665 students from seventh, eighth, and ninth grades at two primary schools in East Sarajevo. The findings revealed a correlation between teachers' empathy and students' metacognitive strategies. Specifically, teachers' suffering was found to be a significant predictor of students' use of metacognitive strategies. The study emphasized the importance of empathy in promoting effective learning strategies and positive behaviors. It suggested that empathy training should be incorporated into teacher education programs.

Swan et al. (2012) conducted a study titled *Mentalization: A Tool to Measure Teacher Empathy in Primary School Teachers*, which aimed to define empathy in a way that helps teachers observe and interact with their students more effectively. The study began with a review of existing research, which revealed significant differences in how empathy is understood. The researchers then explored empathy within the context of primary school teaching, linking it to the concept of mentalization, as defined by Fonagy (1991). By understanding empathy through the lens of mentalization, teachers can better understand their students' emotions and perspectives. This approach provides useful guidance for primary educators, helping them foster supportive, effective classrooms based on strong teacher-student relationships. The study suggests that mentalization offers a practical framework for enhancing teacher empathy, leading to improved teaching practices and better student outcomes.

Weijia, L. (2015) conducted a study titled *The Effects of Teachers' Empathy on Students' Academic Achievement: A Hierarchical Linear Analysis Based on the Measurement of Animated Narrative Vignettes Simulations*, which explored how teachers' empathy impacts students' academic performance. The study used a quasi-experimental design, with an animated narrative vignettes (ANVs) tool developed to measure teachers' empathy. An empathy training program was implemented for 20 primary school teachers in the treatment group, while 20 teachers in the control group did not participate in any training. The study collected academic performance data, including mid-term and final grades, for 803 students taught by the treatment group teachers and 852 students taught by the control group teachers. Hierarchical linear analysis was used to examine the relationship between teachers' empathy and students' academic achievement, considering different variable levels and students' initial academic performance. The results showed that teachers with enhanced empathy led to better student academic performance. Additionally, students' initial academic performance played a mediating role in the relationship between teachers' empathy and student academic outcomes.

Ezhilrajan, K. (2016) Facilitated research on A multicultural analysis of the empathetic behaviour of school teachers. This study explores the presence of empathy among school teachers, who play a pivotal role as classroom leaders and builders of a better future. The research was conducted in two Indian states, Tamil Nadu and Kerala, specifically focusing on the districts of Salem and Palakkad, respectively. The findings reveal that female school teachers and those belonging to the Hindu religion in both states exhibit higher levels of empathetic behavior compared to other teacher groups. Within Tamil Nadu, teachers from urban areas and backward communities show greater empathy. In contrast, in Kerala, teachers from rural areas and most backward communities demonstrate higher levels of empathy than their counterparts.

Gorucu, A. (2017) conducted a study titled *Investigation of the Relationship Between the Empathy Tendency and the Communication Skills of Preschool Education Teachers*, which explored the connection between preschool teachers' empathic tendencies and their communication skills. The study also examined how these tendencies and skills varied based on the teachers' age and years of experience. The research used a relational screening model and involved preschool teachers working in kindergartens, primary schools, and middle schools in the Selçuklu and Meram districts of Konya during the

2015-2016 academic year. The sample consisted of 144 randomly selected preschool teachers. Data were collected using a "Personal Information Form," the "Empathy Tendency Scale" by Dökmen (1988), and the "Communication Skills Scale" by Bedur (2007). A correlation analysis was performed to assess the relationship between empathic tendencies and communication skills, as well as how these varied by age and years of experience. The findings revealed no significant correlation between age or years of experience and either empathic tendencies or communication skills. However, a strong and significant relationship was found between teachers' empathic tendencies and their communication skills.

McKnight (2017) conducted a study titled *Communication, Empathy, and Trust: Exploring Teachers' Partnerships with the Families of Their Most Challenging Students*, which examined how teachers collaborate with the families of students at risk for emotional or behavioral disorders (EBDs). The research focused on eight kindergarten, first-, and second-grade teachers in two high-poverty, Title 1 urban schools that were not accredited. This study was part of a federally funded intervention program called BEST in CLASS-Elementary (BiC-E), which aimed to reduce problem behaviors and improve student engagement using evidence-based teaching strategies. The study employed an embedded mixed-methods approach and identified three key factors that contributed to successful teacher-family partnerships. The most important factor was the Home-School Partnership process, which, when combined with the CARES Framework, encouraged empathy, cultural sensitivity, and effective communication. Support from coaches was also crucial in strengthening these partnerships, and promoting a collaborative approach emphasized the unique strengths each party brought to the table.

Platsidou et al. (2017) conducted a study titled *Does Empathy Predict Instructional Assignment-Related Stress? A Study in Special and General Education Teachers*, which explored how empathy is related to teachers' stress associated with instructional assignments. While the impact of empathy on students has been widely studied, there is limited research on its influence on teachers' well-being. The study involved 190 primary school teachers from both general and special education settings. Data were collected using the Interpersonal Reactivity Index and the Inventory of Job-Related Stress Factors. The results showed that teachers reported moderately high levels of perspective-taking and empathic concern, but lower levels of fantasizing and personal distress. Stress related

to instructional assignments was moderate to low among teachers. No significant differences were found between general and special education teachers regarding empathy or stress levels. The study found that personal distress and fantasizing were significant predictors of stress related to instructional assignments, while core empathy skills like empathic concern and perspective-taking did not significantly predict stress outcomes.

Erşen et al., (2019) The study titled *“The Exploration of Primary School Teachers’ Empathy Levels by Their Demographic Characteristics: A Case Study in Zeytinburnu-Istanbul”* examined how empathy levels of primary school teachers change according to their personal characteristics. The research population included 591 teachers working in primary schools in the Zeytinburnu district of Istanbul during the 2018–2019 academic year. Out of these, 190 teachers were randomly chosen as the sample. Data was collected using a Demographic Information Form and the *Empathic Skill Scale – B Form* developed by Dokmen (1988). For data analysis, the researchers used frequency distribution, descriptive statistics, one-way ANOVA, and Kruskal-Wallis’s variance analysis. The results showed that empathy levels were significantly different based on teachers’ age ($p < 0.05$) and years of service ($p < 0.01$). However, there were no significant differences in empathy levels according to faculty type, income, or housing type.

Utkur, N. (2019) conducted research titled *Empathy in Primary School Life Sciences Course: The Roles Assumed by Pre-Service Teachers*, which aimed to address the limited time teachers dedicate to empathy-related activities and the lack of such content in textbooks. The study focused on providing pre-service teachers with training on empathy, equipping them with skills to apply in future life sciences classes. This case study, within a qualitative framework, involved 52 third-year pre-service teachers from the Classroom Teaching Department at a state university. The training covered topics such as understanding empathy, identifying empathic roles, and integrating these concepts into life sciences lessons. Data were collected through document analysis, and the empathetic texts created by the participants were evaluated. The analysis of the 52 written texts revealed that most centered on themes like a fire-damaged tree or a bird affected by environmental pollution, while fewer addressed grass affected by pollution or a bird impacted by hunting. Most activities met basic criteria but lacked quality-enhancing

elements. The study concluded that the empathy-based training was effective in fostering empathic understanding among pre-service teachers.

Tutkun, T. (2019) conducted a study titled *Examining and Predicting Ethnocultural Empathy of Preservice Classroom Teachers*, which aimed to define and assess the level of ethnocultural empathy among preservice classroom teachers. The study used a non-experimental, causal-comparative design to explore the relationships between independent and dependent variables after an event had occurred. The research involved 434 preservice teachers enrolled in the Primary School Education Program at Canakkale Onsekiz Mart University during the 2017-2018 academic year. To measure ethnocultural empathy, the Turkish version of the Scale of Ethnocultural Empathy (TSEE), developed by Wang et al. and adapted into Turkish by Ozdikmenli-Demir & Demir, was used. The findings showed that ethnocultural empathy levels varied based on gender, grade level, ethnic background, family income, and place of upbringing. Regression analysis identified three significant predictors of ethnocultural empathy: "experience in multicultural settings," "grade level," and "being part of the majority group." These factors were found to significantly influence the ethnocultural empathy of preservice teachers.

Parchomiuk, M. (2019) conducted a study titled *Teacher Empathy and Attitudes Towards Individuals with Disabilities*, which explored the relationship between empathy as a personality trait and teachers' attitudes toward individuals with disabilities. The study included 300 special education teachers working with students with intellectual disabilities and 280 general education teachers working with typically developing students in primary and secondary schools. Two instruments were used to collect data: the Empathic Understanding of Other People Questionnaire and the Scale of Attitudes towards Individuals with Disability. The findings revealed that, among special education teachers, only Syndrome 2 of empathy was significantly related to their attitudes, whereas for general education teachers, Syndromes 1, 3, and 4 were significant. Positive correlations were observed in Syndromes 1, 2, and 4, which focus on emotional, cognitive, motivational, and communication aspects of empathy. Interestingly, Syndrome 3, which emphasizes cognitive empathy, showed a negative correlation with attitudes. These results suggest that different dimensions of empathy influence attitudes toward individuals with disabilities in distinct ways.

Fu et al. (2022) A study titled *'How Perceived School Culture Relates to Work Engagement among Primary and Secondary School Teachers: The Roles of Affective Empathy and Job Tenure'* investigated the mechanisms linking teachers' perceptions of school culture to their work engagement. The study found that how teachers perceive school culture is an important predictor of their performance, but the processes behind this relationship are not yet fully understood. Using the Job Demands–Resources (JD–R) model, the research explored whether affective empathy plays a mediating role between perceived school culture and work engagement, and whether job tenure influences this relationship. A total of 647 primary and secondary school teachers completed surveys about school culture, affective empathy, and work engagement. After controlling for gender and education, the results showed that teachers who viewed school culture positively were more engaged in their work, and this effect was partly explained by affective empathy. It was also found that job tenure had an effect: the link between school culture and work engagement was stronger for teachers with shorter job tenure compared to those with longer tenure. The findings suggest that school culture influences teacher engagement both directly and indirectly, while job tenure shapes the strength of this relationship.

Brackins, H. (2022) Conducted a study on Middle school students' perceptions of teacher empathy in Christian schools: A transcendental phenomenological study. This study builds on previous research about teacher empathy, which has primarily focused on theoretical, empirical, and practical perspectives. While prior research has examined teacher empathy, very few studies have focused on middle school students' experiences, and none have addressed this issue in Christian academies. Based on Rogers' self-theory and student-centered teaching approaches, this study explored the perceptions of 10 middle school students regarding teacher empathy. Data were collected through individual interviews, a focus group, and letters written to future middle school teachers. The results suggest that students view teacher empathy as a continuous relational process that supports both their personal growth and academic development. The study highlights the importance for decision-makers to foster relational cultures in schools, while teachers are encouraged to build continuous, open, and nonjudgmental relationships that create meaningful empathic connections.

Martinsone et al. (2023) conducted a study titled *Teachers' Contributions to the School Climate and Using Empathy at Work: Implications from Qualitative Research in Two European Countries*. The study explored the factors that teachers believe contribute to a positive school climate and how empathy influences their relationships with students. The research involved teachers from Latvia (n = 83) and Lithuania (n = 69). Data were collected through focus group interviews and analyzed using latent qualitative content analysis. The findings showed that teachers in both countries recognized the importance of communication and professional growth. However, Lithuanian teachers placed more emphasis on strengthening institutional values and collective aspects, while Latvian teachers focused on individual responsibility and applying effective teaching strategies. The study highlights the role of cultural and contextual factors in shaping teachers' work and emphasizes the different educational needs that arise in various school settings.

Chen et al., (2024) A study titled '*Unleashing Digital Superheroes: Exploring the Role of Empathy in Digital Competence and Online Teacher Autonomy Support*' investigated how teachers' digital competence relates to their ability to support online autonomy, an area that remains underexplored despite extensive research on digital competence. Drawing on the TPACK) framework, the study employed multiple regression analysis to examine this relationship. Data from 652 primary school teachers in China revealed that digital competence positively influences online teacher autonomy support through teachers' cognitive empathy. Furthermore, emotional empathy strengthened both the direct impact of cognitive empathy on autonomy support and the indirect influence of digital competence. These findings not only enrich the TPACK framework but also provide practical guidance for enhancing online teaching by emphasizing the importance of digital competence in fostering teacher autonomy.

Sarwer et al. (2024) conducted a study titled *Impact of Teacher Empathy and Motivation on Student Academic Achievement: Mediated by Sense of School Belongingness*, which explored how teacher empathy and motivation influence student academic performance, with a particular focus on the role of students' sense of belonging in school. The study was carried out in secondary schools in Punjab, Pakistan, using a survey approach. Data were collected from 778 secondary school teachers to examine both the direct and indirect effects of teacher traits on student achievement. Structural modeling analysis using Smart-PLS4 revealed that teacher empathy and motivation positively impacted student

performance. However, when students' sense of school belonging was considered as a mediator, the strength of the effect slightly decreased. This suggests that direct interactions between teachers and students have a stronger influence on academic outcomes than the broader school environment. The findings emphasize the importance of teacher behaviors in promoting student success and suggest that improving teacher empathy and motivation may be more effective than solely focusing on enhancing the school environment.

Y Chen et al. (2024) examined the relationship between teachers' digital competence and online teacher autonomy support, highlighting the importance of digital skills in education. Despite the growing recognition of digital competence, its impact on autonomy support in online teaching has not been sufficiently explored. The study used multiple regression analysis on data from 652 primary school teachers in China, focusing on the role of digital competence and its relation to autonomy support. The results showed that digital competence positively influenced autonomy support, with teachers' cognitive empathy acting as a mediator. Furthermore, emotional empathy was found to enhance both the direct effect of cognitive empathy on autonomy support and the indirect effect of digital competence on autonomy support. The study emphasizes the importance of digital competence and empathy in supporting teacher autonomy, particularly in the context of online teaching, suggesting that fostering both cognitive and emotional empathy in teachers can strengthen their ability to provide autonomy support in digital learning environments.

2.1.3 Reviews on Altruism and Empathy

Eisenberg-Berg et al. (1980) conducted a study titled *Altruism and the Assessment of Empathy in the Preschool Years*, which explored the relationship between prosocial behavior and empathy in 51 children aged 4 and 5. The researchers used a modified version of the Feshbach empathy measure, which differed from the original in several ways: the stories were more detailed, only happy and sad scenarios were included, and both verbal and nonverbal responses were considered to assess empathy. Children were interviewed by either a familiar or unfamiliar experimenter to evaluate their empathy and understanding of others' feelings. Their prosocial behaviors were observed naturally over 10 weeks. Surprisingly, the results showed a negative correlation between spontaneous prosocial behavior and empathy measures (both verbal and nonverbal).

However, prosocial behavior prompted by a request showed a slight positive correlation with nonverbal empathy scores. Cognitive role-taking, or comprehension, did not correlate with prosocial behavior. Interviews with an unfamiliar person resulted in lower comprehension but did not affect empathy scores. The study suggests that empathy measures may capture social desirability rather than true empathy.

Zahn-Waxler et al. (1985) conducted a study titled *The Origins of Empathy and Altruism*, which explored the expressions of empathy and altruism as forms of compassion shared among humans. These emotions and behaviors, which suggest concern for others, are also observed across different species. Researchers in fields like ethology and sociobiology (e.g., Wilson, 1975) have documented numerous examples of prosocial or altruistic behaviors in animals and insects. These behaviors include cooperative activities of bees, warning calls in various species, rescue actions by whales, and nurturing behaviors by mammalian caregivers toward their offspring. While examples of altruism between different species are rare, some animals can be trained to assist and protect others, including humans in need. Pet owners often report that animals display emotional concern for others, and studies of parent-child interactions show that pets respond with apparent distress when humans feign emotional upset. The growing field of animal-assisted therapy highlights animals' ability to provide comfort and support to individuals facing physical or emotional challenges.

Litvack-Miller et al. (1997) conducted a study titled *The Structure of Empathy during Middle Childhood and Its Relationship to Prosocial Behavior*, which explored the development of empathy during middle childhood and its connection to altruistic behaviors. The study included 478 students from 2nd, 4th, and 6th grades, who completed a modified version of the Interpersonal Reactivity Index (Davis, 1980), a social desirability scale, and a custom-designed altruism questionnaire. Teachers also assessed the students' prosocial behaviors, such as sharing, and the children were given opportunities to engage in activities like donating or volunteering to raise funds. The results of a confirmatory factor analysis supported Davis's (1980) four-component empathy model—perspective taking, fantasy, empathic concern, and personal distress—although the correlations between the components differed from the original model. The study's MANOVA findings revealed that girls demonstrated higher levels of empathy than boys, and older children exhibited more empathic concern than younger ones. Among the

components of empathy, only empathic concern and perspective taking were found to be significant predictors of prosocial behavior.

Mondorl, Y. (2008) conducted a study titled *Altruism in Schools and Empathy: A Developmental Study of Japanese Pupils*, which examined the relationship between empathy and altruism among Japanese students. The study involved 314 boys and 304 girls, aged 9 to 15, attending public elementary and middle schools in Japan. To measure altruism, the Index of Altruistic Behavior for Children (IABC) was used, while empathy was assessed with a modified version of Bryant's Empathy Index (IECA). The study found that girls scored higher in both altruism and empathy than boys. Additionally, altruism levels declined with age, particularly from 7th to 9th grades, while empathy levels were higher in middle school students compared to elementary school students. The results also revealed a strong positive correlation between empathy and altruism across all age groups. Gender differences were attributed to traditional gender roles in Japanese culture, which often encourage girls to display more nurturing behaviors. The decline in altruism during middle school years was linked to the competitive atmosphere created by entrance exams, which may discourage generous behaviors.

Waal, F. (2008) conducted a study titled *Putting the Altruism Back into Altruism: The Evolution of Empathy*, which explores the evolutionary origins of altruistic behavior and its connection to empathy. Evolutionary theory suggests that altruism developed because it provides benefits to the individual performing the act. For these benefits to influence motivation, the organism must be able to experience them. Therefore, the focus in analyzing motivation should be on the altruistic impulse and its observable effects. Empathy is identified as a key mechanism behind "directed altruism," which refers to helping behavior triggered by another's pain, need, or distress. This mechanism is thought to be evolutionarily ancient, likely present since the emergence of mammals and birds. When an individual perceives another's emotional state, it triggers a similar emotional response in them. Over time, as cognitive abilities developed, this emotional mirroring evolved into more complex forms, such as concern for others and the ability to take their perspective. Empathy-driven altruism creates a powerful emotional connection and aligns with kin selection and reciprocal altruism theories, which explain how helping others can be beneficial in evolutionary terms.

Shu-Yuan, L. (2010) conducted a study focused on examining the levels of empathy and altruism among nursing students across different academic years and exploring the relationship between these traits. The study involved 163 nursing students from grades 1 to 5, who completed the Interpersonal Reactivity Index (IRI) and a questionnaire measuring altruism. The IRI consists of four dimensions: perspective-taking (PT), empathic concern (EC), fantasy (FS), and personal distress (PD). The results showed that students in higher grades scored lower on FS ($P < 0.05$) but higher on EC and PT ($P < 0.05$). However, there was no significant difference in altruism levels between students from different grades ($P > 0.05$). A positive correlation was found between EC, PT, and altruism ($P < 0.01$). The study suggests that enhancing empathy training in nursing education could improve altruism among nursing students, helping them develop stronger empathic skills, which are essential for effective patient care.

Leontopoulou, S. (2010) Administered a study on An Exploratory Study of Altruism in Greek Children: Relations with Empathy, Resilience and Classroom Climate. This exploratory study had two main objectives: a) to explore any connections between children and their altruism with various demographic, personal, and social traits of Greek children, such as empathy, resilience, and classroom environment; and b) to evaluate the psychometric qualities of a newly created tool for measuring altruistic behavior in children, the Altruistic Behaviour Questionnaire (ABQ). The study involved total of 232 participants from both male and female students from the 5th and 6th grades of Primary School in Northern Greece. The ABQ was found to have good internal consistency, as well as concurrent and construct validity. Through hierarchical regression analysis, it was determined that altruism in children was strongly influenced by factors like gender, academic performance, empathy, and resilience. However, the classroom environment, which is more socially influenced, only had a slight impact on predicting altruism. The study emphasizes the need for incorporating training on altruism in emotional education and resilience-building programs at schools.

Swank et al. (2013) conducted a qualitative study titled *A Qualitative Exploration of Counseling Students' Perception of Altruism*, which focused on how altruism develops in counseling students. Empathy, a key element in building therapeutic relationships (Rogers, 1957), is closely related to altruism. However, there has been limited research on how altruism develops in counselors. The study involved 19 counseling students and

aimed to understand the factors influencing the development of altruism. The researchers developed the Altruism Development Model (ADM) to explain this process, comparing the students' insights with the factors identified in the ADM, previously outlined by Curry et al. and Robinson and Curry. The ADM highlights four key influences on altruism: biological, cognitive, social learning, and religious/spiritual factors. The biological aspect, supported by Hamilton's (1964) "altruistic gene" theory, suggests that individuals act selflessly to benefit relatives who share similar genes, thus ensuring the survival of altruistic traits within families and species. The kinship hypothesis further explains that people are more likely to act altruistically toward family members, even at a personal cost.

Tentama et al. (2020) conducted a study titled *Altruism Scale: A Psychometric Study for Junior High School Students*, which aimed to assess the construct validity and reliability of the altruism scale and explore the factors contributing to this variable. Altruism was measured through three aspects: empathy, voluntary actions, and the desire to help. The study's population consisted of 572 students from "X" Public Middle School in Semanu, with a sample size of 142 students selected using simple random sampling. Data were collected using the altruism scale and analyzed with Structural Equation Modeling (SEM) using SmartPLS 3.2.8 software. The results showed that the aspects and indicators of altruism were both valid and reliable. Empathy, with a loading factor of 0.823, was found to be the most dominant aspect of altruism, while the desire to help, with a loading factor of 0.780, was the weakest. This suggests that all aspects and indicators effectively represent the altruism variable. The measurement model was accepted as the theory of altruism aligned well with the empirical data.

Kashirskaya, I. (2020) conducted a study titled *Ideas about Altruism and Selfishness in Students with Different Levels of Empathy*, which explored how students with varying levels of empathy perceive altruism and selfishness. Altruism and selfishness, as socio-psychological phenomena, arise from different causes and are influenced by various internal and external factors, with personal traits being a significant influence. The study focused on the relationship between students' empathy levels and their views on altruism and selfishness. Empathy was measured using a diagnostic tool, while students' perceptions were analyzed through content analysis. Students were grouped into three categories based on their empathy levels: high, medium, and low. The findings revealed that students had mixed opinions about altruism and selfishness, acknowledging both the

advantages and disadvantages of altruistic behavior. Key differences were found in areas such as: 1) positive and negative associations with "altruism" and "selfishness," 2) perceptions of the negative outcomes of altruism and the positive outcomes of selfishness, and 3) beliefs about how gender influences these behaviors. The study confirmed that students' empathy levels significantly impact how they conceptualize altruism and selfishness.

Kaushik et al. (2021) conducted a study titled *Relationship of Altruism with Empathy Among Adolescents: A Gender Study*, which explored the connection between altruism and empathy in adolescents and whether this relationship varies by gender. The study involved 240 adolescents (120 girls and 120 boys) aged 16–18 from government secondary schools in the Ludhiana District. Data were collected using a Socio-personal Information Sheet, the Altruism Scale (Rai & Singh), and the Empathy Scale (Dubey & Tandon). The findings revealed that most adolescents exhibited high levels of altruism. Gender comparisons showed that girls were generally more altruistic and empathetic than boys. Additionally, a statistically significant positive correlation between altruism and empathy was found for both genders. The study suggests that empathy and altruism are closely related, with gender influencing the extent of these traits, particularly showing that girls tend to display higher levels of both.

Kappelmayer et al. (2022) conducted a study to investigate the effects of an intervention designed to promote compassion, empathy, and social relationships among children. Growing evidence suggests that fostering compassion and altruism from an early age can have significant long-term benefits. This research focused on 9-year-old children in a school in Buenos Aires, Argentina, using a pretest-posttest controlled design with 48 participants. Half of the children participated in the intervention program, while the other half formed a waitlist group that took part in academic tutorial sessions led by the same research team. The findings revealed that the intervention effectively improved children's altruistic and compassionate behaviors, as measured by the Universal Altruism Test, social integration assessments, and emotional response evaluations. The intervention group showed medium to large effect sizes, whereas the waitlist group exhibited no significant improvements. These results suggest that fostering self-awareness and awareness of others in children can enhance compassion and empathy, ultimately improving both individual and collective well-being.

Li et al. (2022) conducted a study titled *Altruistic Preferences of Pre-Service Teachers: The Mediating Role of Empathic Concern and the Moderating Role of Self-Control*, which examined the relationships between academic field, self-control, empathy, and altruism among undergraduate and graduate students from five Chinese universities. The study focused on pre-service teachers in pedagogy programs and non-pre-service students in non-pedagogy programs. Participants, aged 18–20 years (58.4% women), completed the Interpersonal Reactivity Index-C, the Self-Control Scale, and the Chinese Self-Report Altruism Scale. The results revealed significant differences in empathic concern and self-control between pre-service and non-pre-service teachers, with pre-service teachers showing higher levels of both empathic concern and altruistic tendencies. Mediation analysis showed that empathy had a slight effect on the relationship between academic field and altruistic preferences. Furthermore, moderated mediation analysis demonstrated that self-control played a protective role in the link between empathy and altruistic behavior. These findings suggest that pre-service teachers' altruistic tendencies are influenced by both empathic concern and self-control.

Liu et al. (2023) conducted a study on the *Effect of Socioeconomic Status on Altruistic Behavior in Chinese Middle School Students*, focusing on the mediating role of empathy. Previous studies have suggested a link between socioeconomic status (SES) and altruistic behavior, with empathy emerging as a significant factor driving altruism. This research aimed to examine how empathy influences the connection between SES and altruistic behavior in Chinese adolescents. The study involved 253 middle school students from Northern China and used the dictator game along with the Interpersonal Relation Index to assess outcomes. The results revealed three key findings: (1) students from lower SES backgrounds exhibited more generosity than their higher SES counterparts; (2) participants were more generous toward recipients from low-SES backgrounds in the dictator game; and (3) affective empathy, rather than cognitive empathy, mediated the relationship between SES and altruistic behavior. These findings support the empathy-altruism hypothesis among Chinese adolescents and suggest that fostering empathy, especially in individuals with higher SES, may encourage more altruistic behaviors.

Arman, M. (2023) conducted a study titled *Empathy, Sympathy, and Altruism: An Evident Triad Based on Compassion*, which aimed to create a knowledge base for developing clinical caring science. The study focused on the interconnections between empathy,

sympathy, altruism, and compassion. It examined each concept individually, exploring their historical backgrounds, related research, challenges, and potential biases, before integrating them into a theoretical model. The findings indicated that empathy, sympathy, and altruism are not contradictory but rather form a harmonious triad, all grounded in compassion. Compassion is identified as both the prerequisite and foundation for these elements to function effectively. In clinical practice, empathy represents intellectual understanding ("from the head"), sympathy reflects emotional connection ("from the heart"), and altruism signifies practical action ("from the hand"), with compassion acting as the driving force for care. The study also emphasizes that compassionate attitudes and skills can be nurtured and enhanced through education and training, highlighting the importance of cultivating empathy, sympathy, and altruism in clinical practice.

Muhadzir et al. (2024) conducted a study titled *Well-Being as the Main Predictor of Altruism over Empathy among School Teachers in Klang Valley, Malaysia*, which explored how empathy, well-being, and self-efficacy collectively influence altruistic behavior in educational settings. The research involved 322 teachers from Klang Valley, Malaysia, who completed quantitative surveys designed to measure these psychological traits and their relationship to altruism. The study used the Interpersonal Reactivity Index to assess empathy, the Warwick-Edinburgh Mental Well-being Scale for well-being, and the Teachers' Sense of Efficacy Scale for self-efficacy. Statistical analyses, including Pearson correlation and multiple regression, revealed that well-being and self-efficacy were strong predictors of altruistic behavior among teachers. However, empathy did not show a direct link to altruism. Despite this, the study emphasized empathy's role in fostering positive teacher-student relationships and creating a supportive classroom environment. The findings suggest that enhancing teachers' well-being and self-efficacy can promote altruism in educational settings.

2.1.4 Matrix of Literature Review

Table 2.1 Matrix of Literature Review

Author(s) & Year	Aims of the Study	Findings of the Study
Chen et al., 2024	The study aimed to investigate the impact of teachers' digital competence on their ability to provide autonomy support in online teaching environments.	The findings indicate that teachers' digital competence positively influences online autonomy support, primarily through the role of cognitive empathy. Additionally, emotional empathy strengthens this relationship, further enhancing teachers' ability to support students autonomously in online settings.
Mehmood et al., 2022	To investigate how training in effective altruism impacts ministers' behavior and decision-making.	Effective altruism training led to increased altruism, strategic decision-making, and social policy recommendations.
Angriani et al., 2021	To explore how organizational culture and altruism affect science teachers' social competence.	Organizational culture and altruism positively influence science teachers' social competence, accounting for 52.10%.
Merton, 1982	To examine how professional altruism becomes institutionalized within society.	Teachers exhibited varied altruistic behaviors: pseudo-altruism, reciprocal altruism, and pure altruism were observed.
Shu-Yuan L., 2010	To study empathy and altruism levels in nursing	Higher-grade nursing students scored lower in fantasy but higher in empathic

	students and their relationship.	concern and perspective-taking. No grade-related differences in altruism.
Arman, M., 2023	To establish a model explaining the connection between empathy, sympathy, and altruism in clinical settings.	Empathy, sympathy, and altruism form a triad of compassionate behavior, each contributing to effective care.
Banerjee et al., 2014	To assess secondary school teachers' attitudes toward the teaching profession.	Teachers exhibited a neutral attitude toward teaching, neither highly favorable nor unfavorable.
Barman, P., 2024	To investigate teachers' attitudes toward inclusive education in West Bengal.	Teachers displayed neutral attitudes, with rural teachers having more favorable views compared to urban ones.
Bogunovich et al., 2023	To explore how altruism functions within education as a shared professional value.	Professional reciprocal altruism encourages meaningful teacher engagement and combats compassion fatigue.
Brackins, H., 2022	To explore how middle school students in Christian schools perceive teacher empathy and the ways it influences their personal and academic experiences.	Teacher empathy positively influences students' personal and academic development.
Buragohain et al., 2016	To study altruism-building exercises in promoting altruistic behavior among adolescent students.	Altruism-building exercises were effective in fostering altruistic behaviors in adolescents.

Chen et al., 2024	To explore the role of empathy in teachers' digital competence and its impact on teacher autonomy support.	Empathy (both cognitive and emotional) mediates the relation between digital competence and teacher autonomy support.
Eisenberg-Berg et al., 1980	To explore the relationship between empathy and prosocial behavior in preschool children.	Empathy negatively correlated with spontaneous prosocial behavior but had a slight positive relationship with prompted prosocial behavior.
Erşen et al., 2019	To study primary school teachers' empathy levels based on demographic characteristics.	Teachers' empathy levels varied based on age and years of service. No significant differences in other demographics.
Eynur et al., 2020	To assess the altruism levels of physical education teachers in Kütahya.	Significant differences were found based on gender, place of residence, and educational background.
Ezhilrajan, K., 2016	To explore empathetic behavior among school teachers in Tamil Nadu and Kerala.	Female teachers exhibited higher empathy, with rural teachers in Kerala showing greater empathy than urban counterparts.
F., 2022	To examine how leadership style and altruism affect teacher performance.	Altruistic behavior influenced teacher performance via meaningfulness, with authentic leadership playing a central role.
Fu et al., 2022	To investigate how perceived school culture and empathy affect teachers' work engagement.	Positive school culture linked to higher work engagement, with empathy partially mediating the relationship.

Gorucu, A., 2017	To study the relationship between preschool teachers' empathy and communication skills.	Strong relationship between empathy and communication skills in preschool teachers.
Ibrahim, F., 2020	To study the role of altruism in English teaching and learning in senior high schools.	Altruistic behaviors such as prosocial actions and empathy were visible in the classroom, enhancing teaching quality.
Indriana et al., 2023	To examine the relationship between self-compassion, fatherhood, and altruism among psychology students.	Self-compassion and views on fatherhood were positively linked to altruism levels in students.
Istiqomah et al., 2020	To foster altruism in elementary school students in Indonesia.	Empathy-based strategies are effective in cultivating altruistic behavior among young learners.
Kappelmayer et al., 2022	To examine a school intervention program's impact on children's empathy and altruism.	Intervention significantly improved children's altruism and compassion, with medium to large effect sizes.
Kashirskaya, I., 2020	To assess how students' empathy levels relate to their views on altruism and selfishness.	Students with higher empathy levels had more positive views on altruism, highlighting the role of empathy in altruistic behavior.
Kaushik et al., 2021	To study gender differences in altruism and empathy among adolescents.	Girls were more altruistic and empathetic than boys, with a positive correlation between the two traits.

Konakli, T., 2013	To explore how school managers' altruism affects organizational cynicism.	Altruism in school managers was negatively associated with organizational cynicism.
Leontopoulou, S., 2010	To examine the relationship between children's altruism, empathy, and classroom climate.	Altruism in children was strongly influenced by empathy, with resilience and classroom environment playing minor roles.
Li et al., 2022	To explore altruism among pre-service teachers, focusing on empathic concern and self-control.	Empathic concern and self-control shaped altruistic behavior in pre-service teachers, with self-control moderating the relationship.
Li, C., 2019	To study the impact of gratitude and altruism on forgiveness in rural teachers.	Altruism mediated the relationship between gratitude and forgiveness, with male teachers exhibiting higher altruism.
Litvack-Miller et al., 1997	To study empathy development during middle childhood and its relation to prosocial behavior.	Empathy, particularly empathic concern and perspective-taking, was linked to prosocial behavior in middle childhood.
Liu et al., 2023	To investigate how socioeconomic status affects altruistic behavior in Chinese students.	Low SES students exhibited greater altruistic behavior, mediated by affective empathy.
Lubis et al., 2020	To assess the impact of altruism, emotional intelligence, and decision-making on work performance in teachers.	Altruism, emotional intelligence, and decision-making moderately impacted teachers' work performance.

Mandal et al., 2016	The study aimed to explore how students' altruistic tendencies relate to their interest in literature.	Female students displayed higher levels of altruism and literary interest, with positive correlations between the two.
Martinsone et al., 2023	To examine the role of empathy in teachers' contributions to school climate.	Empathy was key in shaping teachers' relationships with students and their contributions to a positive school climate.
McKnight, K., 2017	To study how teacher empathy impacts family partnerships in schools.	Teacher empathy fostered positive teacher-family relationships, enhancing student outcomes.
MONDORI, Y., 2008	To explore empathy and altruism in Japanese children.	Girls showed higher altruism and empathy than boys, with a decline in altruism during middle school.
Muhadzir et al., 2024	To assess how well-being and self-efficacy predict altruism in teachers.	Well-being and self-efficacy were strong predictors of altruistic behavior among teachers.
Musallam, F., 2023	To study altruism in teachers working at UNRWA schools in Jordan.	Female teachers exhibited more altruistic behaviors compared to males.
Nainggolan et al., 2020	To study altruism in English textbooks for senior high school students.	Altruistic traits were inconsistently included in textbooks, with a missed opportunity to nurture altruism.
Neli et al., 2019	To assess altruistic behavior in high school students.	Students exhibited high levels of altruistic behavior, with the highest levels seen in cooperation and generosity.

Ozor, T., 2018	To investigate the impact of locality on teachers' altruistic behavior.	Teachers in rural areas demonstrated more altruistic behavior than urban teachers.
Palta, A., 2019	To explore teachers' views on altruism.	Teachers showed strong altruistic tendencies, with no significant differences based on gender, marital status, or teaching subject.
Pande, D., 2016	To explore the link between altruism and environmental attitudes in pupil-teachers.	Altruism was positively correlated with environmental attitudes, highlighting the importance of sustainable education.
Parchomiuk, M., 2019	To study how empathy affects teachers' attitudes toward individuals with disabilities.	Empathy was linked to positive attitudes toward individuals with disabilities, with emotional and cognitive empathy being significant predictors.
Patnaik et al., 2022	To explore teachers' perceptions of challenging behaviors in classrooms.	Teachers identified various causes for challenging behaviors and emphasized proactive strategies for managing them.
Platsidou et al., 2017	To investigate how empathy relates to stress in teachers.	Empathy was not a significant predictor of instructional stress, but personal distress and fantasizing were.
Plaza, A., 2023	To reevaluate altruism in teachers from a philosophical perspective.	Female teachers exhibited higher altruism, with primary school teachers showing significantly higher altruism.
Reddy, M., 2022	To examine altruistic behavior among secondary school teachers.	Altruistic behavior was observed in the majority of teachers, with no significant differences based on demographic variables.

Saĝnak et al., 2017	To explore how meaningfulness mediates the relationship between leadership and altruism in teachers.	Meaningfulness fully mediated the relationship between authentic leadership and altruistic behavior.
Sajan et al., 2018	To compare altruism between male and female secondary school teachers.	Female teachers exhibited higher altruism than male teachers, supporting gender-based altruistic differences.
Sarwer et al., 2024	To study how teacher empathy and motivation affect student achievement through school belongingness.	Teacher empathy and motivation positively impacted student achievement, with school belongingness as a partial mediator.
Septiana, D., 2018	To study how emotional intelligence, self-efficacy, and altruism influence teacher competence in inclusion.	Emotional intelligence and altruism significantly correlated with teacher competence, with altruism showing the strongest correlation.
Sladoje-Bošnjak, B., 2012	To explore how teachers' perceived empathy affects students' metacognitive strategies.	Teachers' empathy, especially suffering, significantly predicted students' use of metacognitive strategies.
Swan et al., 2012	To examine the role of mentalization in measuring teacher empathy.	Mentalization offers valuable guidance for primary school teachers to foster effective teacher-student relationships.
Swank et al., 2013	To study the development of altruism in counseling students.	Biological, cognitive, and social factors enhance the evolution of altruism in counseling students.

Tentama et al., 2020	To assess the psychometric properties of the altruism scale in middle school students.	Empathy was the most dominant factor in defining altruism, with all aspects of altruism being valid and reliable.
Tutkun, T., 2019	To study ethnocultural empathy in preservice classroom teachers.	Experience in multicultural settings and being part of the majority group were significant predictors of ethnocultural empathy.
Ütkür, N., 2019	To explore empathy in primary school life sciences courses.	Empathy training improved pre-service teachers' ability to incorporate empathy into life sciences lessons.
Waal, F., 2008	To explore the evolutionary origins of empathy and altruism.	Empathy-driven altruism is a powerful mechanism for altruistic behavior, influenced by kin selection and reciprocal altruism.
Weijia, L., 2015	To examine the impact of teachers' empathy on students' academic achievement.	Enhanced empathy in teachers led to improved student academic performance, with initial student performance mediating the relationship.
Yiğit et al., 2020	To explore the altruism features of physical education teachers.	No significant differences in altruism levels among teachers based on gender, age, or school type.
Zahn-Waxler et al., 1985	To explore the origins of empathy and altruism across species.	Empathy and altruism have evolutionary roots, with evidence of these behaviors in animals supporting the altruism hypothesis.

2.2 Statement of the Problem

The researcher studied handful literatures on the causes, existence, and resolutions of teacher's altruism and empathy among different sample groups, which led him to investigate deeply into determining how teachers' altruism and empathy can be measured using various parameters. The researcher was unable to locate a study that significantly shed light on the existence altruism and empathy among primary school teachers using actual data. Although numerous theoretical explanations suggested the existence of teacher's altruism and empathy in developing nations, particularly in the underdeveloped regions of these nations, empirical studies are still lacking. Previous researchers have conducted thoughtful investigation on students as well as teachers and employees in tertiary education level that is higher education. But the Arena of school education was literally unturned. In this endeavours which is very crucial at present time due to increased demand of teacher's altruism and empathy responsibilities and need of the modern higher education system. Henceforth, the researcher ended up in conducting the research on the area of teacher's altruism and empathy. Researcher has identified a substantial knowledge gap between the conceptual and practical existence of altruism and empathy among primary school in West Bengal. Based on the researcher's contextual reading and analysis of the existing literature, the following research questions on the present study were identified as –

- i. Are Teachers in Primary Schools Altruistic?
- ii. Are Teachers in Primary Schools Empathetic?
- iii. Is there any relationship between Altruistic Behavior and Empathetic Behavior of Teachers?

In search of the appropriate answers of aforesaid research questions, the researcher framed and stated the problem of the study as – **“Exploring Teachers' Altruism and Empathy in Primary Schools of West Bengal”**

2.3 Delimitations of the study

- i. The present study was delimited to only Six districts located in West Bengal i.e., Jalpaiguri, Alipurduar, Coochbehar, Hooghly, South 24 Parganas, and Howrah.
- ii. The study is confined only to Primary school teachers in West Bengal.

iii. The study was delimited to 570 primary school Teachers in West Bengal considered as a sample.

iv. The study focuses only on two teacher attributes: Altruism and Empathy.

v. Altruism has been measured through an Altruism Scale partly adapted from 'Helping Attitude Scale' (Gary Nickell, 2000), 'The Gratitude Scale' (Mc. Cullrgh et al., 2002) and partly developed by researcher, and empathy was measured using the Toronto Empathy Questionnaire.

vi. The present study was delimited to thirteen demographic and socio-academic variables e.g., Gender, Marital status, social category, Family structure, educational qualification, Academic discipline, School location, Social Organization member, Teacher training qualification year, Birth order, Teaching as a career choice, Religion, and Work Experience.

2.4 Objectives of the study

i) To know the extent of altruistic behavior among primary school teachers.

ii) To know the extent of empathetic behavior among primary school teachers.

iii) To explore if there is any relationship between Teachers' Altruism and Teachers' Empathy.

iv) To investigate the variation of various independent variables viz; gender, Marital status, social category, Family structure, educational qualification, Academic discipline, School location, Social Organization member, Religion, Teacher training qualification year, Teaching as a career choice, Birth order, Work Experience on Altruism and Empathy among Primary School Teachers of West Bengal.

2.5 Hypotheses of the study

H₀₁: Altruism does not significantly differ among Primary School Teachers based on their Gender.

H₀₂: Empathy does not significantly differ among Primary School Teachers based on their Gender.

H₀₃: Altruism does not significantly differ among Primary School Teachers based on their Marital Status.

H₀₄: Empathy does not significantly differ among Primary School Teachers based on their Marital Status.

H₀₅: Altruism does not significantly differ among Primary School Teachers based on their Social Category.

H₀₆: Empathy does not significantly differ among Primary School Teachers based on their Social Category.

H₀₇: Altruism does not significantly differ among Primary School Teachers based on their Family Structure.

H₀₈: Empathy does not significantly differ among Primary School Teachers based on their Family Structure.

H₀₉: Altruism does not significantly differ among Primary School Teachers based on their Educational Qualification.

H₀₁₀: Empathy does not significantly differ among Primary School Teachers based on their Educational Qualification.

H₀₁₁: Altruism does not significantly differ among Primary School Teachers based on their Academic Discipline.

H₀₁₂: Empathy does not significantly differ among Primary School Teachers based on their Academic Discipline.

H₀₁₃: Altruism does not significantly differ among Primary School Teachers based on their School Location.

H₀₁₄: Empathy does not significantly differ among Primary School Teachers based on their School Location.

H₀₁₅: Altruism does not significantly differ among primary school teachers based on their membership in social organizations.

H₀₁₆: Empathy does not significantly differ among primary school teachers based on their membership in social organizations.

H₀17: Altruism does not significantly differ among primary school teachers based on their teacher training qualification year.

H₀18: Empathy does not significantly differ among primary school teachers based on their teacher training qualification year.

H₀19: Altruism does not significantly differ among primary school teachers based on whether teaching was their first choice as a career.

H₀20: Empathy does not significantly differ among primary school teachers based on whether teaching was their first choice as a career.

H₀21: Altruism does not significantly differ among primary school teachers based on their Work Experience.

H₀22: Empathy does not significantly differ among primary school teachers based on their Work Experience.

H₀23: Altruism does not significantly differ among primary school teachers based on their Religion.

H₀24: Empathy does not significantly differ among primary school teachers based on their Religion.

H₀25: Altruism does not significantly differ among primary school teachers based on their Birth Order.

H₀26: Empathy does not significantly differ among primary school teachers based on their Birth Order.

H₀27: Altruism does not significantly correlate with Empathy among primary school teachers.

H₀28: Altruism does not significantly correlate with Birth Order among primary school teachers.

H₀29: Empathy does not significantly correlate with Birth Order among primary school teachers.

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CHAPTER III
METHOD AND PROCEDURE

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The methodology of a study is crucial to its success, as it directly impacts the research outcomes. Given that each research problem has unique characteristics, it is essential to select a methodology tailored to the specific nature of the problem. In this chapter, the researcher outlines two main components of the research design. The first part discusses the research method, study design, including the population, sample, description of variables, and tools used for data collection. The second part provides an overview of the data collection process, outlining the procedures followed throughout the study.

3.1 Method

The term 'method' encompasses the set of activities, procedures, and techniques used by researchers during their studies, including the processes of data collection, statistical analysis, and the overall study design. As Goundar (2012) explains, "The research method, particularly the data collection and analysis techniques, is provided with a justification for why the selected method was chosen." The purpose of this study was to assess the altruistic and empathetic behaviors of primary school teachers and investigate the correlation between teachers' altruism and empathy across various districts in West Bengal, such as Jalpaiguri, Alipurduar, Coochbehar, Hooghly, South 24 Parganas, and Howrah. To accurately represent the research method, a quantitative descriptive survey approach was followed in this study.

3.1.1 Study Design

The study design is a detailed plan that outlines how a research study will be conducted. It involves the decisions and choices made by the researchers regarding the structure, methods, and procedures to answer the research questions or achieve the objectives. A well-planned study ensures that the data collected is accurate, reliable, and relevant to the research goals. According to Kabir (2016), "Research design refers to the entire process of planning and executing a research study. It is the visualization of the entire research process before it begins."

In this study, the researcher used Cross-sectional survey research design to gather quantitative data through a questionnaire. Cross-sectional studies are conducted at a

single point in time or over a specific period, while the survey method helps gather information on a wide range of topics, including personal facts, attitudes, past behaviors, and opinions. The researcher used statistical analysis to test the hypothesis and describe the nature of the population.

3.1.2 Population

In research, the term 'population' refers to the complete group of individuals, objects, or events that the researcher plans to study. It represents the larger group to which the findings of the study will be applied. For this study, the target population consisted of all government-aided primary school teachers in West Bengal i.e., 2,47,134 (UDISE+ 2023-24). The following map was showing the location of the population area which is given in

Figure 3.1 Map showing population area

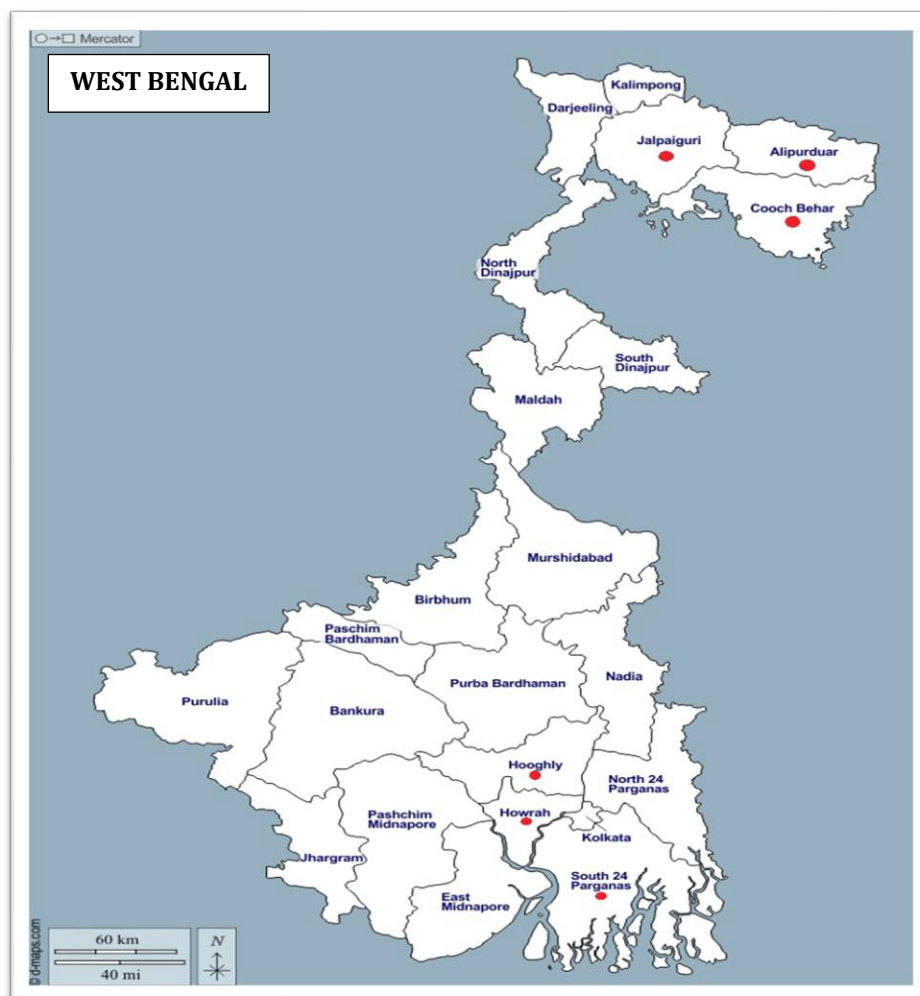


● → Indicating the population area

3.1.3 Sample and Sampling Techniques

For any quantitative descriptive survey research, it is important to select a sample that accurately represents the population. Using the sampling error formula with a 95% confidence level and a 5% margin of error, the required sample size was calculated. With these parameters and assuming maximum variability ($p = 0.5$), the sample size needed for the survey was approximately 385 respondents (Krejcie & Morgan, 1970; Cochran, 1977). This means that a sample of 384 participants would typically give a reliable estimate within the set limits. In this study, a sample of 570 primary school teachers from six districts and twenty blocks of West Bengal was selected, ensuring broad representation of government-aided primary school teachers. A multistage sampling method was used to choose the schools, while a simple random sampling technique was applied to select the teachers who participated.

3.2 Map showing sampling area



● → Indicating the sample area

Table 3.1 Sample distribution by districts

Sl No.	Name of Districts	Number of Samples	Percentage (%)
1.	Jalpaiguri	142	24.9%
2.	Alipurduar	93	16.3%
3.	Coochbehar	100	17.5%
4.	Howrah	79	13.9%
5.	Hooghly	81	14.2%
6.	South 24 Parganas	75	13.2%
Total		570	100

3.3 Showing sample distribution by districts

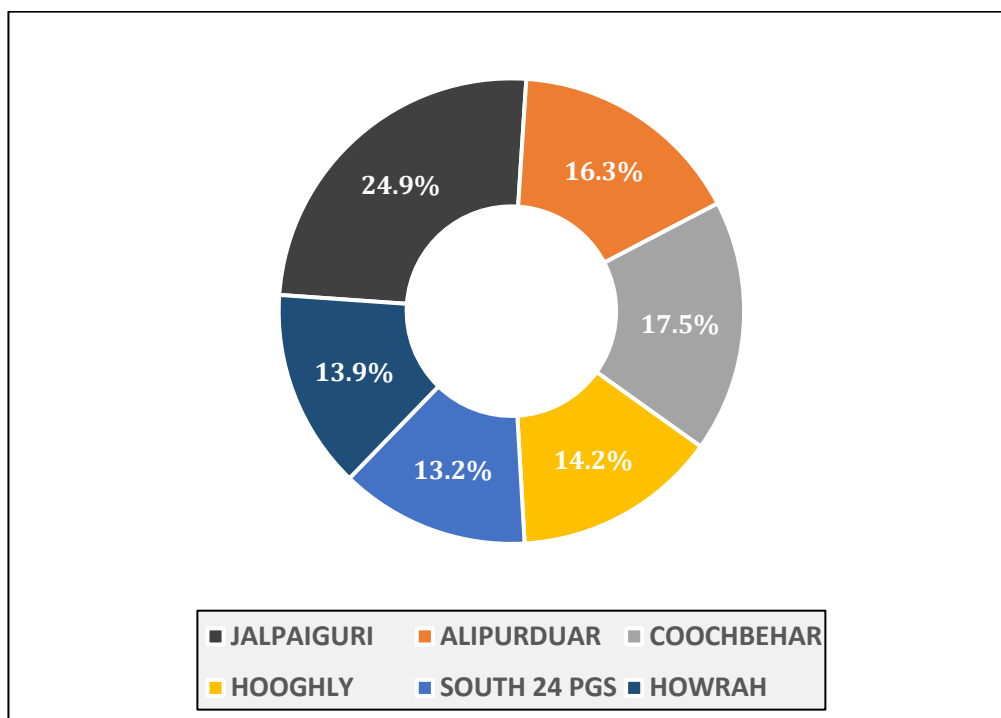


Table 3.2 Blocks wise sample distributions

Sl No.	Name of Blocks	Number of Samples	Percentage (%)
1.	Dhupguri	32	5.61%
2.	Banarhat	36	6.32%
3.	Mainaguri	22	3.86%
4.	Nagrakata	38	6.67%
5.	Falakata	36	6.32%
6.	Kalchini	33	5.79%
7.	Alipurduar-I	23	4.04%
8.	Cooch Behar-I	20	3.51%
9.	Haldibari	34	5.96%
10.	Arambagh	27	4.74%
11.	Goghat-I	36	6.32%
12.	Serampore	13	2.28%
13.	Tarakeswar	24	4.21%
14.	Panchla	30	5.26%
15.	Shyampur	28	4.91%
16.	Bhadoo	21	3.68%
17.	Aamta-I	33	5.79%
18.	Baruipur	31	5.44%
19.	Sonarpur	30	5.26%
20.	Basanti	23	4.04%
Total		570	100%

Figure 3.4 Showing block wise sample distributions.

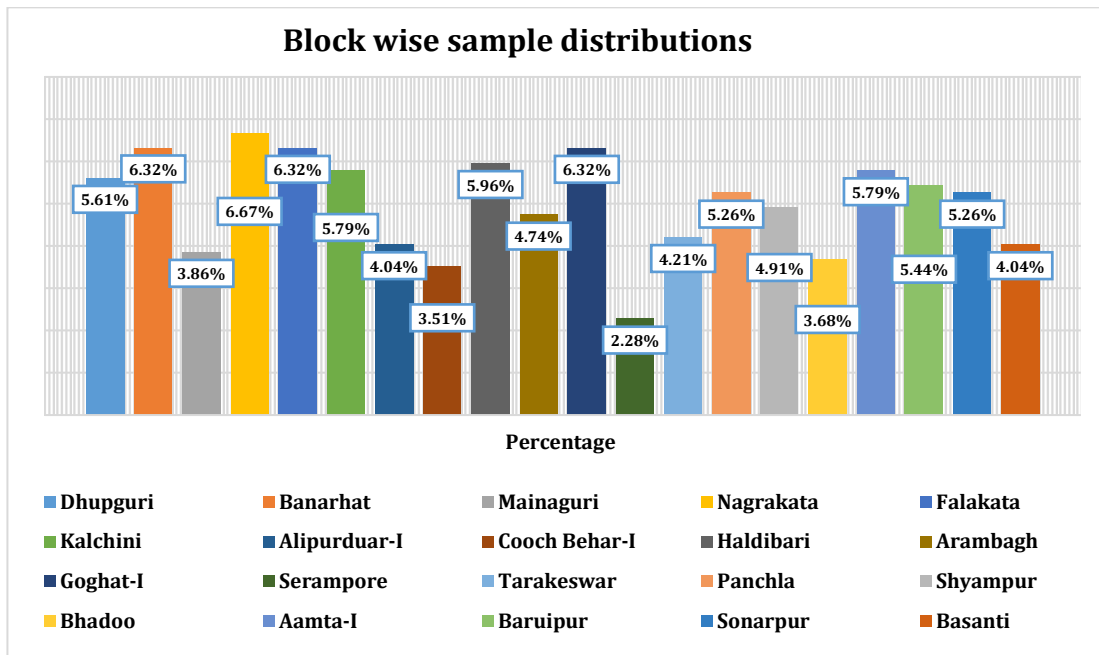


Table 3.3 Representing the sample distributions.

Variables	Categories	Frequency (N)	Percentage (%)
Gender	Male	367	64.4%
	Female	203	35.6%
	Total	570	100
Marital Status	Married	452	79.3%
	Un-married	118	20.7%
	Total	570	100
Social Category	General	249	43.7%
	SC	169	29.6%
	ST	36	6.3%
	OBC	116	20.4%
	Total	570	100
Family Structure	Joint	279	48.9%
	Nuclear	291	51.1%
	Total	570	100

Highest Educational Qualification	HS	165	28.9%
	BA	238	41.8%
	MA	167	29.3%
	Total	570	100
Academic Discipline	Arts	386	67.7%
	Science	154	27.0%
	Commerce	30	5.3%
	Total	570	100
School Location	Rural	357	62.6%
	Semi-urban	91	16.0%
	Urban	122	21.4%
	Total	570	100
Membership in Social Organization	NO	363	63.7%
	Yes	207	36.3%
	Total	570	100
Teachers Training Qualification Year	More than 10 years ago	349	61.2%
	7 to 9 years age	148	26.0%
	4 to 6 years age	73	12.8%
	Total	570	100
Teaching as a First Career Choice	Yes	468	82.1%
	No	102	17.9%
	Total	570	100
Work Experience	Less than 1 year	37	6.5%
	1 to 5 years	120	21.1%
	6 to 10 years	141	24.7%
	11 to 15 years	67	11.8%
	More than 15 years	205	36.0%
Total	570	100	

Religion	Hinduism	471	82.6%
	Islam	99	17.4%
	Total	570	100
Birth Order	1 st order	149	26.1%
	2 nd Order	149	26.1%
	3 rd Order	103	18.1%
	4 th Order	77	13.5%
	5 th Order	33	5.8%
	6 th Order	18	3.2%
	7 th Order	23	4.0%
	8 th Order	18	3.2%
	Total	570	100

Figure 3.5 Showing gender wise sample distribution

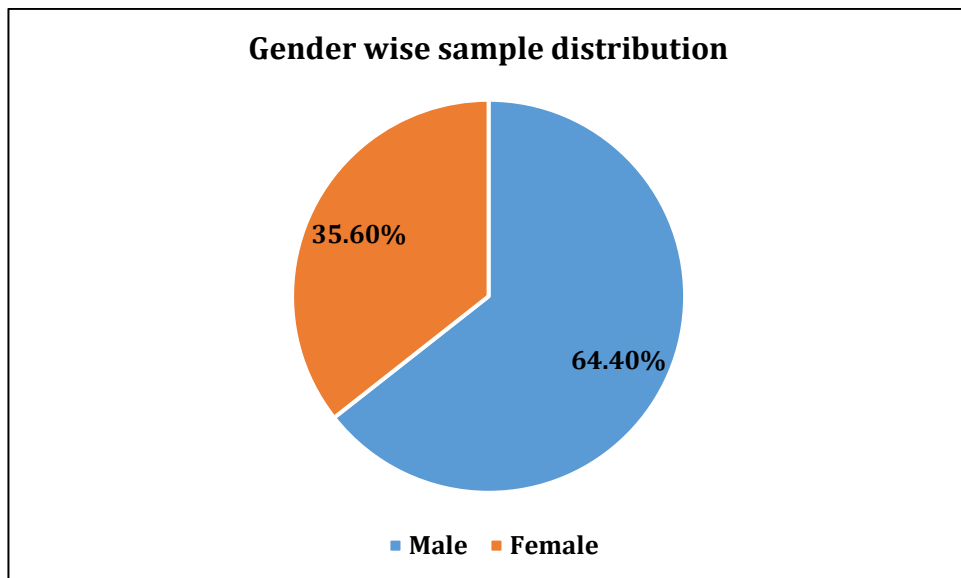


Figure 3.6 Showing marital status wise sample distribution

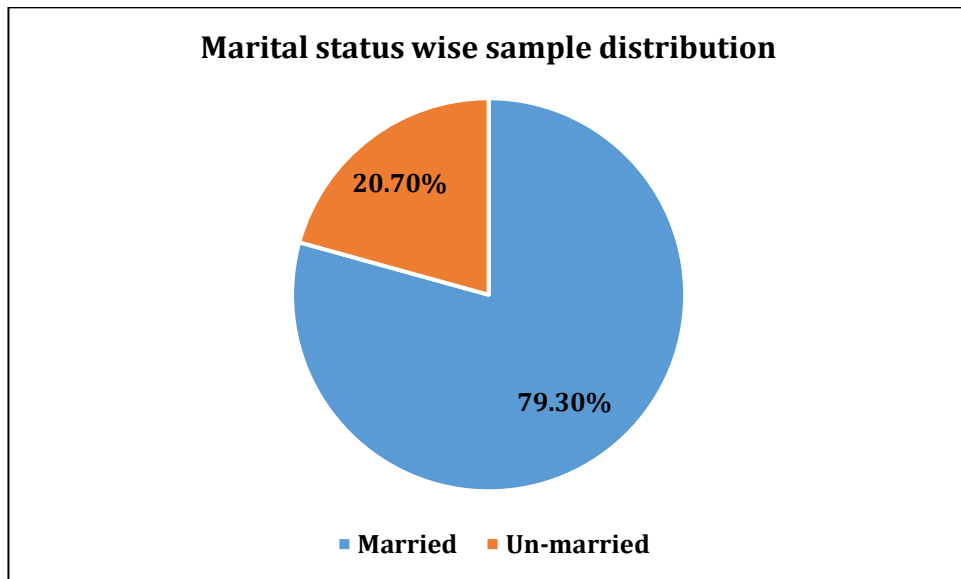


Figure 3.7 Showing social category wise sample distribution

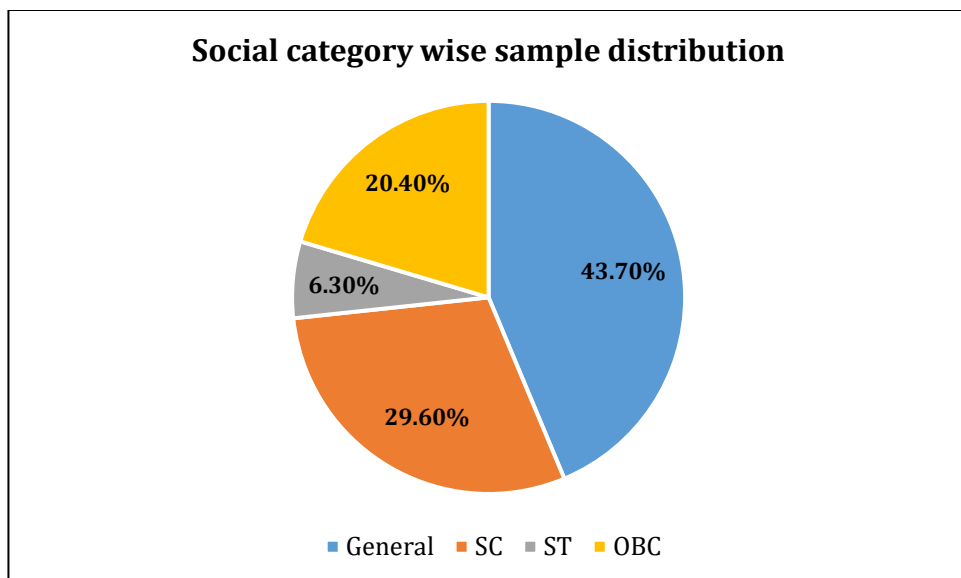


Figure 3.8 Showing family structure wise sample distribution

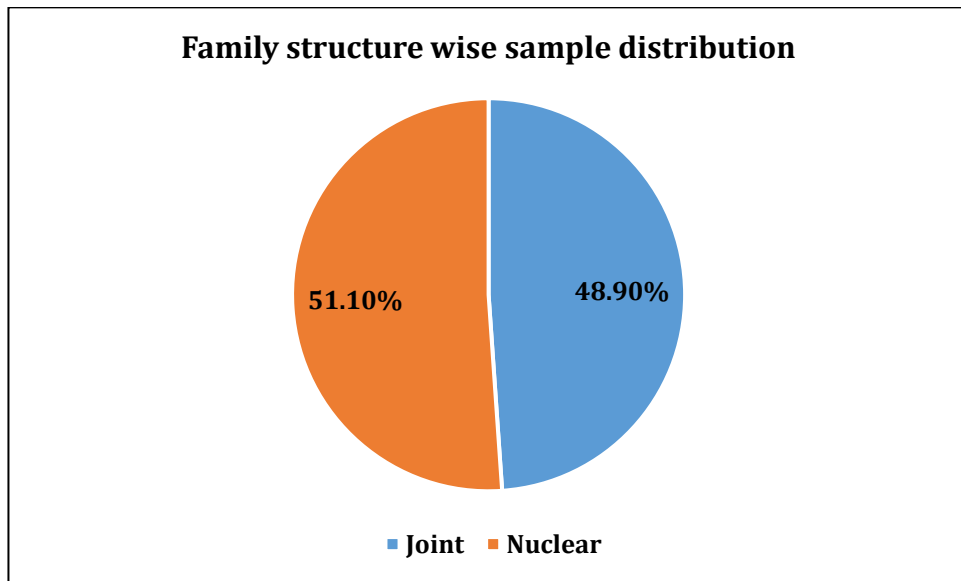


Figure 3.9 Showing highest educational qualification wise sample distribution

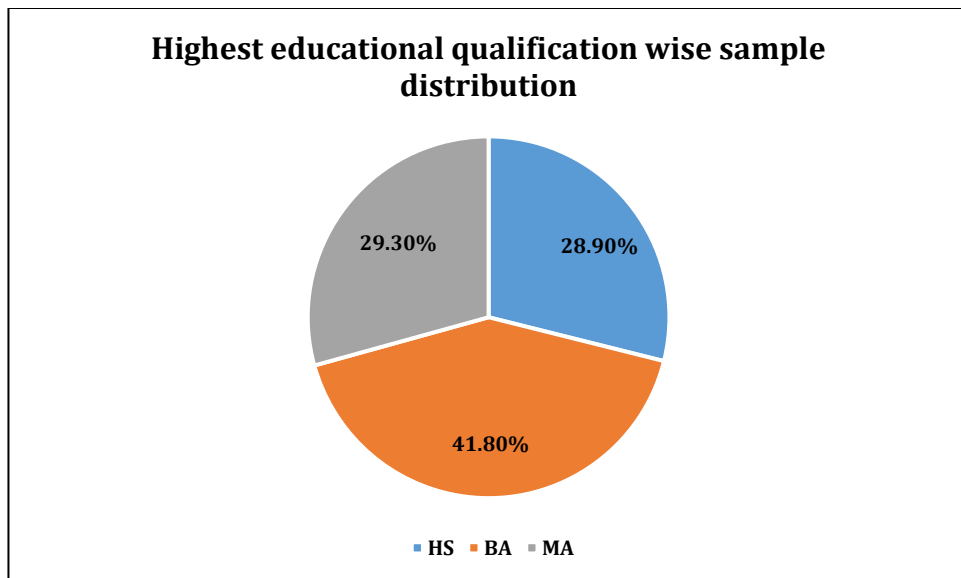


Figure 3.10 Showing academic discipline wise sample distribution

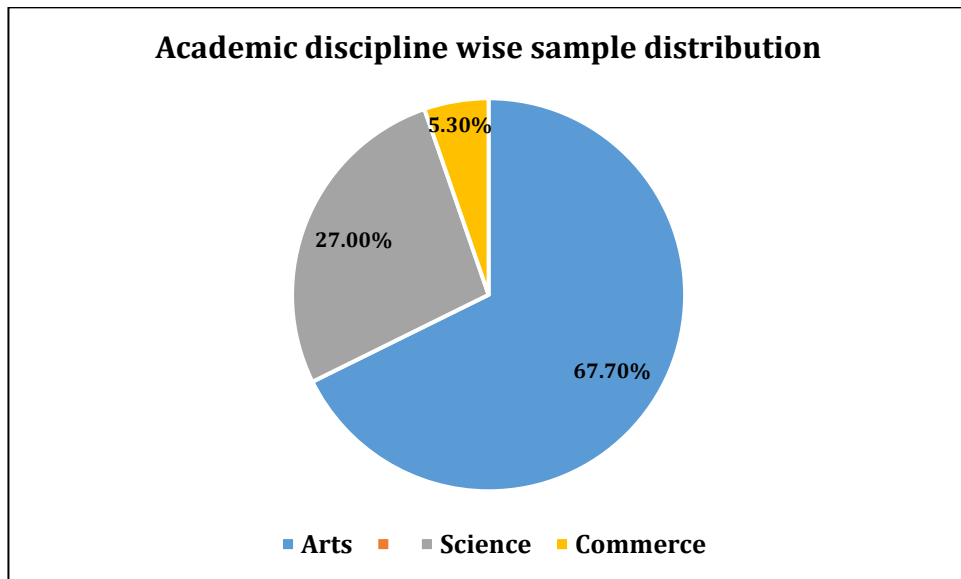


Figure 3.11 Showing school location wise sample distribution

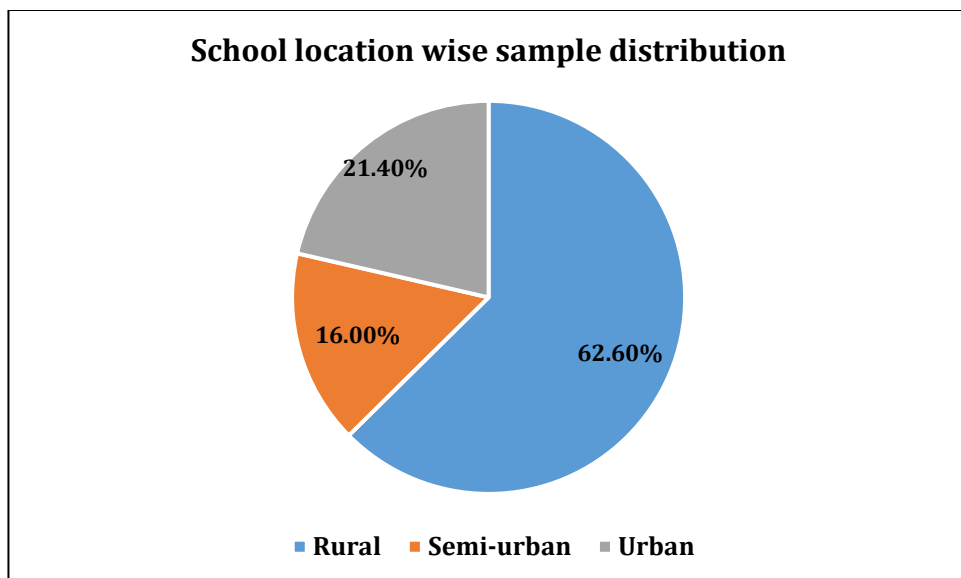


Figure 3.12 Showing membership in social organization wise sample distribution

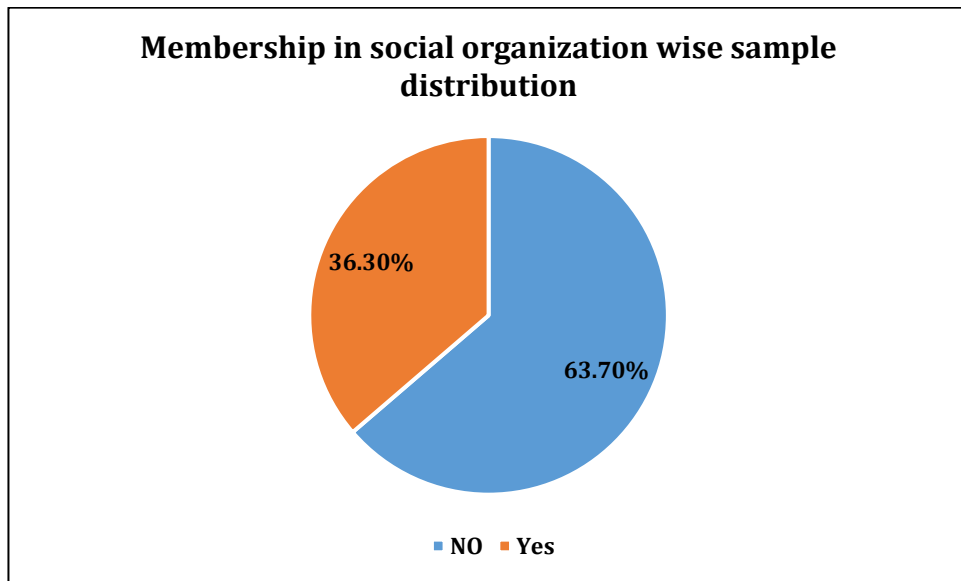


Figure 3.13 Showing teachers training qualification year wise sample distribution

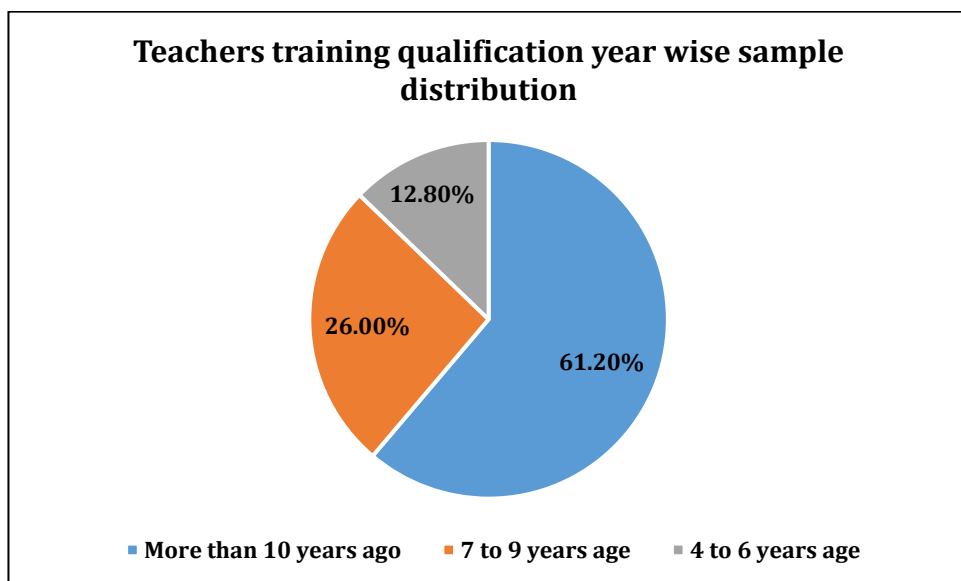


Figure 3.14 Showing teaching as a first career choice wise sample distribution

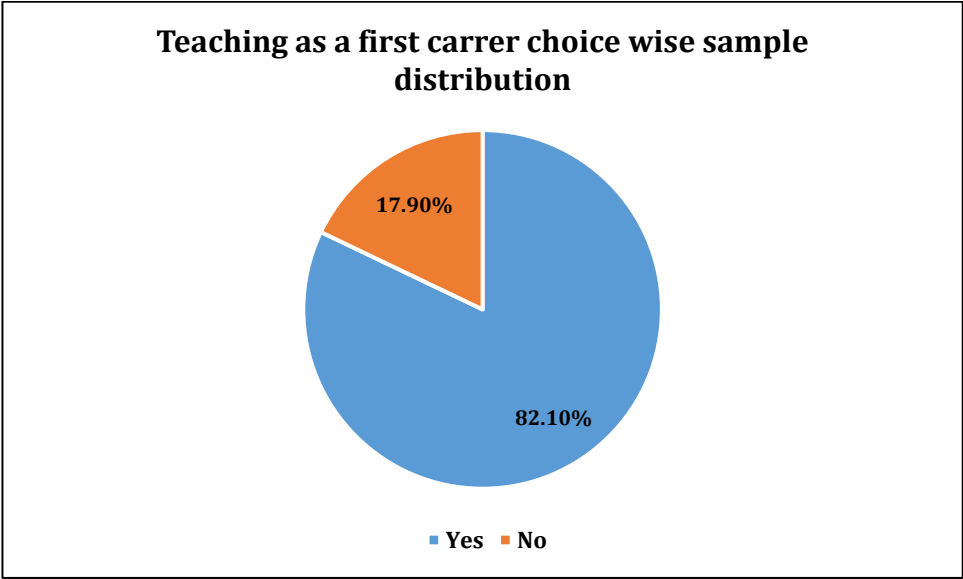


Figure 3.15 Showing work experience wise sample distribution

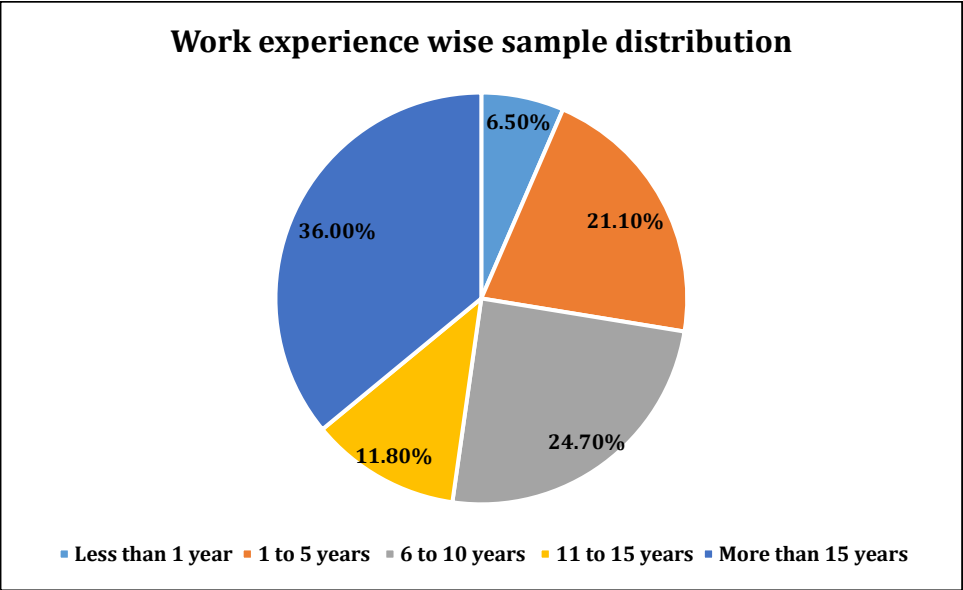


Figure 3.16 Showing religion wise sample distribution

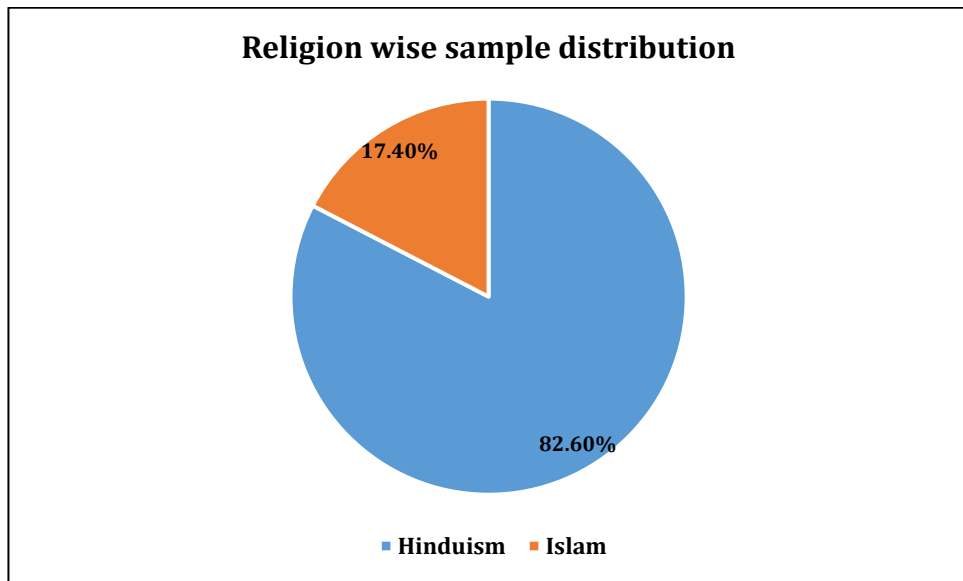
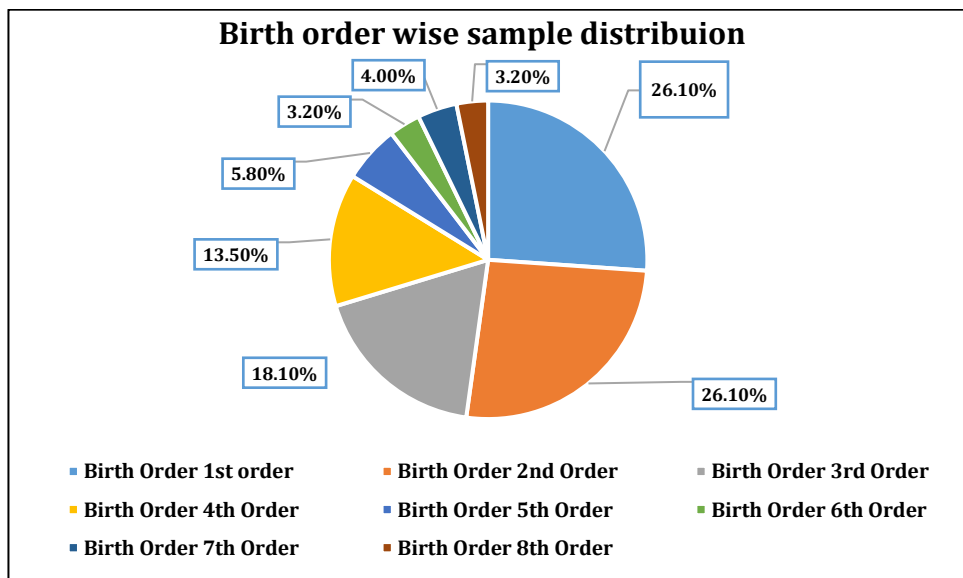


Figure 3.17 Showing birth order wise sample distribution



3.1.4 Description of Variables

In this study following independent and dependent variables were taken –

- **Independent Variables –**

- i. **Gender:** *There are two categories considered, i.e., Male and Female.*
- ii. **Marital Status:** *There are two categories considered, i.e., Married and Un-married.*
- iii. **Social Category:** *There are four categories considered, i.e., General, SC, ST, OBC.*
- iv. **Family Structure:** *There are two categories considered, i.e., Joint and Nuclear.*
- v. **Highest Educational Qualification:** *There are three categories considered, i.e., HS, BA, and MA.*
- vi. **Academic Discipline:** *There are three categories considered, i.e., Arts, Science and Commerce.*
- vii. **School Location:** *There are three categories considered, i.e., Rural, Semi-urban and Urban.*
- viii. **Membership in Social Organization:** *There are two categories considered, i.e., No and Yes.*
- ix. **Teachers Training Qualification Year:** *There are three categories considered, i.e., More than 10 years ago, 7 to 9 years ago, 4 to 6 years ago.*
- x. **Teaching as a First Career Choice:** *There are two categories considered, i.e., Yes and No.*
- xi. **Work Experience:** *There are five categories considered, i.e., Less than 1 year, 1 to 5 years, 6 to 10 years, 11 to 15 years, more than 15 years.*
- xii. **Religion:** *There are two categories considered, i.e., Hinduism and Islam.*
- xiii. **Birth Order:** *There are eight categories considered, i.e., 1st order, 2nd order, 3rd order, 4th order, 5th order, 6th order, 7th order and 8th order.*

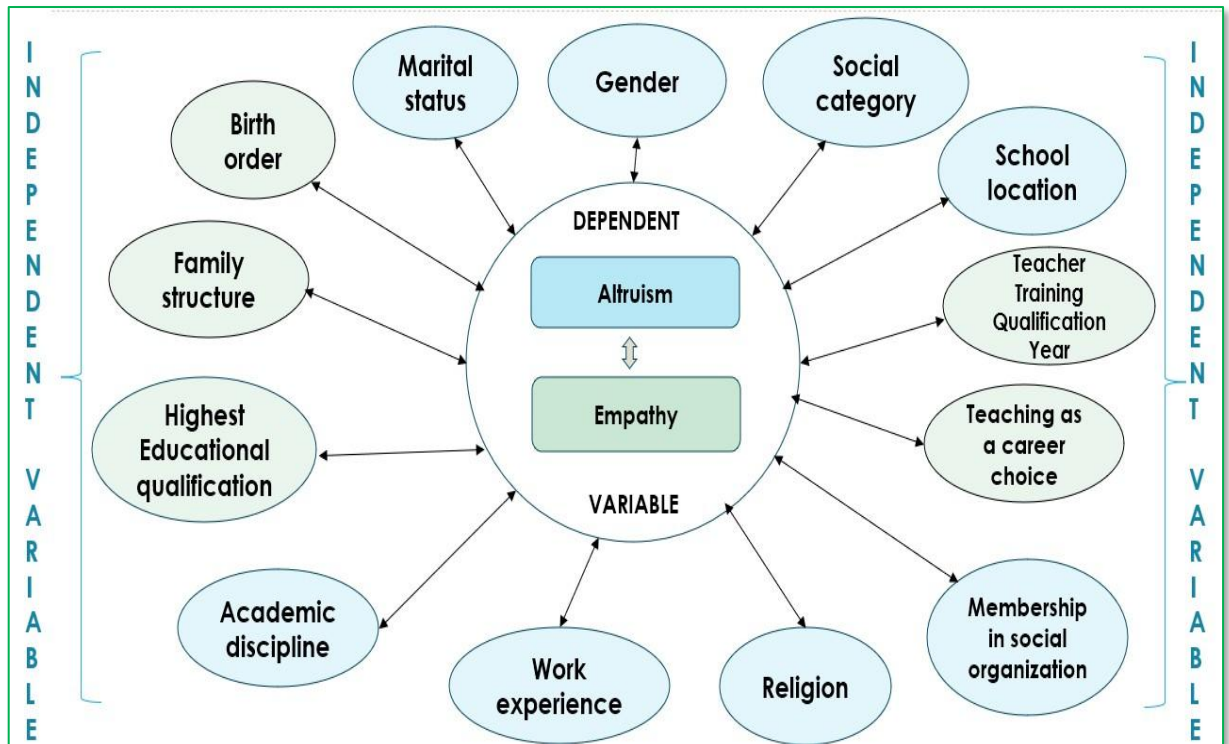
- **Dependent Variable –**

Dependent variables are the outcomes or responses that researchers measure in an experiment or study. These variables are influenced or affected by changes in the independent variables (the factors that are manipulated or controlled). In this study, the dependent variables are:

1. **Teachers' Altruism**
2. **Teachers' Empathy**

3.1.5 Interaction Between Variables

Figure 3.18 Diagram showing variables interaction



3.1.6 Tools Used for Data Collection

In the present study, three tools were used for data collection, namely the Teachers Altruism scale, Teachers Empathy scale and the Teachers Basic Information Schedule. These three instruments are discussed above.

Instrument 1: Teachers Altruism scale

The Teachers' Altruism Scale was developed by the researcher with assistance from their supervisor to assess the altruistic behavior of primary school teachers. The scale includes two main dimensions: Helpfulness and Gratitude, which were adapted from the 'Helping Attitude Scale' (Gary Nickell, 2000) and 'The Gratitude Scale' (McCullough et al., 2002). Based on a literature review and expert input, the scale consists of 27 items measured on a 5-point Likert scale. Following pilot testing and expert validation, the final version of the tool demonstrated excellent reliability (Cronbach's Alpha = .904) and validity, confirming its suitability for the study. The minimum score is 0 and maximum score is 108.

Table 3.4 Showing dimensions and number of items.

<i>Sl. No.</i>	<i>Dimensions</i>	<i>Number of items</i>
1.	Helpfulness	7, 8, 9, 15, 10, 11, 14, 6
2.	Gratitude	22, 16, 17
3.	Commitment to Students' Well-Being	1, 2, 3, 4, 5, 13
4.	Moral Responsibility and Ethical Behavior	12, 19, 20, 21, 23, 18
5.	Charity	24, 25, 26, 27
Total Number of Items		27

Scoring Norms

Scoring Procedure

Strongly Agree = 4, Agree = 3, Sometimes = 2, Disagree = 1, Strongly Disagree = 0

Reliability and Validity

In the present study, a pilot study was conducted by the researcher to assess the internal consistency of the altruism scale using a sample of 183 participants. The researcher, with the assistance of their supervisor, translated the scale into Bengali while ensuring the preservation of its psychometric properties according to established standards. To maintain the content, concurrent, and face validity, the researcher sought guidance from their supervisor and a subject expert. Prior to the final data collection, the researcher also verified the reliability of the scale. The following table presents the internal consistency results of the data collected in the current study.

Table 3.5 Showing reliability of the altruism scale

<i>Sample size</i>	<i>Cronbach's alpha (α)</i>
Pilot Study (183)	0.904
Final (570)	0.916

Instrument 2: Toronto Empathy Questionnaire (TEQ)

The Toronto Empathy Questionnaire (TEQ), developed by Spreng, McKinnon, Mar, and Levine in 2009, is a tool designed to assess an individual's level of empathy through a set of positive and negative statements. The questionnaire consists of items categorized into two groups: Positive Statements (items 1, 3, 5, 6, 8, 9, 13, and 16) and Negative Statements (items 2, 4, 7, 10, 11, 12, 14, and 15). The scoring system for positive statements assigns points based on frequency of agreement (Never=0, Rarely=1, Sometimes=2, Often=3, Always=4), while for negative statements, the scoring is reversed (Never=4, Rarely=3, Sometimes=2, Often=1, Always=0). This bilingual version of the TEQ allows for better accessibility in different linguistic contexts, with higher scores indicating higher empathy levels.

Reliability and Validity

In the present study, a pilot study was conducted by the researcher to assess the internal consistency of the Toronto empathy questionnaire using a sample of 110 participants. The researcher, with the assistance of their supervisor, translated the scale into Bengali while ensuring the preservation of its psychometric properties according to established standards. To maintain the content, concurrent, and face validity, the researcher sought guidance from their supervisor and a subject expert. Prior to the final data collection, the researcher also verified the reliability of the scale. The following table presents the internal consistency results of the data collected in the current study.

Table 3.6 Showing reliability of Toronto Empathy Questionnaire (TEQ)

<i>Sample size</i>	<i>Cronbach's alpha (α)</i>
Pilot Study (110)	0.845
Final (570)	0.896

Instrument 3: Teachers Basic Information Schedule

A schedule of required information about the teachers was prepared and placed with the main instrument. This schedule seeks information about teachers' gender, marital status, social category, family structure, highest educational qualification, academic discipline, school location, membership in school organization, teachers training qualification year,

teaching as a first career choice, work experience, religion and birth order. In accordance with research ethics, the names or any other personally identifiable information of the teachers was not collected in the information schedule.

3.2 Procedure

This section provides a detailed explanation of the steps taken to administer the test instruments for data collection, followed by the process of filtering, organizing, and analyzing the results.

3.2.1 Data Collection

During visits to primary school, the researcher first met the head masters/ head mistress to explain the purpose and procedures of the study. The researcher also assured them about the confidentiality of the information and data collected. An authorization letter from the supervisor, representing the Department of Education, Jadavpur University, was submitted to formally request permission for data collection.

After receiving approval from the respective schools, data collection commenced. Permission was granted by 160 government aided primary school across all six districts. Once authorization was obtained, survey questionnaires were distributed to the participating teachers. No strict time limit was imposed for completing the surveys, although about 95% of the teachers finished within 40 minutes. Data collection was carried out on weekdays between November, 2024 to March, 2025.

3.2.2 Data Quality

A total of 594 Teachers completed the questionnaires. However, 24 participants either did not complete the surveys or provided incomplete information, leading to their exclusion from the dataset. Therefore, data from the remaining 570 teachers were used as the sample for this study.

3.2.3 Data Analysis

The researcher organized the data using Microsoft Excel and conducted statistical analysis with IBM SPSS version 20. Descriptive statistics, including mean and standard deviation, were applied to describe the sample distributions. For inferential analysis,

independent sample t-test, one-way ANOVA, and correlation techniques were used. These methods supported drawing conclusions about the larger population from the sample data.

3.2.4 Normality of Data

The current study used a large sample size of over 30 participants. The Shapiro Wilk test was applied to assess the normality of the data. Due to the sample size of 570, the Kolmogorov-Smirnov test was not applicable. The Shapiro-Wilk test revealed a significant p-value of 0.000* for the total perceived learning environment variable, indicating that the data distribution was not normal. According to the central limit theorem, when the sample size exceeds 30, the distribution of sample means tends to approach normality, even if the underlying population distribution is not normal. In cases like this, where data is collected using multistage sampling from a large population, parametric tests can still be used.

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CHAPTER IV
ANALYSIS AND INTERPRETATION OF DATA

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

Data analysis and interpretation constitute two vital phases of any research work. Analysis involves carefully organizing, classifying, and simplifying the collected information so that the research questions can be addressed in a meaningful way. Interpretation, on the other hand, is concerned with understanding the significance of the analyzed information and drawing reasoned conclusions from it. Different approaches are used to handle data depending on its nature. Quantitative information, such as survey responses or results of experiments, is usually studied through statistical techniques. In contrast, qualitative approaches are applied to non-numerical data like interview transcripts, field notes, or observational records. The task of interpretation goes beyond simply presenting results. It requires linking the findings with earlier research, developing possible explanations, or even proposing new theoretical insights. This process must remain clear, concise, and impartial so that the conclusions are credible. Together, data analysis and interpretation form the backbone of the research process. They help researchers to answer their central questions, develop fresh ideas, and contribute to the creation of new knowledge. In the present study, this chapter has been organized into two main parts: descriptive statistics and inferential statistics (including hypothesis testing). The descriptive section offers a detailed picture of the features and trends within the data, while the inferential section evaluates the significance of the results and the validity of the conclusions drawn from them.

4.1 Descriptive Statistics

Descriptive statistics represent an important branch of statistics that focuses on the collection, organization, presentation, and basic interpretation of data. Its primary purpose is to summarize and highlight the essential features of a dataset, thereby providing a clear and meaningful overview. Through this process, large volumes of information are transformed into a more concise and understandable form.

In the present study, descriptive statistics have been employed to examine the distribution of mean scores and standard deviations across various explanatory and

independent variables. These analyses were conducted with particular reference to teachers' Altruism and Empathy offering an initial picture of the data before moving toward more advanced statistical procedures.

4.1.1 Overall descriptive scores of Teachers Altruism based on various demographic variables.

Table 4.1 Showing mean score distribution of teacher's Altruism based on gender.

<i>Dependent variable</i>	<i>Category of gender</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	MALE	367	88.17	12.638
	FEMALE	203	90.87	12.618

Figure 4.1 Presenting mean score distribution of teacher's Altruism based on gender.

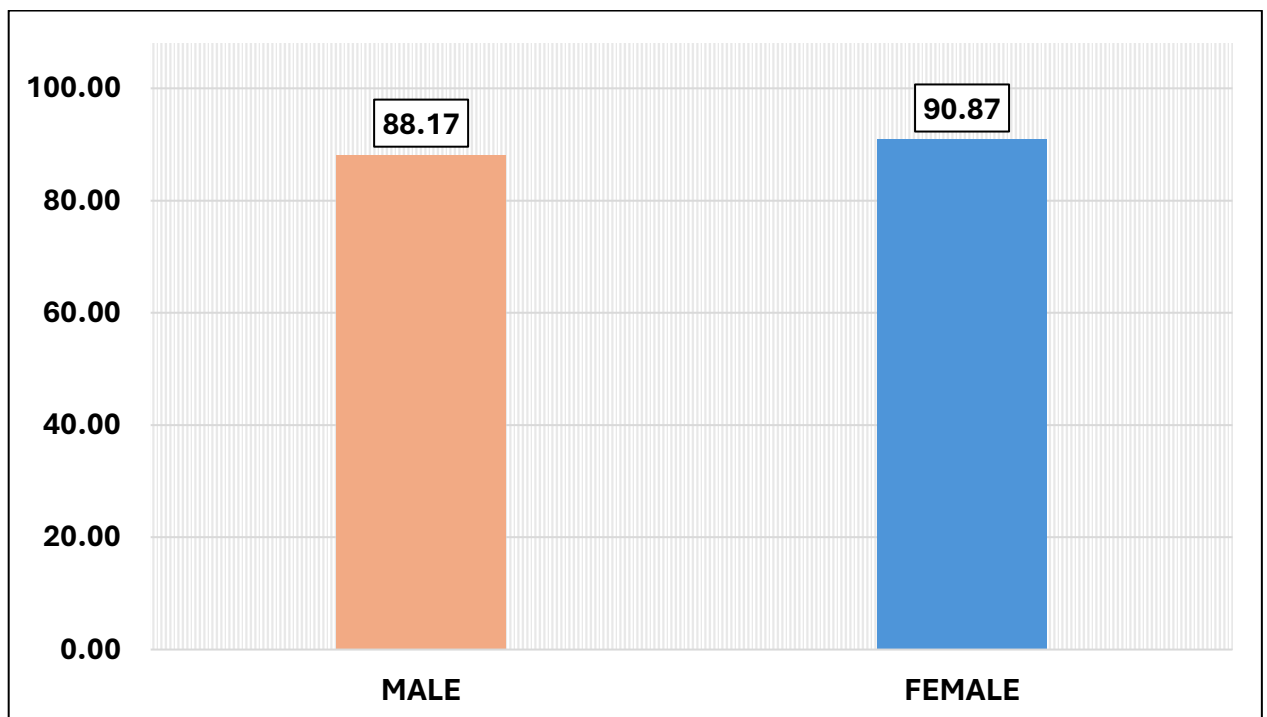


Figure 4.1 presents the mean score distribution of altruism among primary teachers based on gender. Male teachers (N=367) obtained a mean score of 88.17 with a standard deviation of 12.638, whereas female teachers (N=203) recorded a higher mean score of

90.87 with a standard deviation of 12.618. Thus, it can be interpreted that female teachers demonstrated slightly greater altruism compared to their male counterparts.

Table 4.2 Showing mean score distribution of teacher's Altruism based on marital status.

<i>Dependent variable</i>	<i>Category of Marital status</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	MARRIED	452	89.89	13.148
	UNMARRIED	118	86.22	10.273

Figure 4.2 Presenting mean score distribution of teacher's Altruism based on marital status.

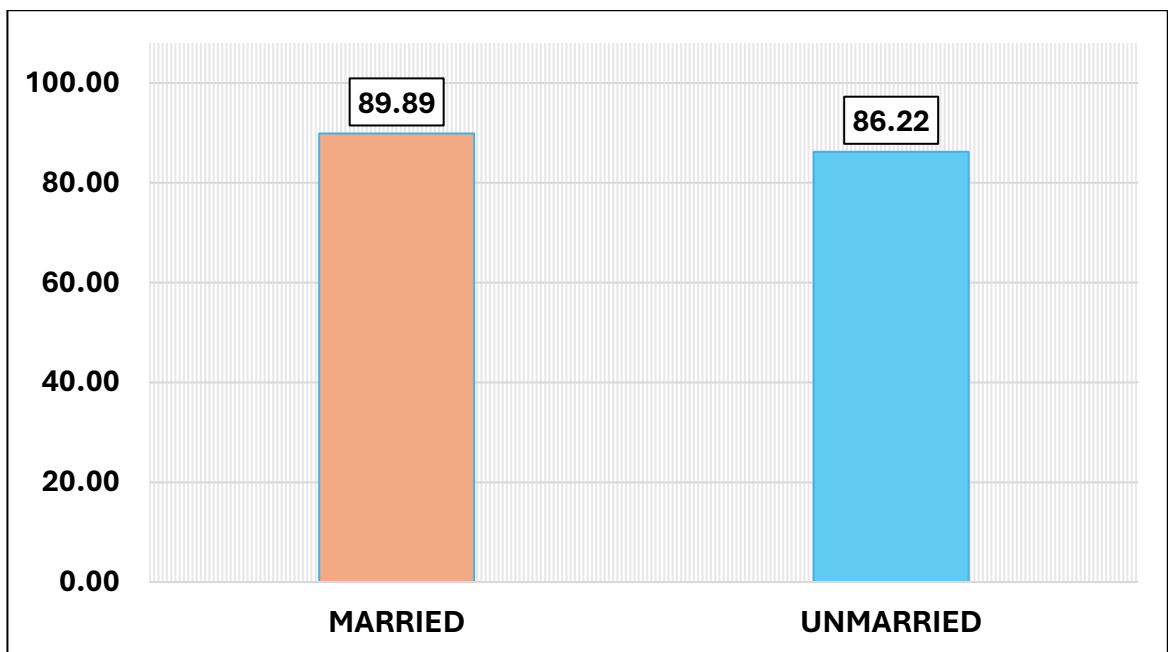


Figure 4.2 shows the mean score distribution of altruism among teachers based on marital status. Married teachers (N=452) obtained a mean score of 89.89 with a standard deviation of 13.148, while unmarried teachers (N=118) recorded a mean score of 86.22 with a standard deviation of 10.273. Hence, it can be interpreted that married teachers exhibited higher altruism than unmarried teachers.

Table 4.3 Showing mean score distribution of teacher's Altruism based on social category.

<i>Dependent variable</i>	<i>Category of social category</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	GENERAL	249	91.10	12.880
	SC	169	89.02	11.387
	ST	36	83.19	14.972
	OBC	116	86.91	12.508

Figure 4.3 Presenting mean score distribution of teacher's Altruism based on social category.

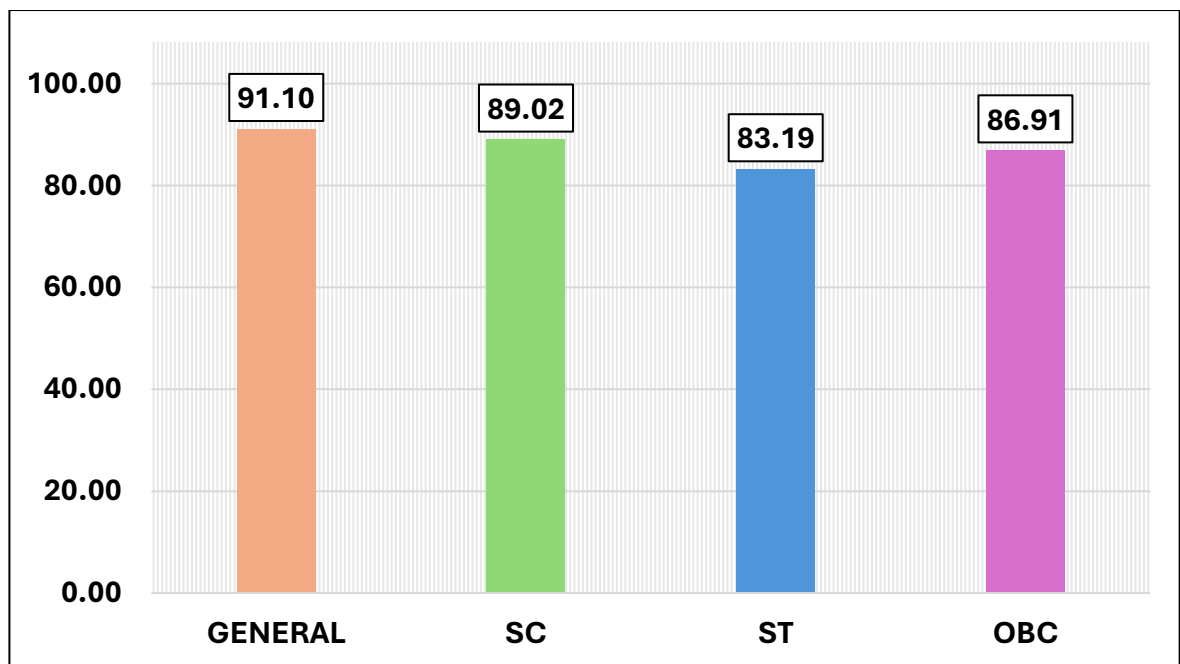


Figure 4.3 presents the mean score distribution of altruism among teachers across different social categories. Teachers belonging to the General category (N=249) obtained the highest mean score of 91.10 with a standard deviation of 12.880. Teachers from the SC category (N=169) recorded a mean score of 89.02 (SD = 11.387), followed by OBC teachers (N=116) with a mean score of 86.91 (SD = 12.508). The ST group (N=36) showed the lowest mean altruism score of 83.19 with a standard deviation of 14.972. Thus, it can be interpreted that altruism was highest among teachers of the General category, while teachers from the SC, OBC, and ST category reflected comparatively lower altruism.

Table 4.4 Showing mean score distribution of teacher's Altruism based on family structure.

<i>Dependent variable</i>	<i>Category of family structure</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	JOINT	279	87.16	12.263
	NUCLEAR	291	91.02	12.818

Figure 4.4 Presenting mean score distribution of teacher's Altruism based on family structure.

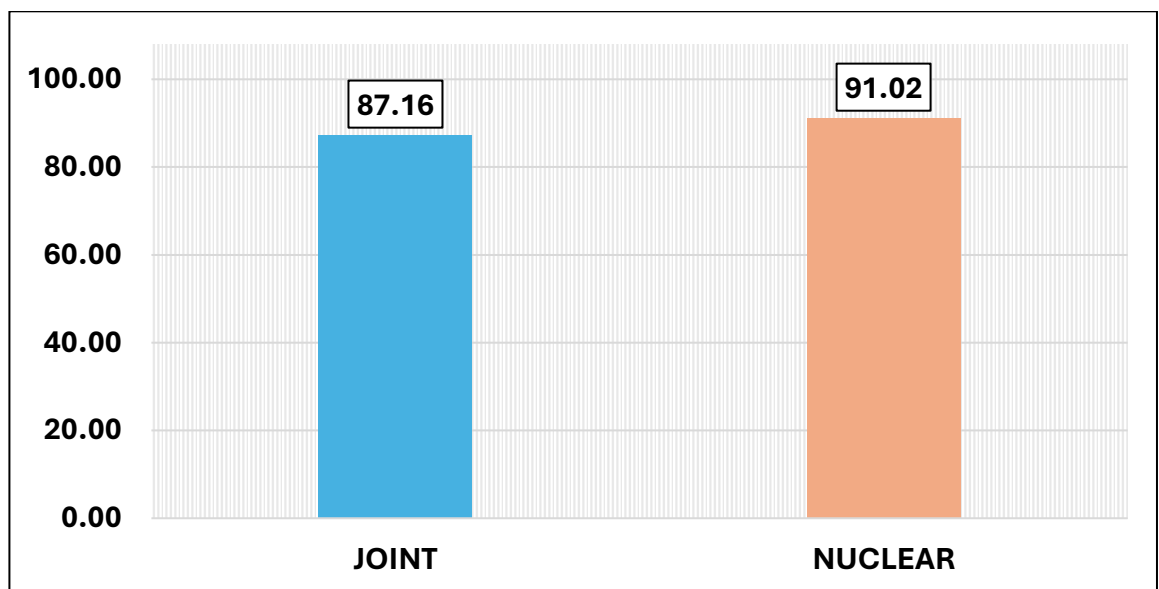


Figure 4.4 shows the mean score distribution of altruism among teachers based on family structure. Teachers from joint families (N=279) obtained a mean score of 87.16 with a standard deviation of 12.263, whereas those from nuclear families (N=291) recorded a higher mean score of 91.02 with a standard deviation of 12.818. Hence, it can be interpreted that teachers belonging to nuclear families demonstrated greater altruism compared to teachers from joint families.

Table 4.5 Showing mean score distribution of teacher's Altruism based on highest educational qualification.

<i>Dependent variable</i>	<i>Category of highest educational qualification</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	HIGHER SECONDARY	165	92.71	12.112
	BACHELOR'S DEGREE	238	87.53	12.470
	MASTER'S DEGREE	167	87.88	12.913

Figure 4.5 Presenting mean score distribution of teacher's Altruism based on highest educational qualification.

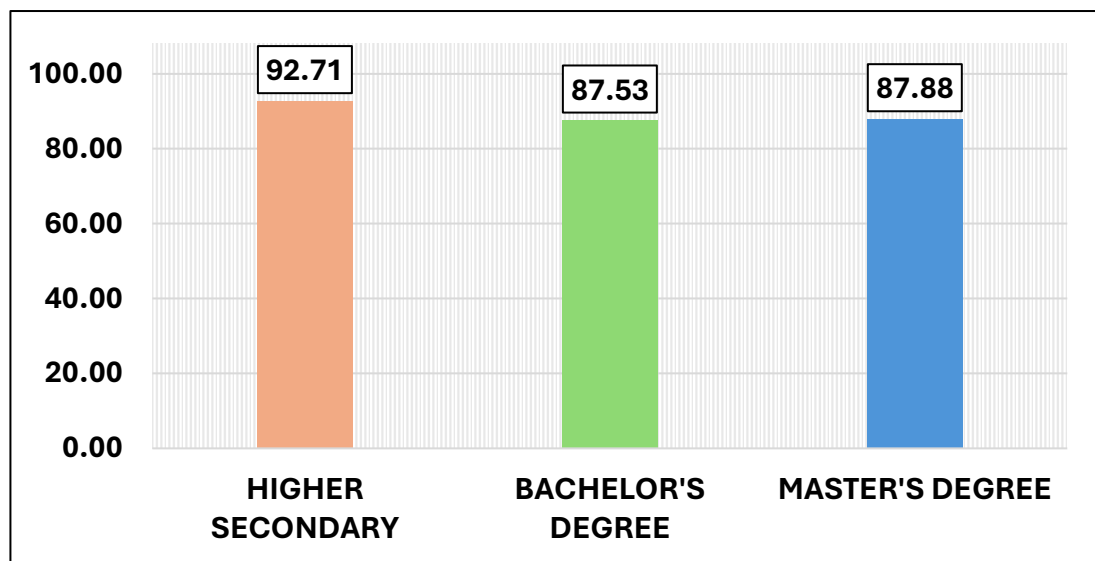


Figure 4.5 presents the mean score distribution of altruism among teachers based on their highest educational qualification. Teachers with a Higher Secondary qualification (N=165) obtained the highest mean score of 92.71 with a standard deviation of 12.112. Those holding a Master's degree (N=167) recorded a mean score of 87.88 (SD = 12.913), while teachers with a Bachelor's degree (N=238) showed a mean score of 87.53 (SD = 12.470). Thus, it can be interpreted that teachers with Higher Secondary qualifications demonstrated greater altruism compared to those with graduate or postgraduate degrees.

Table 4.6 Showing mean score distribution of teacher's Altruism based on Academic discipline.

<i>Dependent variable</i>	<i>Category of Academic discipline</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	ARTS	386	90.18	13.161
	SCIENCE	154	86.81	11.560
	COMMERCE	30	87.57	10.361

Figure 4.6 Presenting mean score distribution of teacher's Altruism based on Academic discipline.

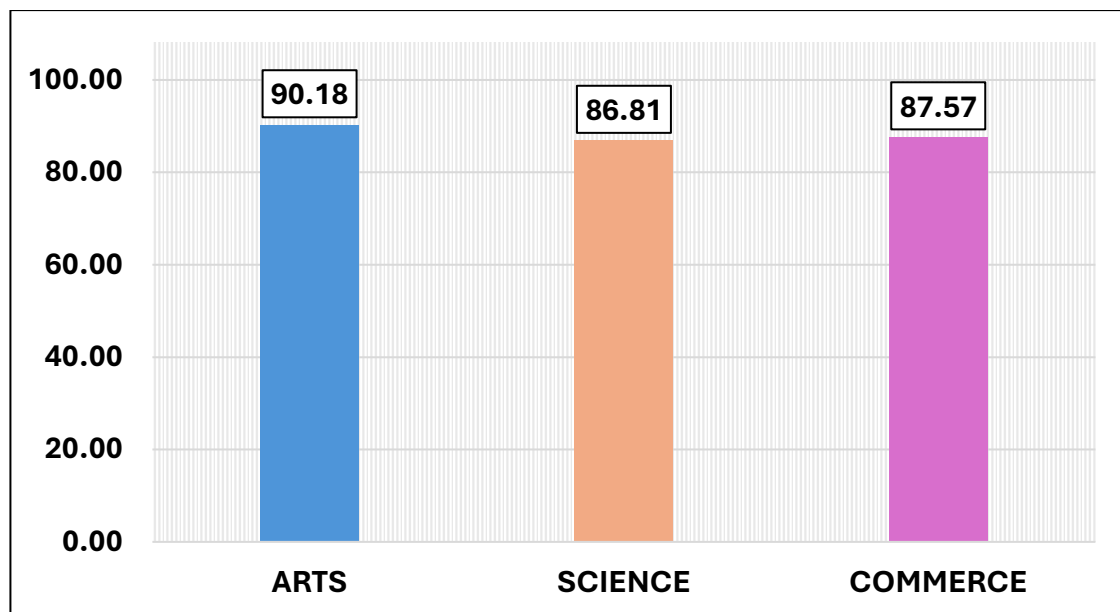


Figure 4.6 shows the mean score distribution of altruism among teachers according to their academic discipline. Teachers from the Arts background (N=386) obtained a mean score of 90.18 with a standard deviation of 13.161. Teachers with a Science background (N=154) recorded a mean score of 86.81 (SD = 11.560), while those from Commerce (N=30) showed a mean score of 87.57 with a standard deviation of 10.361. Hence, it can be interpreted that teachers belonging to the Arts discipline demonstrated comparatively higher altruism than those from Science and Commerce backgrounds.

Table 4.7 Showing mean score distribution of teacher's Altruism based on School location.

<i>Dependent variable</i>	<i>Category of School location</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	RURAL	357	90.45	11.734
	SEMI-URBAN	91	87.10	13.274
	URBAN	122	86.80	14.387

Figure 4.7 Presenting mean score distribution of teacher's Altruism based on School location.

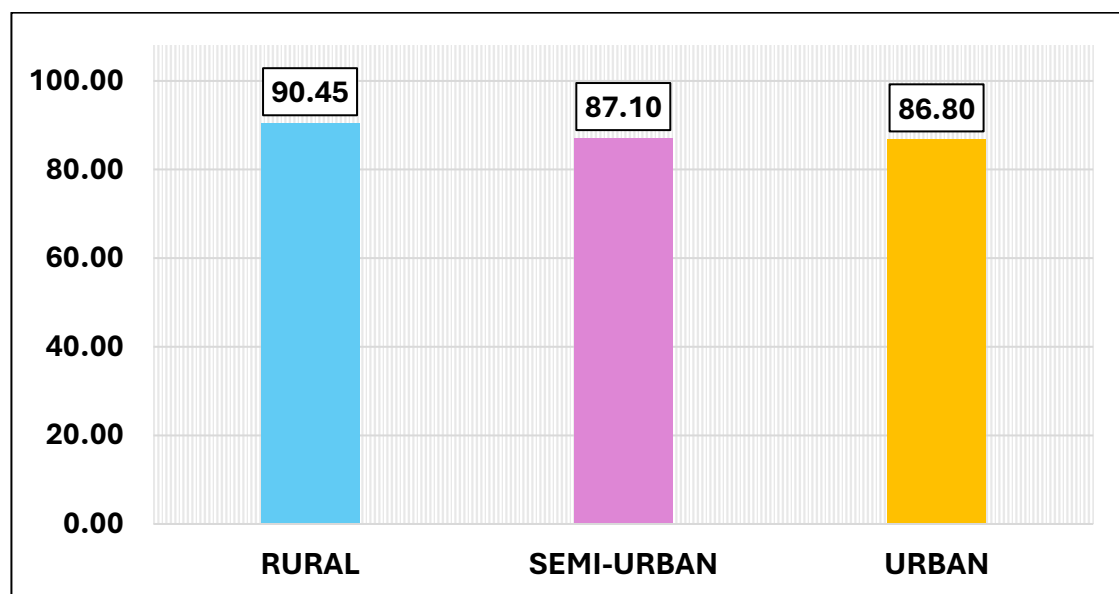


Figure 4.7 presents the mean score distribution of altruism among teachers according to school location. Teachers working in rural schools (N=357) obtained the highest mean score of 90.45 with a standard deviation of 11.734. Teachers from semi-urban schools (N=91) recorded a mean score of 87.10 (SD = 13.274), while those from urban schools (N=122) showed the lowest mean score of 86.80 with a standard deviation of 14.387. Thus, it can be interpreted that teachers in rural schools demonstrated greater altruism compared to their semi-urban and urban counterparts.

Table 4.8 Showing mean score distribution of teacher's Altruism based on membership in social organization.

<i>Dependent variable</i>	<i>Category of membership in social organization</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	NO	363	87.67	12.079
	YES	207	91.71	13.331

Figure 4.8 Presenting mean score distribution of teacher's Altruism based on membership in social organization.

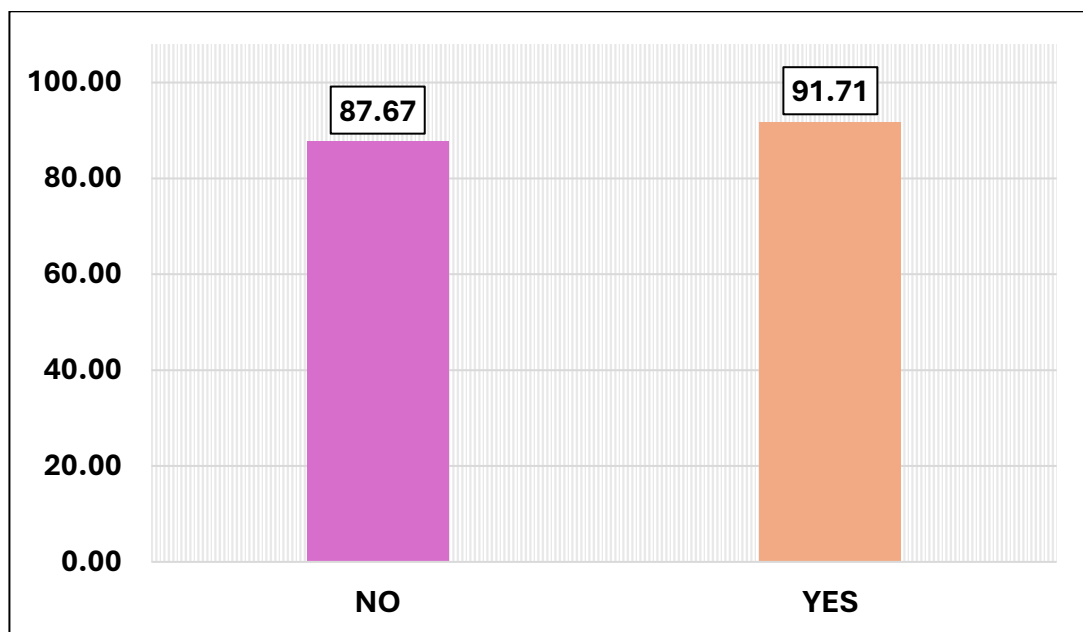


Figure 4.8 shows the mean score distribution of altruism among teachers based on their membership in social organizations. Teachers who were not members of any social organization (N=363) obtained a mean score of 87.67 with a standard deviation of 12.079, whereas teachers who reported membership in such organizations (N=207) recorded a higher mean score of 91.71 with a standard deviation of 13.331. Hence, it can be interpreted that teachers associated with social organizations demonstrated greater altruism compared to those who were not members.

Table 4.9 Showing mean score distribution of teacher's Altruism based on Teachers' training qualification year.

<i>Dependent variable</i>	<i>Category of Teachers' training qualification year</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	MORE THAN 10 YEARS AGO	349	89.70	12.366
	7 TO 9 YEARS AGO	148	88.19	13.424
	4 TO 6 YEARS AGO	73	88.34	12.681

Figure 4.9 Presenting mean score distribution of teacher's Altruism based on Teachers' training qualification year.

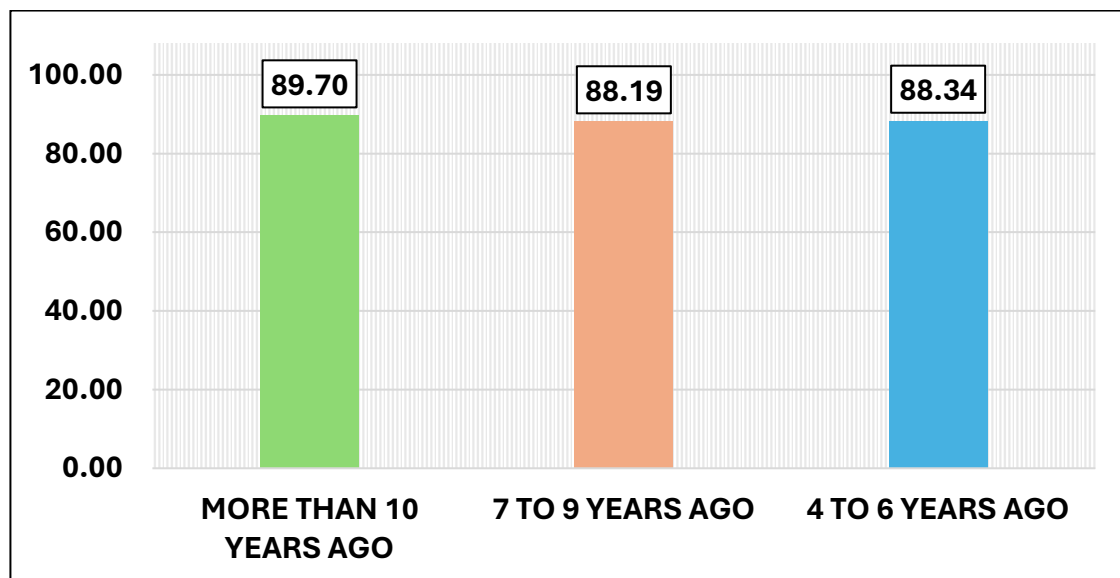


Figure 4.9 presents the mean score distribution of altruism among teachers according to the year of their training qualification. Teachers who completed their training more than 10 years ago (N=349) obtained the highest mean score of 89.70 with a standard deviation of 12.366. Those who received training 4 to 6 years ago (N=73) recorded a mean score of 88.34 (SD = 12.681), while teachers trained 7 to 9 years ago (N=148) showed a mean score of 88.19 with a standard deviation of 13.424. Thus, it can be interpreted that teachers trained more than 10 years ago demonstrated comparatively greater altruism than those trained in recent years.

Table 4.10 Showing mean score distribution of teacher's Altruism based on teaching as first career choice.

<i>Dependent variable</i>	<i>Category of teaching as first career choice</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	YES	468	89.67	12.336
	NO	102	86.69	13.989

Figure 4.10 Presenting mean score distribution of teacher's Altruism based on teaching as first career choice.

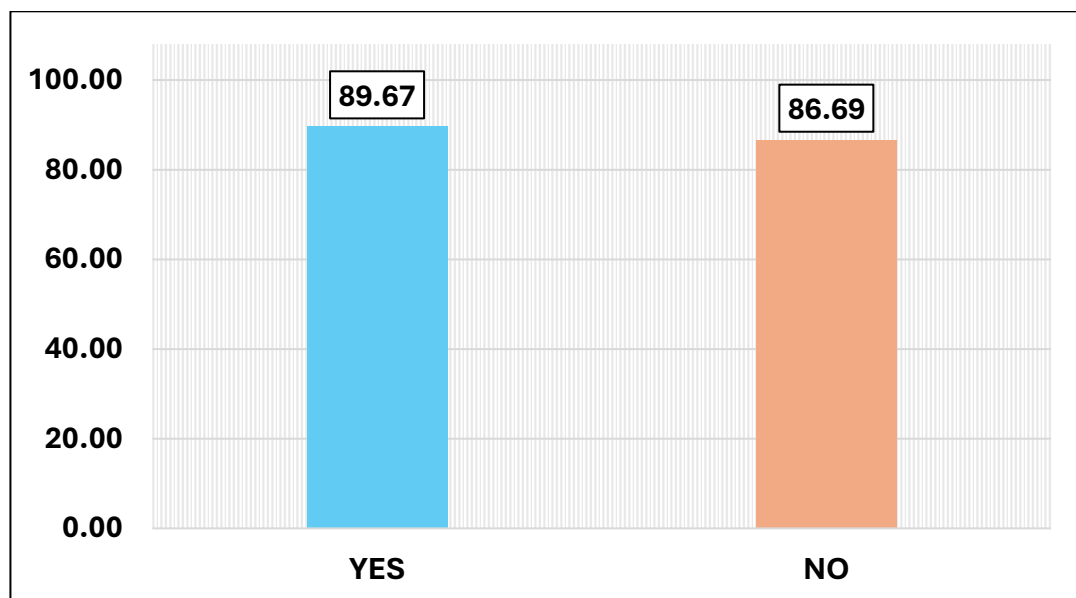


Figure 4.10 shows the mean score distribution of altruism among teachers based on whether teaching was their first career choice. Teachers who reported teaching as their first career choice (N=468) obtained a mean score of 89.67 with a standard deviation of 12.336, while those who indicated teaching was not their first choice (N=102) recorded a lower mean score of 86.69 with a standard deviation of 13.989. Hence, it can be interpreted that teachers who chose teaching as their first career option demonstrated greater altruism than those for whom it was not the primary choice.

Table 4.11 Showing mean score distribution of teacher's Altruism based on work experience.

<i>Dependent variable</i>	<i>Category of work experience</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	LESS THAN 1 YEAR	37	91.57	9.940
	1 TO 5 YEARS	120	89.97	12.260
	6 TO 10 YEARS	141	89.23	12.700
	11 TO 15 YEARS	67	88.45	13.094
	MORE THAN 15 YEARS	205	88.36	13.243

Figure 4.11 Presenting mean score distribution of teacher's Altruism based on work experience.

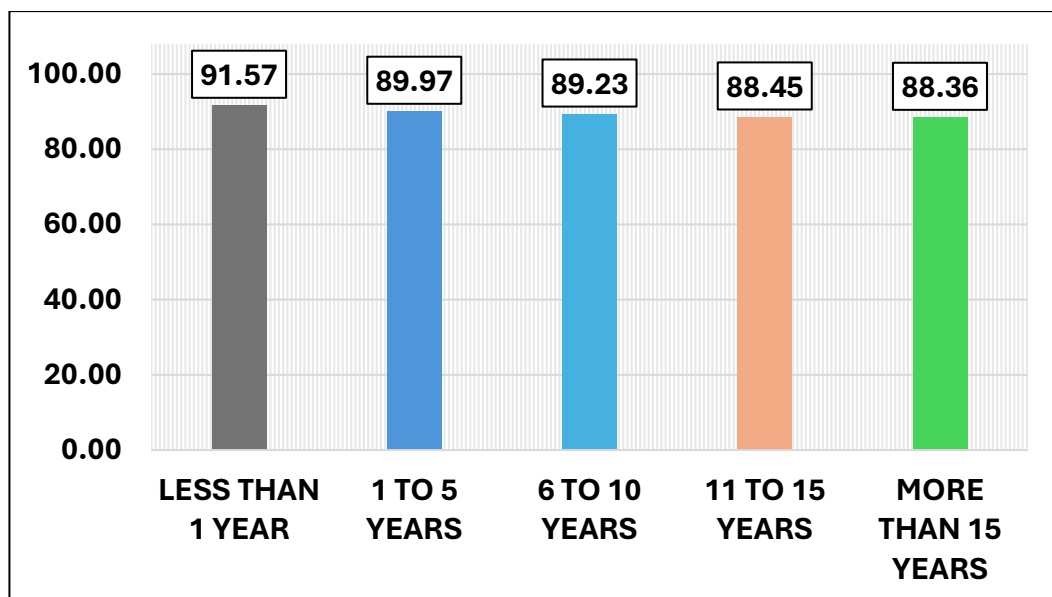


Figure 4.11 presents the mean score distribution of altruism among teachers according to their work experience. Teachers with less than 1 year of experience (N=37) obtained the highest mean score of 91.57 with a standard deviation of 9.940. Those with 1 to 5 years of experience (N=120) recorded a mean score of 89.97 (SD = 12.260), followed by teachers with 6 to 10 years (N=141) showing a mean score of 89.23 (SD = 12.700). Teachers having 11 to 15 years of experience (N=67) scored 88.45 (SD = 13.094), while

those with more than 15 years of experience (N=205) obtained the lowest mean score of 88.36 with a standard deviation of 13.243. Thus, it can be interpreted that teachers with less than one year of experience demonstrated comparatively higher altruism, whereas those with long service (over 15 years) reflected relatively lower altruism.

Table 4.12 Showing mean score distribution of teacher's Altruism based on Religion.

<i>Dependent variable</i>	<i>Category of Religion</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	HINDU	471	89.04	12.704
	MUSLIM	99	89.59	12.656

Figure 4.12 Presenting mean score distribution of teacher's Altruism based on Religion.

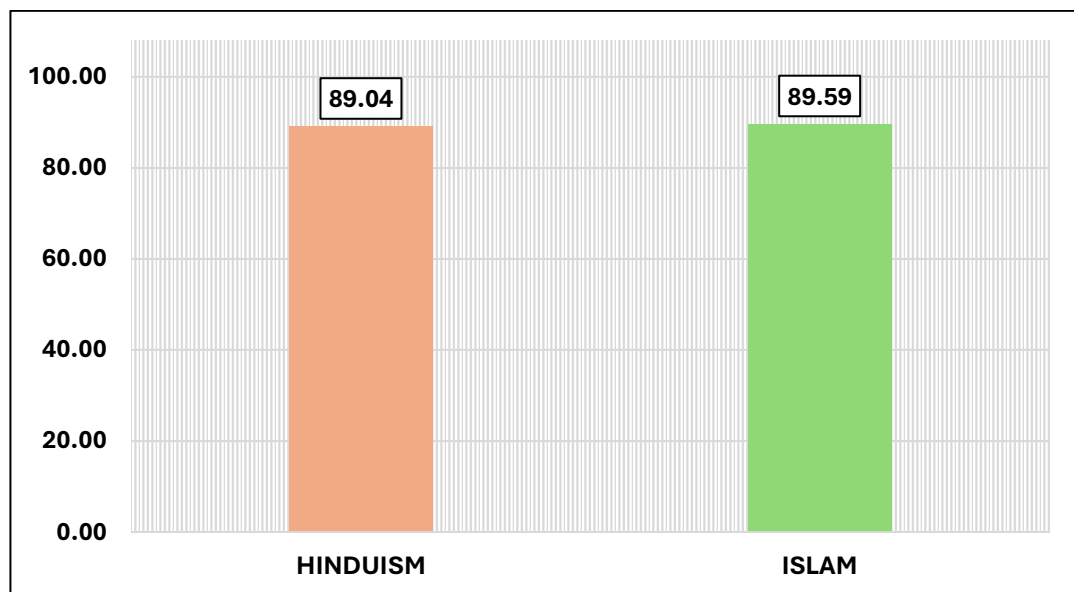


Figure 4.12 shows the mean score distribution of altruism among teachers based on religion. Teachers belonging to the Hindu religion (N=471) obtained a mean score of 89.04 with a standard deviation of 12.704, whereas teachers from the Muslim religion (N=99) recorded a slightly higher mean score of 89.59 with a standard deviation of 12.656. Hence, it can be interpreted that Muslim teachers showed marginally greater altruism compared to Hindu teachers, though the difference was minimal.

Table 4.13 Showing mean score distribution of teacher's Altruism based on birth order.

<i>Dependent variable</i>	<i>Category of birth order</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
ALTRUISM	1	149	89.28	13.001
	2	149	91.13	11.434
	3	103	90.84	11.099
	4	77	86.97	13.631
	5	33	88.00	11.638
	6	18	88.28	11.605
	7	23	80.65	17.510
	8	18	84.61	14.979

Figure 4.13 Presenting mean score distribution of teacher's Altruism based on birth order.

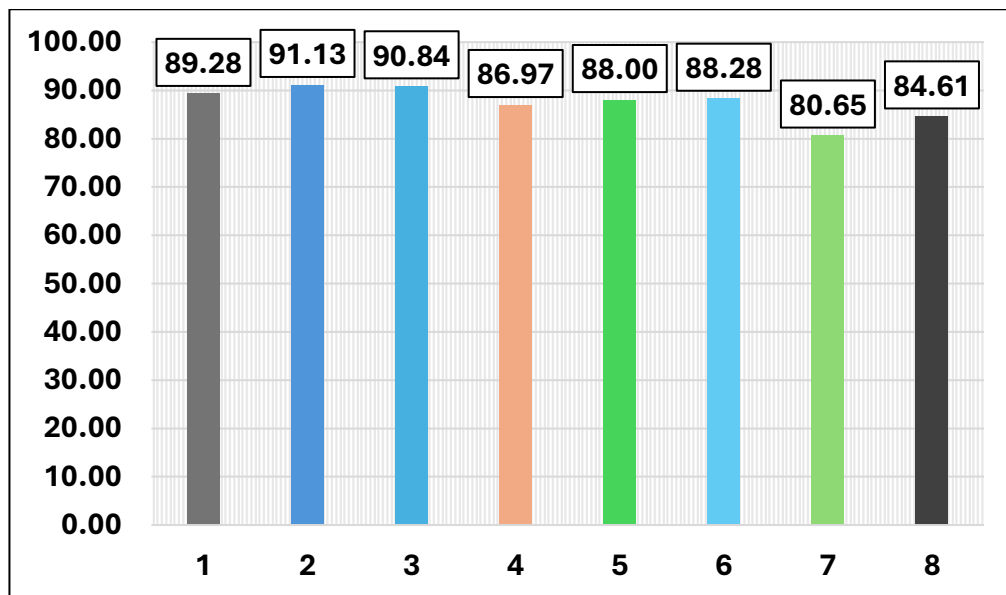


Figure 4.13 presents the mean score distribution of altruism among teachers according to their birth order. Teachers who were first-born (N=149) obtained a mean score of 89.28 with a standard deviation of 13.001, while second-born teachers (N=149) recorded the highest mean score of 91.13 (SD = 11.434). Third-born teachers (N=103) had a mean of 90.84 (SD = 11.099), followed by fourth-born teachers (N=77) with 86.97 (SD =

13.631). Teachers in the fifth (N=33) and sixth positions (N=18) showed mean scores of 88.00 (SD = 11.638) and 88.28 (SD = 11.605), respectively. Those who were seventh-born (N=23) obtained the lowest mean score of 80.65 (SD = 17.510), while eighth-born teachers (N=18) recorded a mean of 84.61 (SD = 14.979). Thus, it can be interpreted that second- and third-born teachers exhibited higher altruism, whereas teachers born in later positions, particularly seventh and eighth, demonstrated comparatively lower altruism.

4.1.2 Overall descriptive scores of Teachers Empathy based on various demographic variables.

Table 4.14 Showing mean score distribution of teacher's Empathy based on gender.

<i>Dependent variable</i>	<i>Category of gender</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	MALE	367	45.16	7.614
	FEMALE	203	48.26	6.580

Figure 4.14 Presenting mean score distribution of teacher's Empathy based on gender.

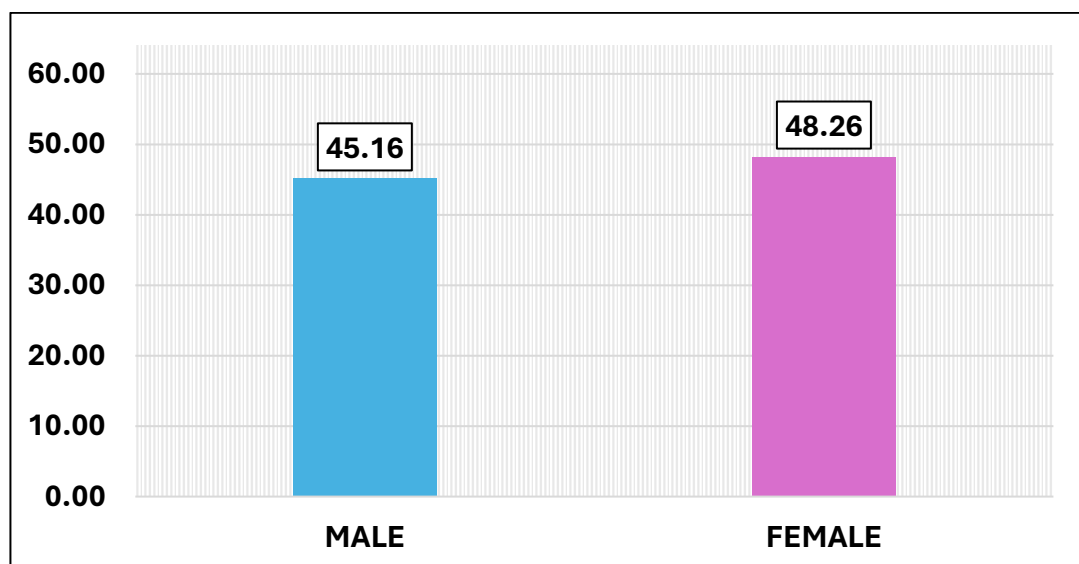


Figure 4.14 shows the mean score distribution of empathy among teachers based on gender. Male teachers (N=367) obtained a mean score of 45.16 with a standard deviation of 7.614, whereas female teachers (N=203) recorded a higher mean score of 48.26 with a

standard deviation of 6.580. Hence, it can be interpreted that female teachers demonstrated greater empathy compared to male teachers.

Table 4.15 Showing mean score distribution of teacher's Empathy based on marital status.

<i>Dependent variable</i>	<i>Category of marital status</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	MARRIED	452	45.89	7.289
	UNMARRIED	118	47.69	7.709

Figure 4.15 Presenting mean score distribution of teacher's Empathy based on marital status.

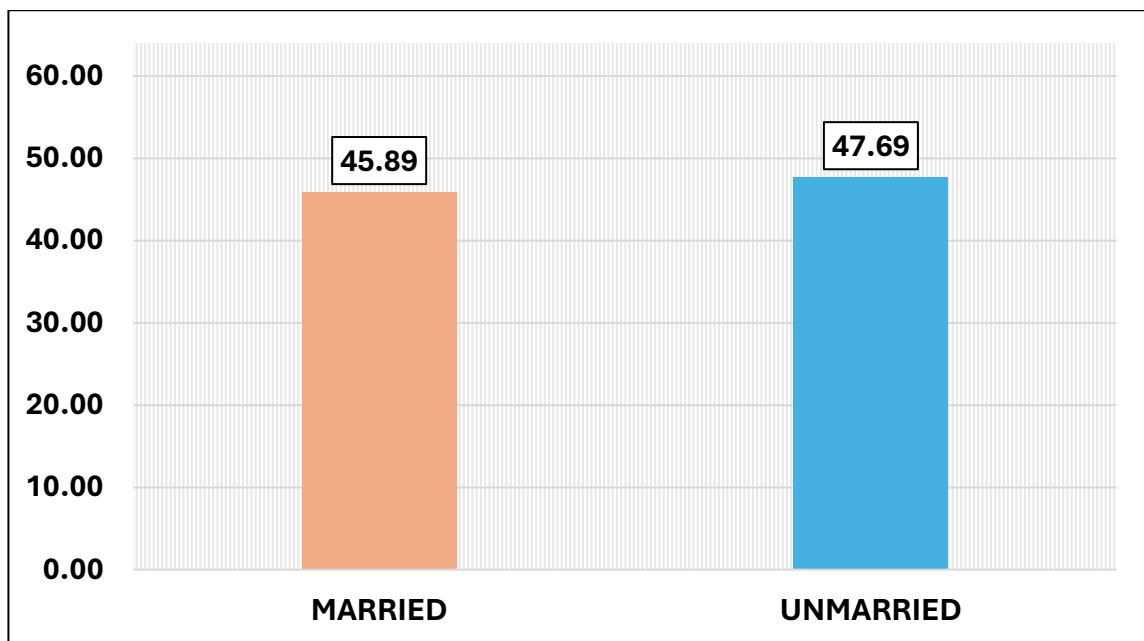


Figure 4.15 presents the mean score distribution of empathy among teachers based on marital status. Married teachers (N=452) obtained a mean score of 45.89 with a standard deviation of 7.289, while unmarried teachers (N=118) recorded a higher mean score of 47.69 with a standard deviation of 7.709. Hence, it can be interpreted that unmarried teachers demonstrated slightly greater empathy compared to married teachers.

Table 4.16 Showing mean score distribution of teacher's Empathy based on social category.

<i>Dependent variable</i>	<i>Category of social category</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	GENERAL	249	47.63	6.887
	SC	169	44.83	7.852
	ST	36	45.47	7.629
	OBC	116	45.65	7.329

Figure 4.16 Presenting mean score distribution of teacher's Empathy based on social category.

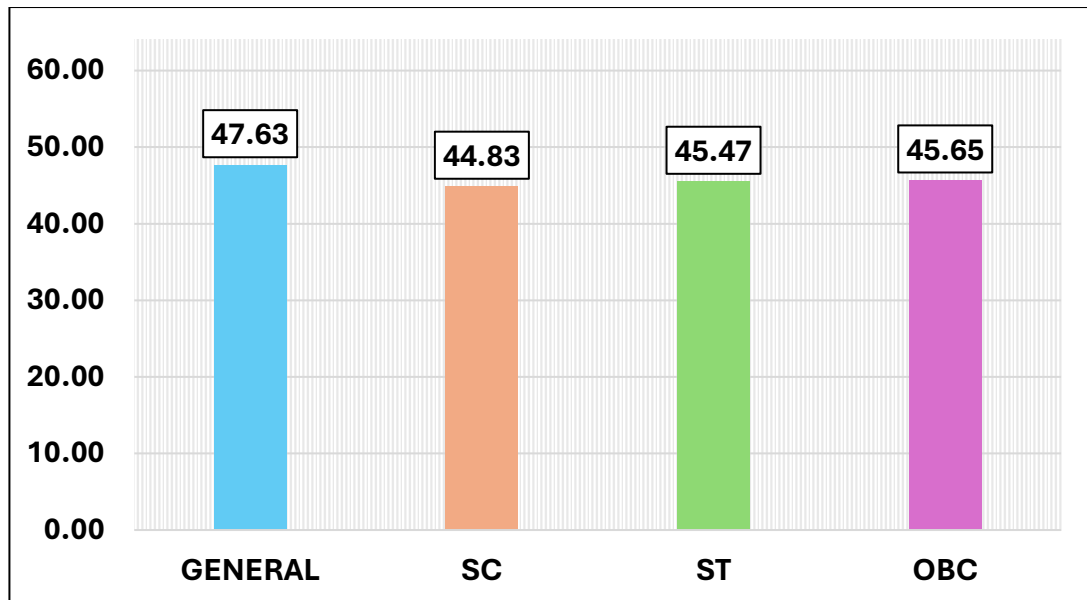


Figure 4.16 shows the mean score distribution of empathy among teachers across different social categories. Teachers from the General category (N=249) obtained the highest mean score of 47.63 with a standard deviation of 6.887. Teachers from the SC category (N=169) recorded a mean score of 44.83 (SD = 7.852), ST teachers (N=36) had a mean of 45.47 (SD = 7.629), and OBC teachers (N=116) showed a mean score of 45.65 with a standard deviation of 7.329. Hence, it can be interpreted that teachers from the General category demonstrated higher empathy, while SC category teachers reflected comparatively lower empathy.

Table 4.17 Showing mean score distribution of teacher's Empathy based on family structure.

<i>Dependent variable</i>	<i>Category of family structure</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	JOINT	279	44.91	7.894
	NUCLEAR	291	47.56	6.667

Figure 4.17 Presenting mean score distribution of teacher's Empathy based on family structure.

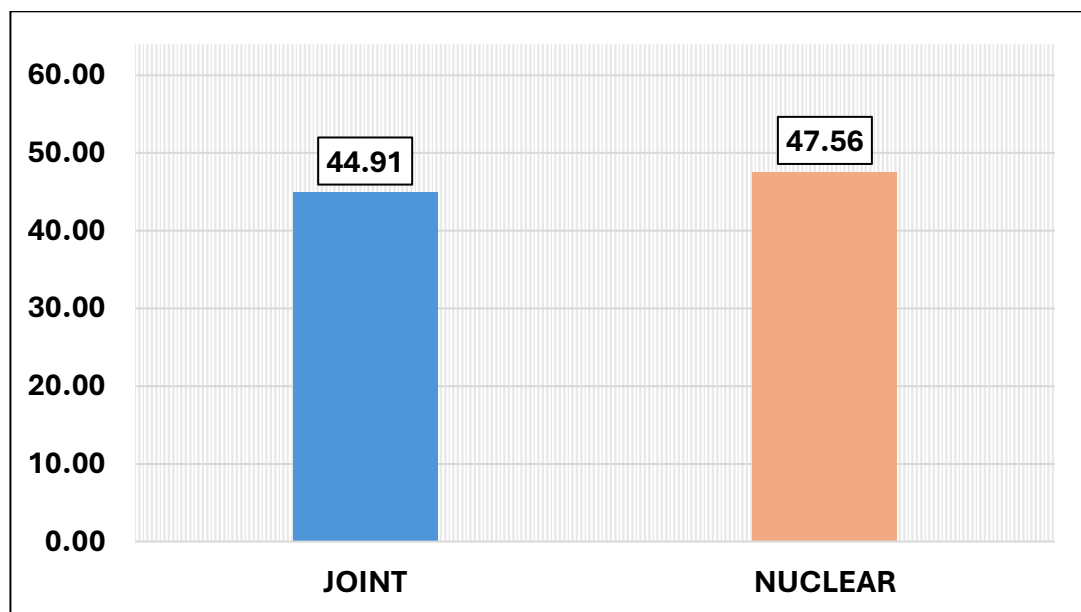


Figure 4.17 presents the mean score distribution of empathy among teachers based on family structure. Teachers from joint families (N=279) obtained a mean score of 44.91 with a standard deviation of 7.894, whereas those from nuclear families (N=291) recorded a higher mean score of 47.56 with a standard deviation of 6.667. Hence, it can be interpreted that teachers belonging to nuclear families demonstrated greater empathy compared to teachers from joint families.

Table 4.18 Showing mean score distribution of teacher's Empathy based on highest educational qualification.

<i>Dependent variable</i>	<i>Category of highest educational qualification</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	HIGHER SECONDARY	165	48.08	7.270
	BACHELOR'S DEGREE	238	45.40	7.340
	MASTER'S DEGREE	167	45.69	7.363

Figure 4.18 Presenting mean score distribution of teacher's Empathy based on highest educational qualification.

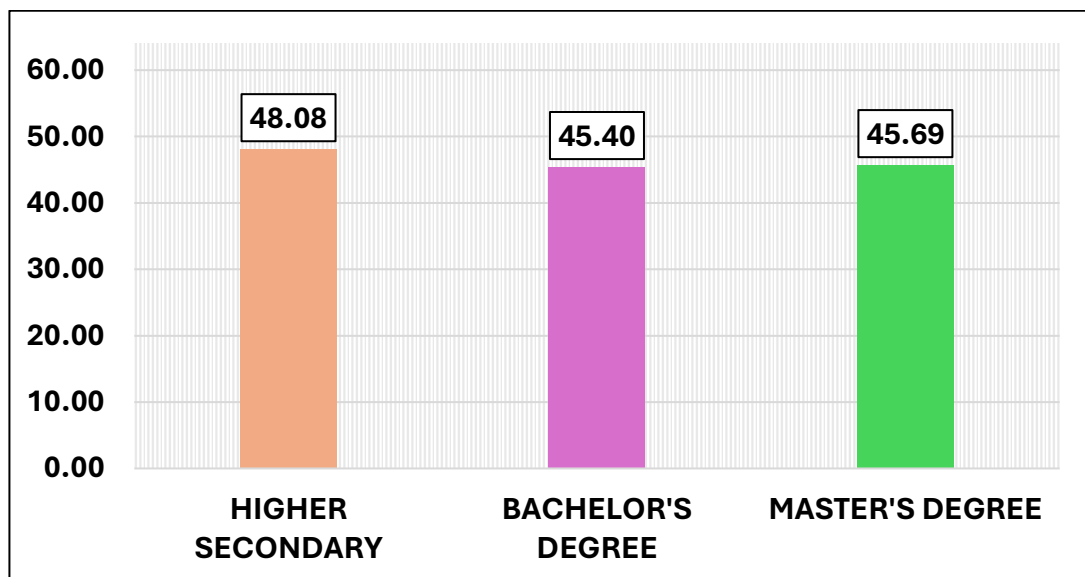


Figure 4.18 shows the mean score distribution of empathy among teachers based on their highest educational qualification. Teachers with a Higher Secondary qualification (N=165) obtained the highest mean score of 48.08 with a standard deviation of 7.270. Teachers holding a Master's degree (N=167) recorded a mean score of 45.69 (SD = 7.363), while those with a Bachelor's degree (N=238) showed a mean score of 45.40 with a standard deviation of 7.340. Hence, it can be interpreted that teachers with Higher Secondary qualifications demonstrated greater empathy compared to those with graduate or postgraduate degrees.

Table 4.19 Showing mean score distribution of teacher's Empathy based on academic discipline.

<i>Dependent variable</i>	<i>Category of academic discipline</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	ARTS	386	46.90	7.289
	SCIENCE	154	45.05	7.534
	COMMERCE	30	44.20	7.350

Figure 4.19 Presenting mean score distribution of teacher's Empathy based on academic discipline.

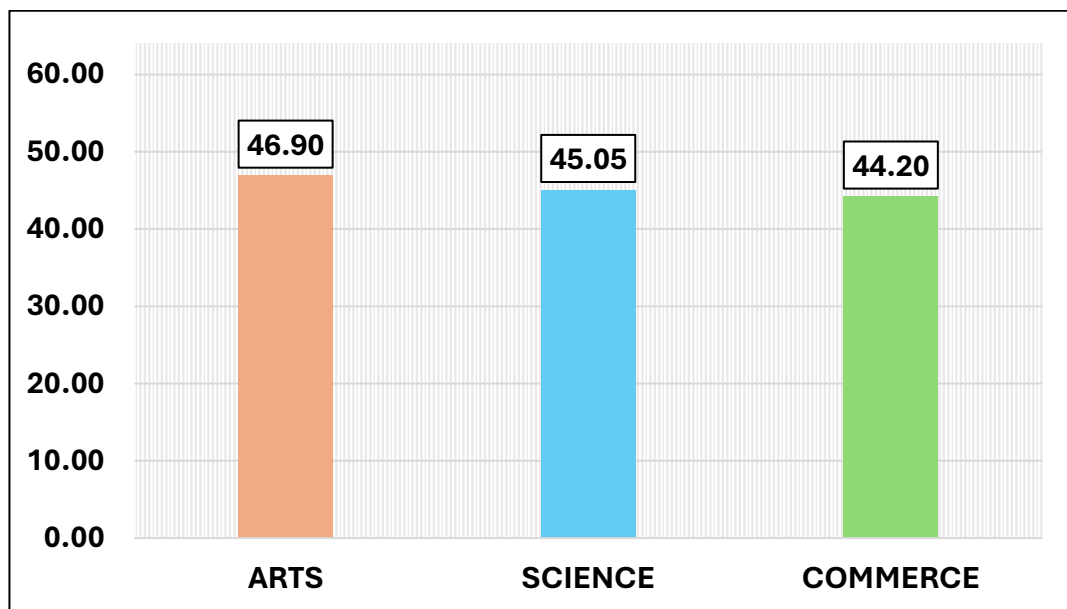


Figure 4.19 presents the mean score distribution of empathy among teachers according to their academic discipline. Teachers from the Arts background (N=386) obtained a mean score of 46.90 with a standard deviation of 7.289. Teachers from the Science discipline (N=154) recorded a mean score of 45.05 (SD = 7.534), while those from Commerce (N=30) showed a mean score of 44.20 with a standard deviation of 7.350. Hence, it can be interpreted that teachers from the Arts discipline demonstrated higher empathy compared to their counterparts from Science and Commerce disciplines.

Table 4.20 Showing mean score distribution of teacher's Empathy based on school location.

<i>Dependent variable</i>	<i>Category of school location</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	RURAL	357	46.92	7.165
	SEMI-URBAN	91	46.22	7.053
	URBAN	122	44.38	8.069

Figure 4.20 Presenting mean score distribution of teacher's Empathy based on school location.

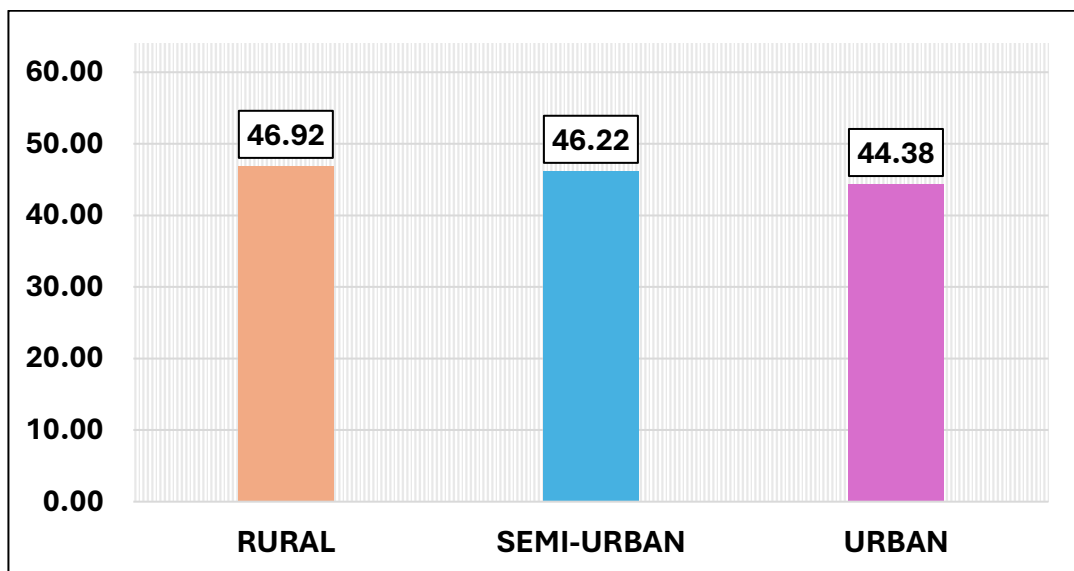


Figure 4.20 shows the mean score distribution of empathy among teachers based on school location. Teachers working in rural schools (N=357) obtained the highest mean score of 46.92 with a standard deviation of 7.165. Teachers from semi-urban schools (N=91) recorded a mean score of 46.22 (SD = 7.053), while those in urban schools (N=122) showed the lowest mean score of 44.38 with a standard deviation of 8.069. Hence, it can be interpreted that teachers in rural schools demonstrated greater empathy compared to their semi-urban and urban counterparts.

Table 4.21 Showing mean score distribution of teacher's Empathy based on membership in social organization.

<i>Dependent variable</i>	<i>Category of membership in social organization</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	NO	363	46.04	7.168
	YES	207	46.65	7.812

Figure 4.21 Presenting mean score distribution of teacher's Empathy based on membership in social organization.

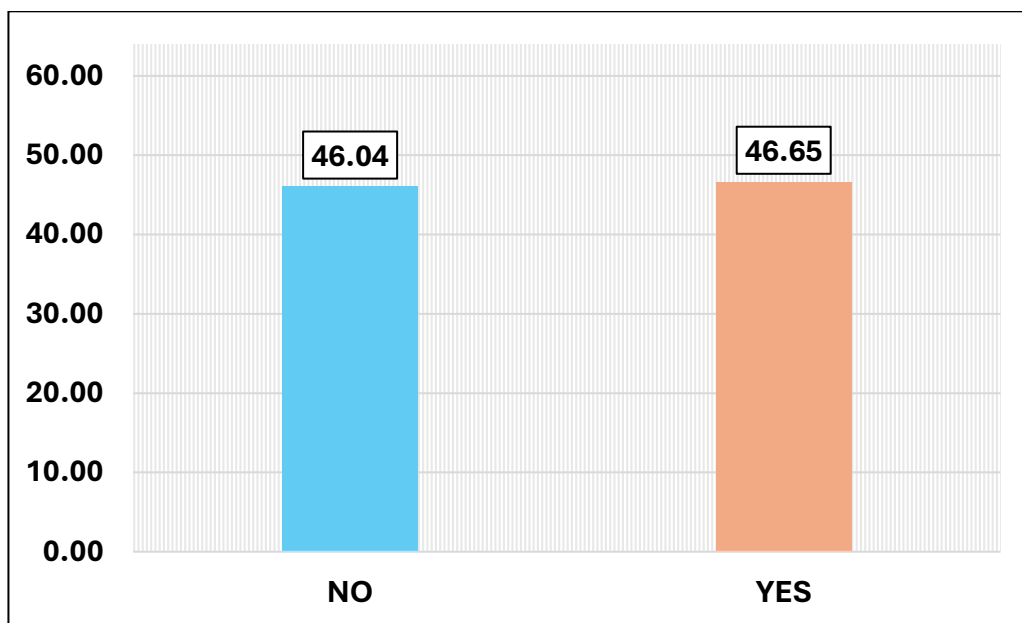


Figure 4.21 presents the mean score distribution of empathy among teachers based on their membership in social organizations. Teachers who were not members of any social organization (N=363) obtained a mean score of 46.04 with a standard deviation of 7.168, whereas teachers who were members (N=207) recorded a slightly higher mean score of 46.65 with a standard deviation of 7.812. Hence, it can be interpreted that teachers associated with social organizations demonstrated slightly greater empathy compared to those who were not members.

Table 4.22 Showing mean score distribution of teacher's Empathy based on Teachers' Training Qualification Year.

<i>Dependent variable</i>	<i>Category of Teachers' Training Qualification Year</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	MORE THAN 10 YEARS AGO	349	46.28	7.573
	7 TO 9 YEARS AGO	148	45.86	7.026
	4 TO 6 YEARS AGO	73	46.99	7.396

Figure 4.22 Presenting mean score distribution of teacher's Empathy based on Teachers' Training Qualification Year.

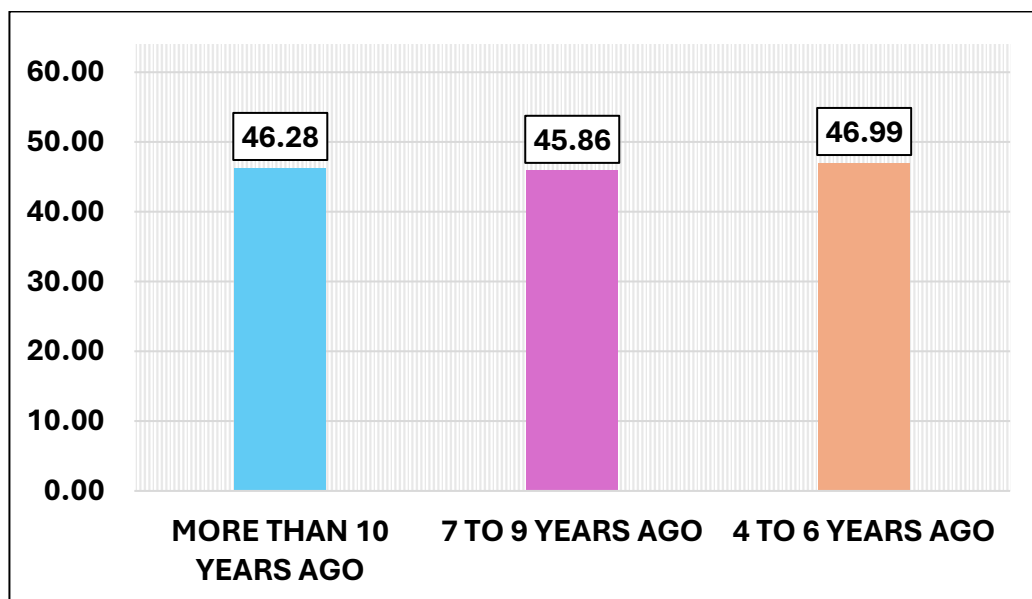


Figure 4.22 shows the mean score distribution of empathy among teachers according to the year of their training qualification. Teachers who completed their training more than 10 years ago (N=349) obtained a mean score of 46.28 with a standard deviation of 7.573. Those trained 7 to 9 years ago (N=148) recorded a mean score of 45.86 (SD = 7.026), while teachers who completed training 4 to 6 years ago (N=73) showed the highest mean score of 46.99 with a standard deviation of 7.396. Hence, it can be interpreted that teachers trained 4 to 6 years ago demonstrated slightly higher empathy compared to those trained in earlier years.

Table 4.23 Showing mean score distribution of teacher's Empathy based on Teaching as First Career Choice.

<i>Dependent variable</i>	<i>Category of Teaching as First Career Choice</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	YES	468	46.39	7.217
	NO	102	45.67	8.235

Figure 4.23 Presenting mean score distribution of teacher's Empathy based on Teaching as First Career Choice.

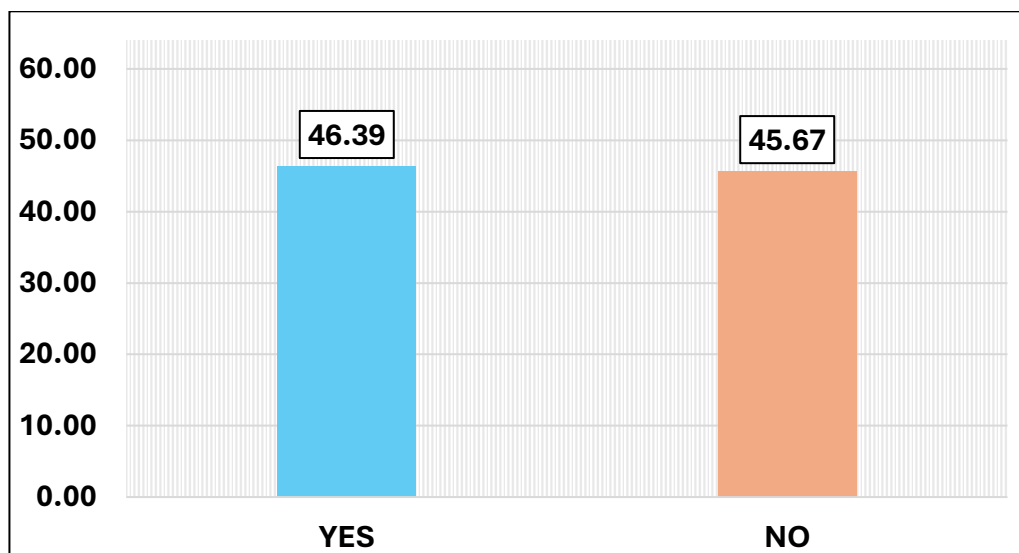


Figure 4.23 presents the mean score distribution of empathy among teachers based on whether teaching was their first career choice. Teachers who reported teaching as their first career choice (N=468) obtained a mean score of 46.39 with a standard deviation of 7.217, while those who indicated teaching was not their first choice (N=102) recorded a mean score of 45.67 with a standard deviation of 8.235. Hence, it can be interpreted that teachers who chose teaching as their first career option demonstrated slightly higher empathy compared to those for whom it was not the primary choice.

Table 4.24 Showing mean score distribution of teacher's Empathy based on work experience.

<i>Dependent variable</i>	<i>Category of work experience</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	LESS THAN 1 YEAR	37	46.86	5.893
	1 TO 5 YEARS	120	46.67	7.111
	6 TO 10 YEARS	141	46.09	7.505
	11 TO 15 YEARS	67	46.01	8.144
	MORE THAN 15 YEARS	205	46.11	7.555

Figure 4.24 Presenting mean score distribution of teacher's Empathy based on work experience.

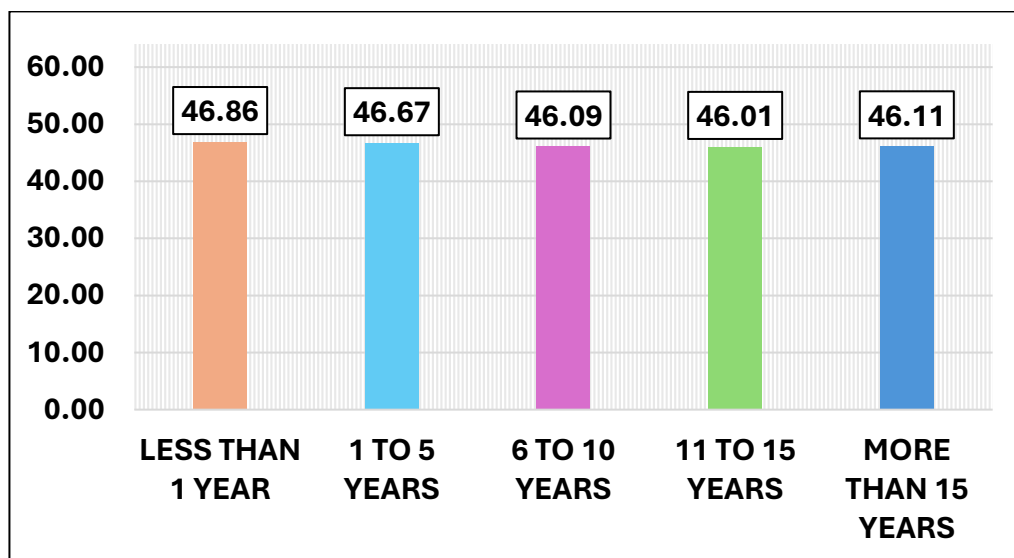


Figure 4.24 displays the mean score distribution of empathy among teachers according to their work experience. Teachers with less than 1 year of experience (N=37) obtained the highest mean score of 46.86 with a standard deviation of 5.893. Those with 1 to 5 years of experience (N=120) recorded a mean score of 46.67 (SD = 7.111). Teachers with 6 to 10 years (N=141) and 11 to 15 years (N=67) reported mean scores of 46.09 (SD = 7.505) and 46.01 (SD = 8.144) respectively. Finally, teachers with more than 15 years of

experience (N=205) obtained a mean score of 46.11 with a standard deviation of 7.555. Hence, it can be interpreted that empathy scores were fairly consistent across different levels of work experience, with the highest empathy observed among teachers having less than 1 year of experience.

Table 4.25 Showing mean score distribution of teacher's Empathy based on religion.

<i>Dependent variable</i>	<i>Category of religion</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	HINDU	471	46.30	7.490
	MUSLIM	99	46.06	7.035

Figure 4.25 Presenting mean score distribution of teacher's Empathy based on religion.

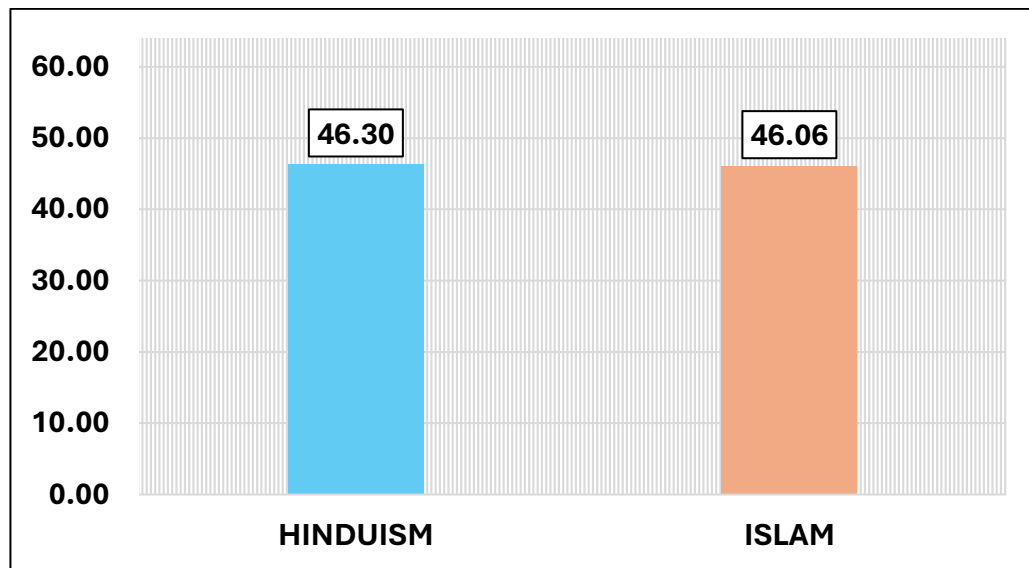


Figure 4.25 presents the mean score distribution of empathy among teachers based on religion. Teachers belonging to the Hindu community (N=471) recorded a mean score of 46.30 with a standard deviation of 7.490, while teachers from the Muslim community (N=99) obtained a mean score of 46.06 with a standard deviation of 7.035. Hence, it can be interpreted that both Hindu and Muslim teachers demonstrated almost similar levels of empathy, with only a marginal difference in their mean scores.

Table 4.26 Showing mean score distribution of teacher's Empathy based on birth order.

<i>Dependent variable</i>	<i>Category of birth order</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
EMPATHY	1	149	46.02	7.272
	2	149	46.16	8.151
	3	103	46.16	7.725
	4	77	47.36	6.509
	5	33	46.82	6.257
	6	18	47.22	6.404
	7	23	45.57	7.809
	8	18	43.89	6.480

Figure 4.26 Presenting mean score distribution of teacher's Empathy based on birth order.

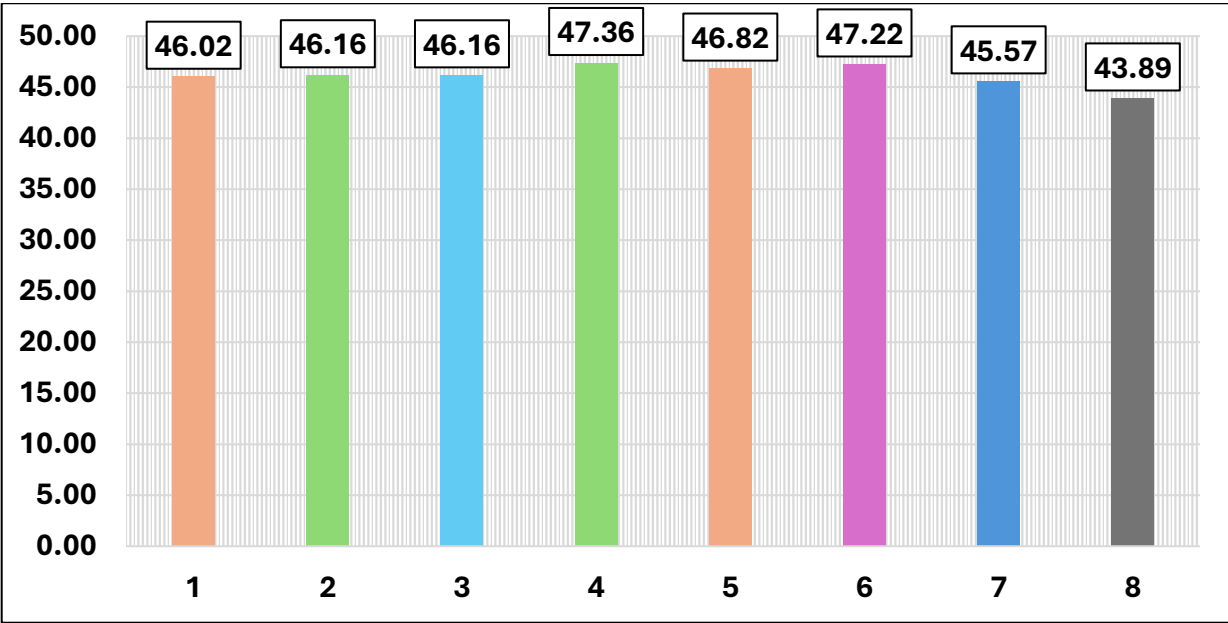


Figure 4.26 displays the mean score distribution of empathy among teachers according to their birth order. Teachers who were first-born (N=149) obtained a mean score of 46.02 with a standard deviation of 7.272, while those in the second (N=149) and third (N=103) birth order categories recorded the same mean score of 46.16 with standard

deviations of 8.151 and 7.725 respectively. Teachers belonging to the fourth birth order (N=77) showed the highest mean score of 47.36 (SD = 6.509). Similarly, those in the fifth (N=33) and sixth (N=18) positions reported mean scores of 46.82 and 47.22, with standard deviations of 6.257 and 6.404 respectively. Meanwhile, teachers in the seventh (N=23) and eighth (N=18) birth order categories had lower empathy scores, with mean values of 45.57 (SD = 7.809) and 43.89 (SD = 6.480). Hence, it can be interpreted that teachers in the middle birth orders, particularly the fourth and sixth, exhibited relatively higher empathy, whereas the lowest empathy levels were observed among those positioned as the eighth child in their families.

4.2 Inferential Statistics

4.2.1 Hypotheses Testing

H₀1: Altruism does not significantly differ among Primary School Teachers based on their Gender.

Table 4.27 Showing Independent sample T-test based on H₀1.

<i>Dependent variable</i>	<i>Gender Category</i>	<i>Mean</i>	<i>t-value</i>	<i>df</i>	<i>MD</i>	<i>p-value</i>	<i>Remarks</i>
<i>Altruism</i>	MALE	88.17	-2.444	568	-2.700	.015	*S
	FEMALE	90.87					P<0.05

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that female employees scored higher in altruism (M=90.87) than male employees (M=88.17), and the obtained t-value was -2.444 (p=0.015). The difference was statistically significant (p<0.05).

Hence, H₀1: Altruism does not significantly differ among Primary School Teachers based on their Gender – **is rejected**.

H02: Empathy does not significantly differ among Primary School Teachers based on their Gender.

Table 4.28 Showing Independent sample T-test based on H02.

<i>Dependent variable</i>	<i>Gender Category</i>	<i>Mean</i>	<i>t- value</i>	<i>df</i>	<i>MD</i>	<i>p-value</i>	<i>Remarks</i>
<i>Empathy</i>	MALE	45.16	-5.085	469.76	-3.098	.000	*S
	FEMALE	48.26		6			P<0.01

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that female employees scored higher in empathy (M=48.26) than male employees (M=45.16), and the obtained t-value was -5.085 (p=0.000). The difference was statistically significant (p<0.01).

Hence, H02: Empathy does not significantly differ among Primary School Teachers based on their Gender - *is rejected*.

H03: Altruism does not significantly differ among Primary School Teachers based on their Marital Status.

Table 4.29 Showing Independent sample T-test based on H03.

<i>Dependent variable</i>	<i>Category of marital status</i>	<i>Mean</i>	<i>t- value</i>	<i>df</i>	<i>MD</i>	<i>p-value</i>	<i>Remarks</i>
<i>Altruism</i>	MARRIED	89.89	3.251	227.65	3.673	.001	*S
	UNMARRIED	86.22		5			P<0.01

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that married employees scored higher in altruism (M=89.89) than unmarried employees (M=86.22), and the obtained t-value was 3.251 (p=0.001). The difference was statistically significant (p<0.01).

Hence, H₀₃: Altruism does not significantly differ among Primary School Teachers based on their Marital Status – *is rejected*.

H₀₄: Empathy does not significantly differ among Primary School Teachers based on their Marital Status.

Table 4.30 Showing Independent sample T-test based on H₀₄.

<i>Dependent variable</i>	<i>Category of marital status</i>	<i>Mean</i>	<i>t-value</i>	<i>df</i>	<i>MD</i>	<i>p-value</i>	<i>Remarks</i>
<i>Empathy</i>	MARRIED	45.89	-2.370	568	-1.808	.018	*S
	UNMARRIED	47.69					P<0.05

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that unmarried employees scored higher in empathy (M=47.69) than married employees (M=45.89), and the obtained t-value was -2.370 (p=0.018). The difference was statistically significant (p<0.05).

Hence, H₀₄: Empathy does not significantly differ among Primary School Teachers based on their Marital Status – *is rejected*.

H₀₅: Altruism does not significantly differ among Primary School Teachers based on their Social Category.

Table 4.31 Showing One-way ANOVA based on H₀₅.

One-way ANOVA						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	2815.080	3	938.360	5.984	.001	*S P<0.01
<i>Within Groups</i>	88760.786	566	156.821			
<i>Total</i>	91575.867	569				

Note: **F-value**= ANOVA test value, **df**= Degree of Freedom, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that altruism significantly differed among Primary School Teachers based on their Social Category, as the obtained F-value was 5.984 ($p=0.001$). The difference was statistically significant ($p<0.01$).

Hence, H₀₅: Altruism does not significantly differ among Primary School Teachers based on their Social Category – *is rejected*.

H₀₆: Empathy does not significantly differ among Primary School Teachers based on their Social Category.

Table 4.32 Showing One-way ANOVA based on H₀₆.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	882.803	3	294.268	5.490	.001	*S P<0.01
<i>Within Groups</i>	30335.247	566	53.596			
<i>Total</i>	31218.051	569				

*Note: F-value= ANOVA test value, df= Degree of Freedom, p-value= Sig. (2-tailed) value, *S- Significant, NS-Not significant.*

It can be concluded from the above table that empathy significantly differed among Primary School Teachers based on their Social Category, as the obtained F-value was 5.490 ($p=0.001$). The difference was statistically significant ($p<0.01$).

Hence, H₀₆: Empathy does not significantly differ among Primary School Teachers based on their Social Category – *is rejected*.

H₀7: Altruism does not significantly differ among Primary School Teachers based on their Family Structure.

Table 4.33 Showing Independent sample T-test based on H₀7.

Dependent variable	Category of family structure	Mean	t-value	df	MD	p-value	Remarks
Altruism	JOINT	87.16	-3.674	568	-3.863	.000	*S P<0.01
	NUCLEAR	91.02					

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that teachers from nuclear families scored higher in altruism (M=91.02) than teachers from joint families (M=87.16), and the obtained t-value was -3.674 (p=0.000). The difference was statistically significant (p<0.01).

Hence, H₀7: Altruism does not significantly differ among Primary School Teachers based on their Family Structure – *is rejected*.

H₀8: Empathy does not significantly differ among Primary School Teachers based on their Family Structure.

Table 4.34 Showing Independent sample T-test based on H₀8.

Dependent variable	Category of family structure	Mean	t-value	df	MD	p-value	Remarks
Empathy	JOINT	44.91	-4.326	544.23	-2.653	.000	*S P<0.01
	NUCLEAR	47.56					

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that teachers from nuclear families scored higher in empathy (M=47.56) than teachers from joint families (M=44.91), and the obtained t-value was -4.326 (p=0.000). The difference was statistically significant (p<0.01).

Hence, H₀₈: Empathy does not significantly differ among Primary School Teachers based on their Family Structure – *is rejected*.

H₀₉: Altruism does not significantly differ among Primary School Teachers based on their Educational Qualification.

Table 4.35 Showing One-way ANOVA based on H₀₉.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	2980.994	2	1490.497	9.539	.000	*S P<0.01
<i>Within Groups</i>	88594.872	567	156.252			
<i>Total</i>	91575.867	569				

Note: **F-value**= ANOVA test value, **df**= Degree of Freedom, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that altruism significantly differed among Primary School Teachers based on their Educational Qualification, as the obtained F-value was 9.539 (p=0.000). The difference was statistically significant (p<0.01).

Hence, H₀₉: Altruism does not significantly differ among Primary School Teachers based on their Educational Qualification – *is rejected*.

H₀₁₀: Empathy does not significantly differ among Primary School Teachers based on their Educational Qualification.

Table 4.36 Showing One-way ANOVA based on H₀₁₀.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	780.351	2	390.175	7.268	.001	*S P<0.01
<i>Within Groups</i>	30437.700	567	53.682			
<i>Total</i>	31218.051	569				

Note: **F-value**= ANOVA test value, **df**= Degree of Freedom, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that empathy significantly differed among Primary School Teachers based on their Educational Qualification, as the obtained F-value was 7.268 ($p=0.001$). The difference was statistically significant ($p<0.01$).

Hence, H_0 10: Empathy does not significantly differ among Primary School Teachers based on their Educational Qualification – *is rejected*.

H_0 11: Altruism does not significantly differ among Primary School Teachers based on their Academic Discipline.

Table 4.37 Showing One-way ANOVA based on H_0 11.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	1327.655	2	663.828	4.171	.016	*S P<0.05
<i>Within Groups</i>	90248.211	567	159.168			
<i>Total</i>	91575.867	569				

Note: F-value= ANOVA test value, df= Degree of Freedom, p-value= Sig. (2-tailed) value, *S- Significant, NS-Not significant.

It can be concluded from the above table that altruism significantly differed among Primary School Teachers based on their Academic Discipline, as the obtained F-value was 4.171 ($p=0.016$). The difference was statistically significant ($p<0.05$).

Hence, H_0 11: Altruism does not significantly differ among Primary School Teachers based on their Academic Discipline – *is rejected*.

H₀12: Empathy does not significantly differ among Primary School Teachers based on their Academic Discipline.

Table 4.38 Showing One-way ANOVA based on H₀12.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	512.213	2	256.107	4.729	.009	*S P<0.05
<i>Within Groups</i>	30705.838	567	54.155			
<i>Total</i>	31218.051	569				

*Note: F-value= ANOVA test value, df= Degree of Freedom, p-value= Sig. (2-tailed) value, *S- Significant, NS-Not significant.*

It can be concluded from the above table that empathy significantly differed among Primary School Teachers based on their Academic Discipline, as the obtained F-value was 4.729 (p=0.009). The difference was statistically significant (p<0.05).

Hence, H₀12: Empathy does not significantly differ among Primary School Teachers based on their Academic Discipline – ***is rejected.***

H₀13: Altruism does not significantly differ among Primary School Teachers based on their School Location.

Table 4.39 Showing One-way ANOVA based on H₀13.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	1656.187	2	828.093	5.222	.006	*S P<0.05
<i>Within Groups</i>	89919.680	567	158.589			
<i>Total</i>	91575.867	569				

*Note: F-value= ANOVA test value, df= Degree of Freedom, p-value= Sig. (2-tailed) value, *S- Significant, NS-Not significant.*

It can be concluded from the above table that altruism significantly differed among Primary School Teachers based on their School Location, as the obtained F-value was 5.222 ($p=0.006$). The difference was statistically significant ($p<0.05$).

Hence, H_0 13: Altruism does not significantly differ among Primary School Teachers based on their School Location – *is rejected*.

H_0 14: Empathy does not significantly differ among Primary School Teachers based on their School Location.

Table 4.40 Showing One-way ANOVA based on H_0 14.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	586.312	2	293.156	5.426	.005	*S P<0.05
<i>Within Groups</i>	30631.739	567	54.024			
<i>Total</i>	31218.051	569				

Note: **F-value**= ANOVA test value, **df**= Degree of Freedom, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that empathy significantly differed among Primary School Teachers based on their School Location, as the obtained F-value was 5.426 ($p=0.005$). The difference was statistically significant ($p<0.05$).

Hence, H_0 14: Empathy does not significantly differ among Primary School Teachers based on their School Location – *is rejected*.

H₀15: Altruism does not significantly differ among primary school teachers based on their membership in social organizations.

Table 4.41 Showing Independent sample T-test based on H₀15.

<i>Dependent variable</i>	<i>Category of membership in social organizations</i>	<i>Mean</i>	<i>t-value</i>	<i>df</i>	<i>MD</i>	<i>p-value</i>	<i>Remarks</i>
<i>Altruism</i>	NO	87.67	-3.597	394.811	-4.039	.000	*S
	YES	91.71					P<0.01

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that teachers who were members of social organizations scored higher in altruism (M=91.71) than teachers who were not members (M=87.67), and the obtained t-value was -3.597 (p=0.000). The difference was statistically significant (p<0.01).

Hence, H₀15: Altruism does not significantly differ among Primary School Teachers based on their membership in social organizations – **is rejected**.

H₀16: Empathy does not significantly differ among primary school teachers based on their membership in social organizations.

Table 4.42 Showing Independent sample T-test based on H₀16.

<i>Dependent variable</i>	<i>Category of membership in social organizations</i>	<i>Mean</i>	<i>t-value</i>	<i>df</i>	<i>MD</i>	<i>p-value</i>	<i>Remarks</i>
<i>Empathy</i>	NO	46.04	-.939	568	-.606	.348	NS
	YES	46.65					P>0.05

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that there was no significant difference in empathy between teachers who were members of social organizations (M=46.65) and those who were not (M=46.04), and the obtained t-value was -0.939 (p=0.348). The difference was not statistically significant (p>0.05).

Hence, H₀₁₆: Empathy does not significantly differ among Primary School Teachers based on their membership in social organizations – *is failed to reject*.

H₀₁₇: Altruism does not significantly differ among primary school teachers based on their teacher training qualification year.

Table 4.43 Showing One-way ANOVA based on H₀₁₇.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	289.316	2	144.658	.899	.408	NS P>0.05
<i>Within Groups</i>	91286.551	567	160.999			
<i>Total</i>	91575.867	569				

Note: F-value= ANOVA test value, df= Degree of Freedom, p-value= Sig. (2-tailed) value, *S- Significant, NS-Not significant.

It can be concluded from the above table that there was no significant difference in altruism among Primary School Teachers based on their Teacher Training Qualification Year, as the obtained F-value was 0.899 (p=0.408). The difference was not statistically significant (p>0.05).

Hence, H₀₁₇: Altruism does not significantly differ among Primary School Teachers based on their Teacher Training Qualification Year – *is failed to reject*.

H₀18: Empathy does not significantly differ among primary school teachers based on their teacher training qualification year.

Table 4.44 Showing One-way ANOVA based on H₀18.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	61.727	2	30.864	.562	.571	NS P>0.05
<i>Within Groups</i>	31156.324	567	54.949			
<i>Total</i>	31218.051	569				

Note: **F-value**= ANOVA test value, **df**= Degree of Freedom, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that there was no significant difference in empathy among Primary School Teachers based on their Teacher Training Qualification Year, as the obtained F-value was 0.562 (p=0.571). The difference was not statistically significant (p>0.05).

Hence, H₀18: Empathy does not significantly differ among Primary School Teachers based on their Teacher Training Qualification Year – *is failed to reject*.

H₀19: Altruism does not significantly differ among primary school teachers based on whether teaching was their first choice as a career.

Table 4.45 Showing Independent sample T-test based on H₀19.

Dependent variable	Category of Teaching as First Career Choice	Mean	t- value	df	MD	p-value	Remarks
Altruism	YES	89.67	2.157	568	2.980	.031	*S P<0.05
	NO	86.69					

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that teachers for whom teaching was their first career choice scored higher in altruism (M=89.67) than those for whom it was not (M=86.69), and the obtained t-value was 2.157 (p=0.031). The difference was statistically significant (p<0.05).

Hence, H₀₁₉: Altruism does not significantly differ among Primary School Teachers based on whether teaching was their first choice as a career – *is rejected*.

H₀₂₀: Empathy does not significantly differ among primary school teachers based on whether teaching was their first choice as a career.

Table 4.46 Showing Independent sample T-test based on H₀₂₀.

Dependent variable	Category of Teaching as First Career Choice	Mean	t-value	df	MD	p-value	Remarks
Empathy	YES	46.39	.895	568	.724	.371	NS P>0.05
	NO	45.67					

Note: t-value= t-test score, df= Degree of Freedom, MD= Mean Difference, p-value= Sig. (2-tailed) value, *S- Significant, NS-Not significant.

It can be concluded from the above table that there was no significant difference in empathy between teachers for whom teaching was their first career choice (M=46.39) and those for whom it was not (M=45.67), and the obtained t-value was 0.895 (p=0.371). The difference was not statistically significant (p>0.05).

Hence, H₀₂₀: Empathy does not significantly differ among Primary School Teachers based on whether teaching was their first choice as a career – *is failed to reject*.

H₀21: Altruism does not significantly differ among primary school teachers based on their Work Experience.

Table 4.47 Showing One-way ANOVA based on H₀21.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	457.787	4	114.447	.710	.586	NS P>0.05
<i>Within Groups</i>	91118.079	565	161.271			
<i>Total</i>	91575.867	569				

Note: **F-value**= ANOVA test value, **df**= Degree of Freedom, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that there was no significant difference in altruism among Primary School Teachers based on their Work Experience, as the obtained F-value was 0.710 (p=0.586). The difference was not statistically significant (p>0.05).

Hence, H₀21: Altruism does not significantly differ among Primary School Teachers based on their Work Experience – *is failed to reject*.

H₀22: Empathy does not significantly differ among primary school teachers based on their Work Experience.

Table 4.48 Showing One-way ANOVA based on H₀22.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	45.854	4	11.463	.208	.934	NS P>0.05
<i>Within Groups</i>	31172.197	565	55.172			
<i>Total</i>	31218.051	569				

Note: **F-value**= ANOVA test value, **df**= Degree of Freedom, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that there was no significant difference in empathy among Primary School Teachers based on their Work Experience, as the obtained F-value was 0.208 ($p=0.934$). The difference was not statistically significant ($p>0.05$).

Hence, H_{022} : Empathy does not significantly differ among Primary School Teachers based on their Work Experience – *is failed to reject*.

H_{023} : Altruism does not significantly differ among primary school teachers based on their Religion.

Table 4.49 Showing Independent sample T-test based on H_{023} .

Dependent variable	Category of Religion.	Mean	t-value	df	MD	p-value	Remarks
Altruism	HINDUISM	89.04	-0.390	568	-0.548	.697	NS P>0.05
	ISLAM	89.59					

Note: t-value= t-test score, df= Degree of Freedom, MD= Mean Difference, p-value= Sig. (2-tailed) value, *S- Significant, NS-Not significant.

It can be concluded from the above table that there was no significant difference in altruism between Hinduism teachers ($M=89.04$) and Islam teachers ($M=89.59$), and the obtained t-value was -0.390 ($p=0.697$). The difference was not statistically significant ($p>0.05$).

Hence, H_{023} : Altruism does not significantly differ among Primary School Teachers based on their Religion – *is failed to reject*.

H₀24: Empathy does not significantly differ among primary school teachers based on their Religion.

Table 4.50 Showing Independent sample T-test based on H₀24.

<i>Dependent variable</i>	<i>Category of Religion.</i>	<i>Mean</i>	<i>t-value</i>	<i>df</i>	<i>MD</i>	<i>p-value</i>	<i>Remarks</i>
<i>Empathy</i>	HINDUISM	46.30	.296	568	.243	.767	NS P>0.05
	ISLAM	46.06					

Note: **t-value**= t-test score, **df**= Degree of Freedom, **MD**= Mean Difference, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that there was no significant difference in empathy between Hinduism teachers (M=46.30) and Islam teachers (M=46.06), and the obtained t-value was 0.296 (p=0.767). The difference was not statistically significant (p>0.05).

Hence, H₀24: Empathy does not significantly differ among Primary School Teachers based on their Religion – *is failed to reject*.

H₀25: Altruism does not significantly differ among primary school teachers based on their Birth Order.

Table 4.51 Showing One-way ANOVA based on H₀25.

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	3338.264	7	476.895	3.037	.004	*S P<0.05
<i>Within Groups</i>	88237.602	562	157.006			
<i>Total</i>	91575.867	569				

Note: **F-value**= ANOVA test value, **df**= Degree of Freedom, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that altruism significantly differed among Primary School Teachers based on their Birth Order, as the obtained F-value was 3.037 ($p=0.004$). The difference was statistically significant ($p<0.05$).

Hence, H_{025} : Altruism does not significantly differ among Primary School Teachers based on their Birth Order – *is rejected*.

H_{026} : Empathy does not significantly differ among primary school teachers based on their Birth Order.

Table 4.52 Showing One-way ANOVA based on H_{026} .

<i>One-way ANOVA</i>						
	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Remarks</i>
<i>Between Groups</i>	244.194	7	34.885	.633	.729	NS P>0.05
<i>Within Groups</i>	30973.857	562	55.114			
<i>Total</i>	31218.051	569				

Note: **F-value**= ANOVA test value, **df**= Degree of Freedom, **p-value**= Sig. (2-tailed) value, ***S**- Significant, **NS**-Not significant.

It can be concluded from the above table that there was no significant difference in empathy among Primary School Teachers based on their Birth Order, as the obtained F-value was 0.633 ($p=0.729$). The difference was not statistically significant ($p>0.05$).

Hence, H_{026} : Empathy does not significantly differ among Primary School Teachers based on their Birth Order – *is failed to reject*.

H₀27: Altruism does not significantly correlate with Empathy among primary school teachers.

Table 4.53 Showing Pearson correlation based on H₀27.

<i>Pearson correlation</i>		<i>EMPATHY</i>	<i>ALTRUISM</i>
<i>EMPATHY</i>	Pearson Correlation	1	.059
	Sig. (2-tailed)		.156
	N	570	570
<i>ALTRUISM</i>	Pearson Correlation	.059	1
	Sig. (2-tailed)	.156	
	N	570	570

It can be concluded from the above table that altruism showed a positive but very weak correlation with empathy ($r = 0.059$) among Primary School Teachers, which was not statistically significant ($p = 0.156, p > 0.05$).

Hence, H₀27: Altruism does not significantly correlate with Empathy among Primary School Teachers – *is failed to reject*.

H₀28: Altruism does not significantly correlate with Birth Order among primary school teachers.

Table 4.54 Showing Pearson correlation based on H₀28.

<i>Pearson correlation</i>		<i>BIRTH ORDER</i>	<i>ALTRUISM</i>
<i>BIRTH ORDER</i>	Pearson Correlation	1	-.137**
	Sig. (2-tailed)		.001
	N	570	570
<i>ALTRUISM</i>	Pearson Correlation	-.137**	1
	Sig. (2-tailed)	.001	
	N	570	570

It can be concluded from the above table that altruism showed a significant very weak negative correlation with birth order ($r = -0.137, p = 0.001, p < 0.01$) among Primary

School Teachers. This indicates that as the birth order increases, the level of altruism decreases.

Hence, H₀28: Altruism does not significantly correlate with Birth Order among Primary School Teachers – *is rejected*.

H₀29: Empathy does not significantly correlate with Birth Order among primary school teachers.

Table 4.55 Showing Pearson correlation based on H₀29.

<i>Pearson correlation</i>		<i>BIRTH ORDER</i>	<i>EMPATHY</i>
<i>BIRTH ORDER</i>	Pearson Correlation	1	-.002
	Sig. (2-tailed)		.958
	N	570	570
<i>EMPATHY</i>	Pearson Correlation	-.002	1
	Sig. (2-tailed)	.958	
	N	570	570

It can be concluded from the above table that empathy did not show any significant correlation with birth order ($r = -0.002$, $p = 0.958$, $p > 0.05$) among Primary School Teachers. This indicates that birth order has no meaningful relationship with the empathy levels of teachers.

Hence, H₀29: Empathy does not significantly correlate with Birth Order among Primary School Teachers – *is failed to reject*.

4.2.2 Hypotheses Testing matrix

Table 4.56 Showing hypotheses testing matrix.

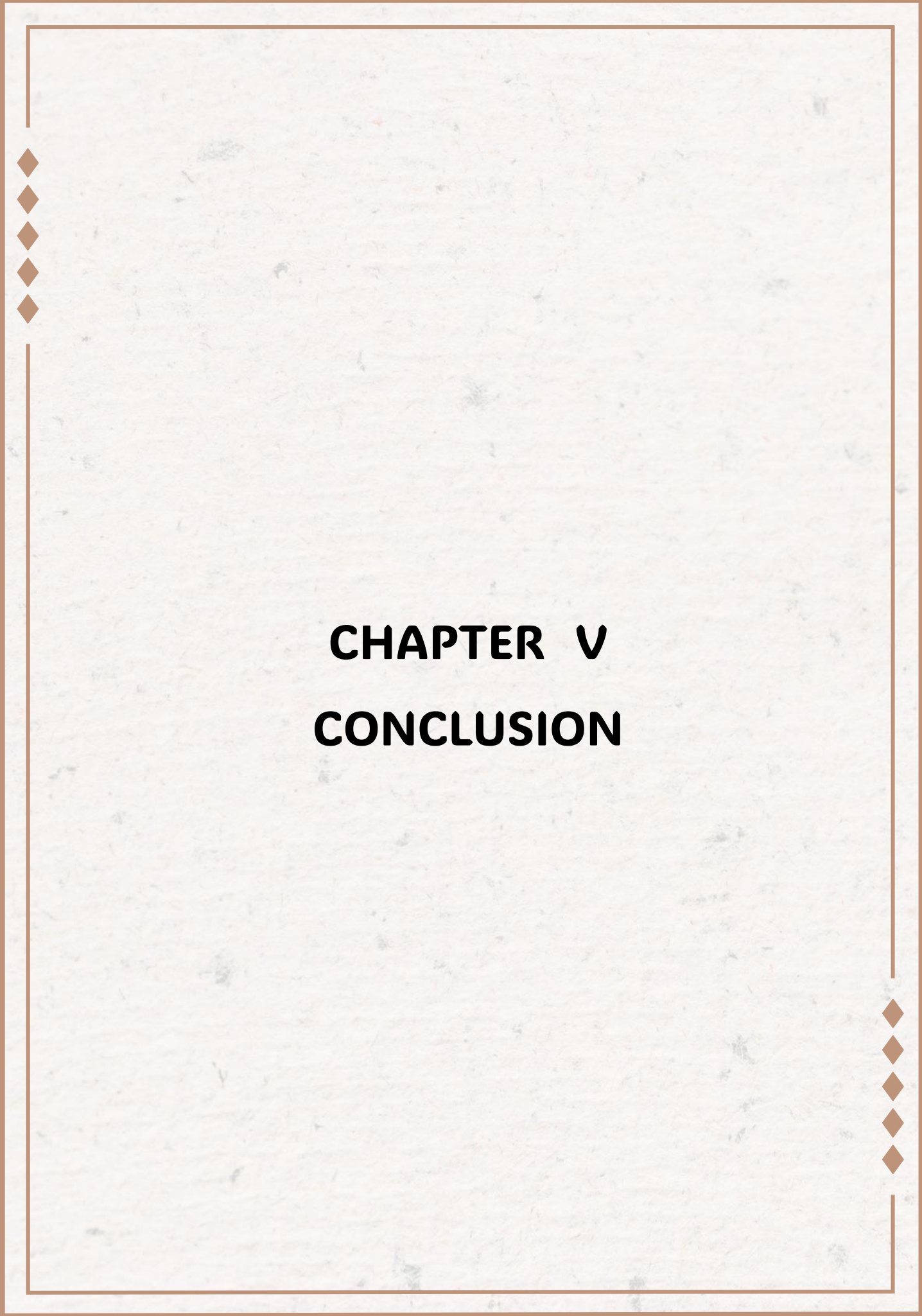
	<i>Hypotheses description</i>	<i>Remarks</i>
H₀₁	Altruism does not significantly differ among Primary School Teachers based on their Gender.	Rejected
H₀₂	Empathy does not significantly differ among Primary School Teachers based on their Gender.	Rejected
H₀₃	Altruism does not significantly differ among Primary School Teachers based on their Marital Status.	Rejected
H₀₄	Empathy does not significantly differ among Primary School Teachers based on their Marital Status.	Rejected
H₀₅	Altruism does not significantly differ among Primary School Teachers based on their Social Category.	Rejected
H₀₆	Empathy does not significantly differ among Primary School Teachers based on their Social Category.	Rejected
H₀₇	Altruism does not significantly differ among Primary School Teachers based on their Family Structure.	Rejected
H₀₈	Empathy does not significantly differ among Primary School Teachers based on their Family Structure.	Rejected
H₀₉	Altruism does not significantly differ among Primary School Teachers based on their Educational Qualification.	Rejected
H₀₁₀	Empathy does not significantly differ among Primary School Teachers based on their Educational Qualification.	Rejected
H₀₁₁	Altruism does not significantly differ among Primary School Teachers based on their Academic Discipline.	Rejected
H₀₁₂	Empathy does not significantly differ among Primary School Teachers based on their Academic Discipline.	Rejected
H₀₁₃	Altruism does not significantly differ among Primary School Teachers based on their School Location.	Rejected
H₀₁₄	Empathy does not significantly differ among Primary School Teachers based on their School Location.	Rejected

H₀15	Altruism does not significantly differ among primary school teachers based on their membership in social organizations.	Rejected
H₀16	Empathy does not significantly differ among primary school teachers based on their membership in social organizations.	Failed to reject
H₀17	Altruism does not significantly differ among primary school teachers based on their teacher training qualification year.	Failed to reject
H₀18	Empathy does not significantly differ among primary school teachers based on their teacher training qualification year.	Failed to reject
H₀19	Altruism does not significantly differ among primary school teachers based on whether teaching was their first choice as a career.	Rejected
H₀20	Empathy does not significantly differ among primary school teachers based on whether teaching was their first choice as a career.	Failed to reject
H₀21	Altruism does not significantly differ among primary school teachers based on their Work Experience.	Failed to reject
H₀22	Empathy does not significantly differ among primary school teachers based on their Work Experience.	Failed to reject
H₀23	Altruism does not significantly differ among primary school teachers based on their Religion.	Failed to reject
H₀24	Empathy does not significantly differ among primary school teachers based on their Religion.	Failed to reject
H₀25	Altruism does not significantly differ among primary school teachers based on their Birth Order.	Rejected
H₀26	Empathy does not significantly differ among primary school teachers based on their Birth Order.	Failed to reject
H₀27	Altruism does not significantly correlate with Empathy among primary school teachers.	Failed to reject

H₀28	Altruism does not significantly correlate with Birth Order among primary school teachers.	Rejected
H₀29	Empathy does not significantly correlate with Birth Order among primary school teachers.	Failed to reject

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CHAPTER V
CONCLUSION

CHAPTER V

CONCLUSION

The purpose of this study was to assess the altruistic and empathetic behaviours of primary school teachers and investigate the correlation between teachers' altruism and empathy across various districts in West Bengal, such as Jalpaiguri, Alipurduar, Coochbehar, Hooghly, South 24 Parganas, and Howrah. To accurately represent the research method, a quantitative descriptive survey approach was employed in this study.

5.1 Major Findings

- **Findings based on Teachers' Altruism & Various Demographic Factors**

- i) Female teachers demonstrated higher altruism compared to male teachers, and the differences was statistically significant.
- ii) Married teachers demonstrated higher altruism compared to unmarried teachers, and the difference was statistically significant.
- iii) Teachers belonging to the General category demonstrated higher altruism compared to teachers from SC, ST, and OBC categories, and the differences was statistically significant.
- iv) Teachers from Nuclear families demonstrated higher altruism compared to teachers from joint families, and the differences was statistically significant.
- v) Teachers with Higher Secondary educational qualifications demonstrated higher altruism compared to teachers with Graduate and Master's degree educational qualifications, and the differences was statistically significant.
- vi) Teachers from the arts academic discipline demonstrated higher altruism compared to teachers from science and commerce academic discipline, and the differences was statistically significant.
- vii) Teachers from rural schools demonstrated higher altruism compared to teachers from urban and semi-urban schools, and the differences was statistically significant.
- viii) Teachers who were members of social organizations demonstrated higher altruism compared to non-members, and the difference was statistically significant.

- ix) No significant differences were found in altruism among teachers based on the year of obtaining their teacher training qualification.
- x) Teachers who reported teaching as their first career choice demonstrated higher altruism compared to those who chose it as an alternative career, and the difference was statistically significant.
- xi) No significant differences were found in altruism among teachers based on their work experience.
- xii) No significant differences were found in altruism among teachers based on religion.

- **Findings based on Teachers' Empathy & Various Demographic Factors**

- i) Female teachers demonstrated higher empathy compared to male teachers, and the differences was statistically significant.
- ii) Unmarried teachers demonstrated higher empathy compared to married teachers, and the difference was statistically significant.
- iii) Teachers belonging to the General category demonstrated higher empathy compared to teachers from SC, ST, and OBC categories, and the differences was statistically significant.
- iv) Teachers from Nuclear families demonstrated higher empathy compared to teachers from joint families, and the differences was statistically significant.
- v) Teachers with Higher Secondary educational qualifications demonstrated higher empathy compared to teachers with Graduate and Master's degree educational qualifications, and the differences was statistically significant.
- vi) Teachers from the arts academic discipline demonstrated higher empathy compared to teachers from science and commerce academic discipline, and the differences was statistically significant.
- vii) Teachers from rural schools demonstrated higher empathy compared to teachers from urban and semi-urban schools, and the differences was statistically significant.
- viii) Teachers who were members of social organizations demonstrated higher empathy compared to non-members, but the difference was statistically not significant.

- ix) No significant differences were found in empathy among teachers based on the year of obtaining their teacher training qualification.
- x) Teachers who reported teaching as their first career choice demonstrated higher empathy compared to those who chose it as an alternative career but the difference was statistically not significant.
- xi) No significant differences were found in empathy among teachers based on their work experience.
- xii) No significant differences were found in empathy among teachers based on religion.

- **Findings based on Correlations**

- i) The results indicate a negative relationship between birth order and altruism among primary school teachers. In other words, as birth order increases (later-born teachers), their altruistic tendencies tend to decrease.
- ii) Altruism and empathy showed a very weak positive correlation, which was not statistically significant.

5.2 Summary of the rejected hypotheses

Here is the all rejected hypotheses:

Table 5.1 Summary of rejected Hypotheses

<i>Sl. No.</i>	<i>Hypotheses</i>	<i>Statement</i>
1	H ₀₁	Altruism does not significantly differ among Primary School Teachers based on their Gender.
2	H ₀₂	Empathy does not significantly differ among Primary School Teachers based on their Gender.
3	H ₀₃	Altruism does not significantly differ among Primary School Teachers based on their Marital Status.
4	H ₀₄	Empathy does not significantly differ among Primary School Teachers based on their Marital Status.

5	H ₀₅	Altruism does not significantly differ among Primary School Teachers based on their Social Category.
6	H ₀₆	Empathy does not significantly differ among Primary School Teachers based on their Social Category.
7	H ₀₇	Altruism does not significantly differ among Primary School Teachers based on their Family Structure.
8	H ₀₈	Empathy does not significantly differ among Primary School Teachers based on their Family Structure.
9	H ₀₉	Altruism does not significantly differ among Primary School Teachers based on their Educational Qualification.
10	H ₀₁₀	Empathy does not significantly differ among Primary School Teachers based on their Educational Qualification.
11	H ₀₁₁	Altruism does not significantly differ among Primary School Teachers based on their Academic Discipline.
12	H ₀₁₂	Empathy does not significantly differ among Primary School Teachers based on their Academic Discipline.
13	H ₀₁₃	Altruism does not significantly differ among Primary School Teachers based on their School Location.
14	H ₀₁₄	Empathy does not significantly differ among Primary School Teachers based on their School Location.
15	H ₀₁₅	Altruism does not significantly differ among primary school teachers based on their membership in social organizations.
16	H ₀₁₉	Altruism does not significantly differ among primary school teachers based on whether teaching was their first choice as a career.
17	H ₀₂₅	Altruism does not significantly differ among primary school teachers based on their Birth Order.
18	H ₀₂₈	Altruism does not significantly correlate with Birth Order among primary school teachers.

5.3 Discussion

The relationship between teachers' personal characteristics and their professional practices plays a significant role in shaping the quality of education. This study aimed to explore the influence of various demographic factors on altruism and empathy among teachers in West Bengal, two essential traits that contribute to effective teaching and positive student outcomes. By analysing the demographic variables such as gender, marital status, family structure, education level, and teaching background, the study offers a deeper understanding of how these factors shape teachers' emotional and prosocial behaviours. These findings have important implications for teacher training, professional development, and educational policy in West Bengal, a region with diverse socio-cultural dynamics. Understanding how personal factors impact teaching practices can lead to more targeted interventions that support teachers in becoming more effective, compassionate, and empathetic educators.

The finding that female teachers demonstrated higher altruism than male teachers align with several studies (Batson et al., 2002; Eisenberg & Lennon, 1983; See et al., 2022) which suggest that female are more likely to engage in altruistic behaviour due to social and cultural expectations. This may be due to the fact that, in our society, females are often raised to be caring, compassionate, and protective of relationships. As a result, they are more capable of recognizing and understanding the pain and suffering of others. Research has shown that the neural mechanisms in females associated with sensitivity and emotional understanding are comparatively more active, enabling them to perceive others' emotions more quickly. Furthermore, females are naturally inclined toward gentleness and affectionate expression, which makes altruism more prominent among them. In contrast, married teachers showing higher altruism than unmarried teachers are consistent with research by Emmons & Crumpler (2000), which indicates that marital relationships encourage prosocial behaviour. This may be because married teachers, while fulfilling family responsibilities, gradually learn to make significant sacrifices, which in turn strengthens their sense of altruism. Many married teachers also develop an ability to understand the needs and struggles of their own children at home, and as a result, they extend the same selfless care and support to other students in the classroom, treating them as they would their own. The finding regarding teachers from General categories demonstrating higher altruism than their counterparts from SC, ST, and OBC

groups is significant, as it might reflect socio-cultural differences in access to resources and societal expectations. Previous studies (Chitnis, 2014) suggest that caste and social category can influence personal values and behaviour. In the West Bengal context, these findings hold particular relevance, as caste-based disparities and the role of family structure in shaping educational attitudes remain prominent in the region's social fabric.

The observation that teachers from nuclear families exhibited higher altruism compared to those from joint families is an interesting finding, as it suggests that family structure may play a role in shaping teacher's emotional responses. This may be because, in nuclear families, the relationships among family members are often more intimate. Owing to the smaller size of the family, each member tends to extend support to one another more readily whenever needed. Family dynamics in West Bengal can be a significant factor, as joint families are still common, and nuclear families may reflect modern, urbanized values. Similarly, the finding that teachers with higher secondary qualifications demonstrated higher altruism compared to those with graduate and master's degrees could be explained by the different career motivations, where those with advanced degrees may focus more on intellectual achievements than emotional connections with students. Completing higher secondary education and entering the teaching profession means that many individuals join schools at a relatively young age. Since their own school life ends quite recently, they are able to better understand students' problems and various challenges, which in turn fosters within them a tendency to provide selfless support. This is important in the context of West Bengal, where educational levels vary widely, and more emphasis is placed on professional qualifications rather than emotional intelligence.

The findings that Teachers from the arts academic discipline exhibit higher altruism compared to teachers from science and commerce academic discipline supported by previous research (Møller-Skau & Lindstøl, 2022). It can be explained that Subjects in the Arts stream, such as Bengali, History, Psychology, and Philosophy, are primarily cantered on human beings, society, culture, and values. Learning these subjects naturally nurtures humanity, and social service, thereby fostering altruism.

The findings that teacher from rural primary school exhibit higher altruism than the other counterparts are supported by previous research (Li, 2019). Teachers in rural schools interact daily with students, many of whom grow up amid poverty, deprivation, and various hardships. Such experiences help cultivate and strengthen altruism among

these teachers. The observation that Teachers who were members of social organizations exhibit higher altruism compared to non-members are supported by previous research (Tseng, & Kuo, 2014). It could be explained that Teachers who are members of social organizations regularly engage in helping others. This experience of providing support is reflected in their classroom practices, where a higher degree of altruism becomes evident.

The findings regarding Teachers who reported teaching as their first career choice exhibit higher altruism compared to those who chose it as an alternative career are supported by previous research (Noor et al., 2021). In this context, it may be stated that teachers who have chosen teaching as their first profession often work with a sense of joy. This professional satisfaction nurtures within them a tendency to support students selflessly.

Another, finding that female teachers exhibit higher empathy than male teachers are supported by previous research (Karni & Fiedler, 2013), which highlights that female generally exhibit more empathic behaviours, possibly due to gendered socialization. This aligns with the West Bengal context, where women are often primary caregivers and may translate these caregiving traits into their teaching practice. On the other hand, unmarried teachers demonstrating higher empathy than married teachers contradict some studies that suggest married individuals, particularly those with children, tend to develop higher empathy (Davis, 1983). This result may reflect unique demographic dynamics in West Bengal, where unmarried teachers, especially younger ones, may have more flexibility to engage deeply with their students.

Other, finding that teachers from General categories exhibited higher empathy than their peers from SC, ST, and OBC categories mirrors the results seen in the altruism section, as both can reflect societal expectations and the emotional responses shaped by one's social standing. This aligns with West Bengal's caste dynamics, where class and community roles influence teacher-student interactions. Teachers from rural schools showing higher empathy than those from urban or semi-urban schools is also consistent with literature (Larson & Green, 2013), as rural teachers often work in more close-knit, community-oriented environments. In West Bengal, rural areas are known for strong community bonds, which likely foster greater empathy among teachers who are deeply embedded in their students' lives. Teachers with Higher Secondary educational qualifications exhibit higher empathy compared to teachers with Graduate and Master's degree educational qualifications. It can be explained that since teachers who enter the profession after

completing higher secondary education are comparatively younger, they are often able to better understand the various problems and challenges faced by students. With relatively fewer family pressures and responsibilities, they tend to be more caring towards learners, which may explain the higher level of empathy observed among them.

The findings that Teachers from the arts academic discipline exhibit higher empathy compared to teachers from science and commerce academic discipline. The west Bengal context, Teachers who study subjects such as Psychology, Sociology, and Literature within the Arts discipline learn to experience and appreciate human struggles, joys, sorrows, and challenges. This literary sensitivity enhances their capacity for empathy.

Lastly, the result showed that the negative relationship between birth order and altruism among primary school teachers, where later-born teachers showed lower altruism, is a new and intriguing finding. This might be explained by the “birth order theory,” which posits that first-borns are more likely to be leaders and caregivers, traits that align with altruism (Sulloway, 1996). The West Bengal context, with its strong family structures and traditional values, may provide fertile ground for these birth order dynamics, where family roles are clearly defined. The weak correlation between altruism and empathy is also a critical finding. While these two traits are often studied together, the lack of significant correlation suggests that altruistic behaviour does not necessarily lead to empathetic actions, or vice versa. This finding aligns with other studies (Caprara et al., 2010), indicating that while both altruism and empathy are pro-social behaviours, they may operate independently depending on individual circumstances and personality.

These findings are crucial for understanding the social dynamics that influence teaching in West Bengal. The region, with its unique demographic, cultural, and educational challenges, can benefit from a deeper exploration of these variables. The emphasis on female teachers’ altruism and empathy, for instance, underscores the importance of nurturing these traits in teacher training programs, particularly in a region where women have been shown to be more empathetic and altruistic. Moreover, married teachers and those from nuclear families may be crucial in shaping teaching practices, as their personal experiences may translate into better student engagement. These insights suggest that teacher training programs and policies in West Bengal can focus more on understanding the complex relationship between teachers’ personal backgrounds and their professional performance.

5.4 Educational Implications

The findings of this study offer several valuable educational implications for improving teaching practices and policies in West Bengal. Understanding how various demographic factors influence teachers' altruism and empathy can guide the development of more targeted teacher training programs. For instance, the study reveals that female teachers exhibit higher levels of altruism and empathy compared to their male counterparts. This suggests the importance of fostering these traits in male teachers through specific training programs that promote emotional intelligence and prosocial behavior. Given the social expectations and caregiving roles often assigned to women, teacher training can focus on nurturing these qualities in all educators, regardless of gender. The study also shows that married teachers demonstrate higher altruism, which can be attributed to the stability that marriage and family life might provide. Teacher development programs could consider integrating family life education and work-life balance strategies to support teachers, particularly those who are unmarried or early in their careers, to develop similar levels of altruism and empathy. Furthermore, the finding that teachers from rural areas exhibit higher empathy than those from urban schools highlights the potential benefits of community-based teaching. This could prompt schools in urban areas to incorporate community engagement activities to encourage more empathetic teaching practices.

Another important finding is that teachers with higher secondary qualifications show more altruism and empathy than their counterparts with graduate or master's degrees. This suggests that emotional intelligence and altruistic behavior might not always correlate with higher academic qualifications. As a result, educational policies and teacher recruitment strategies could place greater emphasis on selecting candidates with strong interpersonal and emotional skills, in addition to academic qualifications, to foster a more compassionate and caring learning environment.

Finally, the study's finding on birth order influencing altruism and empathy suggests that family dynamics play a role in shaping teachers' behavior. Educational institutions could consider integrating family-related discussions and workshops that help teachers reflect on their personal backgrounds, which may enhance their professional development and improve their relationship with students. These insights can lead to a more holistic

approach to teacher training, where both personal experiences and professional competencies are balanced to improve overall teaching effectiveness in West Bengal.

5.5 Limitations of the study

- i) The study was geographically limited to six districts and twenty blocks of West Bengal, which may not fully represent the altruism and empathy of teachers in other districts, regions, or the country, thus restricting the broader applicability of the findings.
- ii) Although the study involved 570 primary school teachers, this sample size may not have captured the full diversity of teachers' altruism and empathy across the entire state or nation. A larger and more diverse sample could have provided richer insights.
- iii) The research focused solely on primary school teachers in West Bengal, which narrows the understanding of altruism and empathy within the broader teaching community.
- iv) The study considered only a limited set of demographic factors, such as gender, marital status, social category, family structure, educational qualification, academic discipline, school location, social organization member, religion, teacher training qualification year, teaching as a career choice, birth order, work experience.
- v) The cross-sectional design of the study offered a snapshot of teachers' altruism and empathy at a single point in time, failing to capture potential changes over time or the effects of factors like curriculum reforms, shifting academic expectations, or evolving teaching practices.

5.6 Scope for Further Studies

- i) This study focused on a sample of primary school teachers. Future research could extend to include teachers from higher secondary schools and higher education institutions.
- ii) The current research was limited to teachers from West Bengal. Further studies could compare the results with teachers from other states or even countries to see if similar patterns emerge.

- iii) Future research could broaden the scope by including other groups such as B.Ed. teacher trainees, students, school administrators, management staff, and even parents to gain a more comprehensive understanding.
- iv) In the present study self-developed Teachers' Altruism scale and Toronto Empathy Questionnaire (TEQ), developed by Spreng, McKinnon, Mar, and Levine in 2009 were used for the study. Further studies can be done taking other scales on altruism and empathy.

5.7 Conclusions

Findings of the study were verified in relation to each of the three research questions.

- **Research Question 1:** Are Teachers in Primary Schools Altruistic?

The analysis of findings clearly suggests that primary school teachers exhibit altruistic tendencies, though the level of altruism is not uniform across all groups. Certain demographic and professional characteristics strongly influence the degree of altruism. Female teachers were found to be more altruistic than their male counterparts, which may be linked to gendered socialization and caregiving roles that encourage nurturing behavior. Similarly, married teachers showed significantly higher altruism than unmarried teachers, possibly because marital responsibilities enhance a sense of sacrifice, responsibility, and consideration for others.

Teachers belonging to the General category recorded higher altruism than those from SC, ST, and OBC categories, indicating that socio-cultural and structural factors may play a role in shaping altruistic dispositions. Teachers from nuclear families were also more altruistic compared to those from joint families, perhaps because nuclear family arrangements require greater individual responsibility and independent decision-making.

Educational qualifications also made a difference—teachers with only Higher Secondary qualifications showed higher altruism than graduates and postgraduates. This could be due to differences in career orientation, where highly qualified individuals may prioritize professional advancement over selfless service. In terms of academic discipline, arts-trained teachers demonstrated greater altruism than those from science or commerce backgrounds, possibly reflecting the humanistic orientation of arts education.

The findings further highlight that rural school teachers showed more altruistic behavior than their urban or semi-urban counterparts, suggesting that the close-knit, community-based environment of rural settings fosters greater selflessness. Membership in social organizations was another strong predictor, as teachers associated with such groups displayed higher altruism compared to non-members. However, no significant differences were observed based on work experience, religion, or the year of obtaining a teaching qualification. Overall, the study confirms that altruism is a prominent trait among primary school teachers, though it is shaped by specific socio-demographic and professional contexts.

- **Research Question 2: Are Teachers in Primary Schools Empathetic?**

The findings also indicate that primary school teachers demonstrate empathy, though again, the degree varies across categories. Female teachers displayed significantly higher empathy compared to male teachers, aligning with research that women often exhibit stronger emotional sensitivity and responsiveness. Interestingly, unmarried teachers were more empathetic than married teachers, which contrasts with the pattern observed in altruism. This could be because unmarried teachers may have more emotional space and fewer competing responsibilities, allowing them to better attune themselves to students' feelings and perspectives.

Teachers from the General category once again scored higher in empathy compared to SC, ST, and OBC teachers, suggesting that social and cultural positioning may influence the expression of empathic concern. Nuclear family teachers were also found to be more empathetic than those from joint families, indicating that similar family structures encourage the development of stronger interpersonal sensitivity.

Educational background and discipline also played a significant role. Higher Secondary qualified teachers were more empathetic than graduates and postgraduates, while arts background teachers reported higher empathy than those from science and commerce. These results suggest that both lower academic qualifications and exposure to humanistic disciplines enhance empathetic capacities.

Location was another critical factor—rural school teachers showed higher empathy compared to teachers in urban or semi-urban schools, reinforcing the idea that rural teaching environments encourage closer personal connections with students and the

community. Although teachers who were members of social organizations and those who chose teaching as their first career displayed higher empathy, these differences were not statistically significant. No notable differences emerged in terms of religion, work experience, or year of obtaining teaching qualifications. Taken together, the results show that empathy is strongly present among primary school teachers, though it is shaped by demographic and professional characteristics in ways that partly overlap, but also diverge, from altruism.

- **Research Question 3:** Is there any relationship between Altruistic Behavior and Empathetic Behavior of Teachers?

When comparing the patterns of altruism and empathy, the findings reveal a strong interconnection between the two constructs, though important distinctions also emerge. Both altruism and empathy were significantly higher among female, General category, nuclear family, Higher Secondary qualified, arts background, and rural school teachers, indicating that these demographic and academic factors foster both selfless and emotionally responsive behaviors. This suggests that altruism and empathy share a common foundation in the teaching profession, as both are oriented toward concern for the well-being of others.

However, differences were also noted. Married teachers demonstrated higher altruism, while unmarried teachers displayed greater empathy, highlighting that family roles and responsibilities may enhance sacrificial tendencies but reduce emotional availability. Similarly, membership in social organizations was strongly associated with altruism but did not significantly affect empathy, suggesting that altruism may be more outwardly oriented toward collective service, whereas empathy remains an individual emotional capacity. Career choice also influenced altruism more strongly than empathy, with first-choice teachers showing significantly higher altruism but only marginally higher empathy.

Overall, the findings point to a close but nuanced relationship between altruism and empathy. While they often coexist and are shaped by similar factors, certain socio-demographic variables influence them differently. This interplay suggests that primary school teachers embody both altruistic and empathetic dispositions, but the balance

between the two is moderated by personal circumstances, educational background, and professional orientation.

This study examined the altruistic and empathetic behaviors of primary school teachers in West Bengal, focusing on the influence of various demographic factors. The results reveal notable differences in altruism and empathy based on gender, marital status, family structure, education level, and teachers' career choices.

The findings suggest that educational policies in West Bengal should prioritize the development of emotional intelligence and prosocial behaviors, particularly among male teachers and those with advanced qualifications. By incorporating community-based teaching methods, family life education, and emotional intelligence into teacher training, it is possible to cultivate more compassionate and empathetic educators. Furthermore, the study underscores the importance of understanding teachers' personal backgrounds, including family dynamics and career paths, in shaping their professional growth.

In conclusion, this research provides important insights for educational policy and teacher development programs, advocating for a holistic approach to fostering emotional intelligence and prosocial behaviors in teachers, ultimately enhancing the quality of education in West Bengal.

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APPENDICES

Appendix - I

Information Schedule about the Teacher

I am Ataur Hossain, a PhD research scholar in the Department of Education at Jadavpur University, conducting research under the supervision of Professor Muktipada Sinha. My study, *Exploring Teachers' Altruism and Empathy in Primary Schools of West Bengal*, aims to examine and understand the altruistic and empathetic behavior of teachers in primary schools across West Bengal. To ensure the accuracy and depth of this research, I seek your valuable insights. Your participation and honest responses will contribute significantly to the quality and credibility of this study. Please note that all information provided in this form will be kept strictly confidential, and your identity will remain anonymous. Kindly answer the following questions as accurately as possible.

I sincerely appreciate your time and cooperation in providing accurate responses to the following questions.

Age : (Years) **Religion** : (Hindu / Muslim / Others)

Gender : (Male / Female / Others) **Educational Qualifications** :

Marital Status : (Married / Unmarried) **Type of School** : (Govt. / Govt. Aided / Private)

Birth Order : **Academic Discipline** : (Arts / Science / Commerce)

Social Category : (GEN / SC / ST / OBC) **School Location** : (Rural / Urban / Semi-Urban)

Family Structure : (Joint / Nuclear)

Are you a member of any social organization other than an academic one (e.g., a club or society)?
Yes / No

Directions: Please read each question carefully and select the option that best represents your response by placing a tick (✓).

Questions	Answer Options
1. What is the highest level of formal education you have completed?	a) Higher Secondary (Class 12) b) Bachelor's Degree c) Master's Degree d) M.Phil. e) PhD
2. Teacher Education qualification.	a) Bachelor of Education (B.Ed.) b) Diploma in Elementary Education (D.El.Ed.) c) Master of Education (M.Ed.) e) Other (please specify)
3. When did you complete the formal Education or training that qualified you to teach?	a) Before 2015 b) 2016–2018 c) 2019–2021 d) 2022–2024 e) 2025- Present

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4. Was teaching your first choice as a career?	a) Yes b) No, I considered other careers first c) No, I entered teaching due to circumstances
5. How many years of work experience do you have in this school?	a) Less than 1 year b) 1-5 years c) 6-10 years d) 11-15 years e) More than 15 years

Appendix - II

Teachers' Altruism scale

*Read each item carefully. Mark your opinion with a tick (✓) according to the following 5-point Likert scale.

Sl. No.	Items	Strongly Agree (সম্পূর্ণ সহমত)	Agree (সহমত)	Some Times (কখনও কখনও)	Disagree (অসহমত)	Strongly Disagree (সম্পূর্ণ অসহমত)
1.	I help students who struggle with their studies, even outside regular school hours. (বিদ্যালয় সময়ের বাইরেও, আমি পড়াশোনায় পিছিয়ে পড়া ছাত্রছাত্রীদের সাহায্য করি)					
2.	I provide emotional support to students facing personal challenges. (ছাত্রছাত্রীরা ব্যক্তিগত সমস্যা নিয়ে এলে আমি তাদের সাহায্য করি।)					
3.	I ensure that every student in my class feels included and valued. (ছাত্রছাত্রীদের প্রত্যেকে যাতে ক্লাসের অন্তর্ভুক্ত একজন সদস্য হিসেবে গুরুত্ব পায়, আমি তা নিশ্চিত করি।)					
4.	I willingly spend my own resources to enhance students' learning experiences. (শিক্ষার্থীদের শিখন অভিজ্ঞতা উৎকৃষ্ট করার জন্য আমি আগ্রহের সাথে নিজের টাকা খরচ করি।)					
5.	I encourage students to approach me for help whenever they need it. (আমি শিক্ষার্থীদের উৎসাহিত করি যাতে তারা প্রয়োজনে আমার কাছে সাহায্য চাইতে পারে।)					
6.	I assist my colleagues when they face challenges in teaching or classroom management. (শ্রেণীকক্ষে পাঠদান বা পরিচালনার ক্ষেত্রে আমার সহকর্মীরা কোনো সমস্যায় পড়লে, আমি তাদের সাহায্য করি।)					
7.	Teaching gives me the opportunity to be of service to others. (শিক্ষকতা আমাকে অন্যদের সেবা করার সুযোগ দেয়।)					
8.	When given an opportunity, I enjoy aiding others who are in need. (সুযোগ পেলে, আমি অন্যদের সাহায্য করতে ভালোবাসি।)					
9.	I would aid someone in a medical emergency if I could. (যদি পারি, আমি অসুস্থ লোককে সাহায্য করব।)					
10.	Children should be taught about the importance of helping others. (শিশুদের সাহায্য করার গুরুত্ব শেখানো দরকার।)					
11.	Teachers have compassion and understanding for themselves and others. (শিক্ষকরা নিজেদের ও অন্যদের ভালোভাবে বোঝেন।)					
12.	I stay updated with new teaching strategies to improve my students' learning. (শিক্ষার্থীদের শিখনের উন্নতির জন্য আমি নতুন নতুন শিক্ষণ পদ্ধতি সম্পর্কে অবগত থাকি।)					

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Sl. No.	Items	Strongly Agree (সম্পূর্ণ সহমত)	Agree (সহমত)	Some Times (কখনও কখনও)	Disagree (অসহমত)	Strongly Disagree (সম্পূর্ণ অসহমত)
13.	I regularly evaluate and modify my teaching methods for better outcomes. (ছাত্রছাত্রীদের ভালো ফলাফলের জন্য আমি নিয়মিত আমার পড়ানো মূল্যায়ন ও পর্যবেক্ষণ করি।)					
14.	I try to offer my help with any activities to my community or school groups are carrying out. (আমি আমার কমিউনিটি বা স্কুলের কাজে সাহায্য করার চেষ্টা করি।)					
15.	Doing volunteer work makes me feel happy. (স্বেচ্ছাসেবক কাজ আমাকে আনন্দ দেয়।)					
16.	Good relationship between the teacher and the taught is essential for learning. (শিক্ষক এবং ছাত্রের মধ্যে ভালো সম্পর্ক শিখতে সাহায্য করে।)					
17.	Teaching gives me the opportunity to realize potential in management, leadership, speak in front of others, etc. (আমি শিক্ষকতার মাধ্যমে নতুন দক্ষতা শিখি।)					
18.	I encourage community involvement in school activities. (স্কুল কার্যক্রমে সমাজের অংশগ্রহণকে আমি উৎসাহিত করি।)					
19.	I treat all students equally, irrespective of their background. (আমি ছাত্র-ছাত্রীদের সঙ্গে বৈষম্যহীনভাবে আচরণ করি।)					
20.	I advocate for the rights of students, especially those from disadvantaged groups. (বিশেষত যারা পিছিয়ে পড়া শিক্ষার্থীদের অধিকারের, পক্ষে আমি কথা বলি।)					
21.	I refrain from any actions that could harm a student emotionally or academically. (শিক্ষার্থীরা মানসিক বা শিক্ষাগত দিক থেকে ক্ষতিগ্রস্ত হতে পারে, এমন কাজ থেকে আমি বিরত থাকি।)					
22.	Teachers work towards every action being for the highest good of all. (শিক্ষকরা সবার কল্যাণে কাজ করেন।)					
23.	I take initiatives to promote values like kindness and honesty among students. (শিক্ষার্থীদের মধ্যে দয়া এবং সততার মতো মূল্যবোধগুলি গড়ে তোলার জন্য উদ্যোগী।)					
24.	I give money to help a student or support a noble initiative by school. (ছাত্রছাত্রীদের বা স্কুলের মহৎ উদ্যোগের উদ্দেশ্যে আমি অর্থ প্রদান করি।)					
25.	I give clothes, books, or other things to students or school donation programs. (ছাত্রছাত্রীদের বা স্কুলের দানমূলক কাজে আমি বই, পোশাক বা অন্যান্য জিনিস দান করে থাকি।)					

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Sl. No.	Items	Strongly Agree (সম্পূর্ণ সহমত)	Agree (সহমত)	Some Times (কখনও কখনও)	Disagree (অসহমত)	Strongly Disagree (সম্পূর্ণ অসহমত)
26.	I give my time to help in school charity events or community work. (স্কুলের বিভিন্ন দানমূলক ও সমাজসেবামূলক কাজে আমি সময় দিই।)					
27.	I help my colleague at school in their need other than academic activities. (আমি স্কুলে পড়াশোনার বাইরেও সহকর্মীদের প্রয়োজনে সাহায্য করি।)					

Appendix - III

Toronto Empathy Questionnaire

*Read each item carefully. Mark your opinion with a 'Tick' according to the following 5-point Likert scale.

Sl. No.	Items	Never (কখনই নয়)	Rarely (খুবইকম)	Some Times (কখনও কখনও)	Often (প্রায়শই)	Always (সবসময়)
1.	When someone else is feeling excited, I tend to get excited too. (যখন কেউ উত্তেজিত হয়ে পড়ে আমিও উত্তেজিত বোধ করি)					
2.	Other people's misfortunes do not disturb me a great deal. (অন্যান্য লোক বিপদে পড়লে আমার কিছু মনে হয় না)					
3.	It upsets me to see someone being treated disrespectfully. (কাউকে অপমানিত হতে দেখলে আমার মন খারাপ লাগে)					
4.	I remain unaffected when someone close to me is happy. (আমার কাছে কোন লোক খুশি হলে আমার কিছু মনে হয় না)					
5.	I enjoy making other people feel better. (অন্যকাউকে খুশি করতে পারলে আমার ভালো লাগে)					
6.	I have tender, concerned feelings for people less fortunate than me. (আমার থেকে কম ভাগ্যবান ব্যক্তিদের প্রতি আমার কোমল অনুভূতি আছে)					
7.	When a friend starts to talk about his/her problems, I try to steer the conversation towards something else. (যখন আমার কোনো বন্ধু তার সমস্যা গুলি নিয়ে কথা বলে, আমি সেই কথোপকথনকে অন্যদিকে ঘুরিয়ে দেওয়ার চেষ্টা করি)					
8.	I can tell when others are sad even when they do not say anything. (অন্যেরা যখন তার দুঃখের কথাগুলি গোপন করে তা আমি বুঝতে পারি)					
9.	I find that I am "in tune" with other people's moods. (অন্যান্য ব্যক্তিদের মেজাজের সাথে আমি ভাল মিলিয়ে থাকতে পারি)					
10.	I do not feel sympathy for people who cause their own serious illnesses. (নিজেদের গুরুতর অসুস্থতার জন্য যারা নিজেরা দায়ী, আমার তাদের প্রতি সমবেদনা নেই)					
11.	I become irritated when someone cries. (কেউ কাঁদলে আমি বিরক্ত বোধ করি)					
12.	I am not really interested in how other people feel. (অন্যেরা কি অনুভব করে সে বিষয়ে আমি আগ্রহী নই)					
13.	I get a strong urge to help when I see someone who is upset. (কারো মন খারাপ দেখতে পেলে, আমার তাকে সাহায্য করার তীব্র তাগিদ থাকে)					
14.	When I see someone being treated unfairly, I do not feel very much pity for them. (কারো সাথে অন্যায় হতে দেখলে, আমার তাদের প্রতি করুণা হয় না)					
15.	I find it silly for people to cry out of happiness. (কেউ আনন্দে কান্নাকাটি করলে আমার তাকে নির্বোধ মনে হয়)					
16.	When I see someone being taken advantage of, I feel kind of protective towards Him/her. (সুবিধাবাদী লোকদের প্রতি আমার শক্ত মনোভাব আছে)					

Researcher – Ataur Hossain (Ph.D Scholar)
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Supervisor -Prof. Mukti Pada Sinha



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By Ataur Hossain

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