

**SOCIAL INTELLIGENCE AND PRO-SOCIAL BEHAVIOUR
IN RELATION TO ACADEMIC ACHIEVEMENT
OF HIGHER SECONDARY STUDENTS
IN EAST KHASI HILLS DISTRICT IN MEGHALAYA**

THESIS

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DECLARATION

I, Laurence Kharluni, hereby declare that the subject matter of this thesis is the record of work done by me and the contents of this thesis did not form the basis of the award of any previous degree to me or to the best of my knowledge to anybody else. The thesis has not been submitted by me for any research degree in any other University/Institute.

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CERTIFICATE

This is to certify that Laurence Kharluni (Registration no. & Date: 2486 of 20.11.2014), Research Scholar of the Department of Education, North-Eastern Hill University has completed his Ph. D. thesis entitled, “Social Intelligence and Pro-Social Behaviour in Relation to Academic Achievement of Higher Secondary Students in East Khasi Hills District in Meghalaya” under my supervision. This is the outcome of his research and investigation. The investigator deserved all the appreciation for his sincere effort.

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CHAPTER I

INTRODUCTION

1.1. Introduction

Education aims to bring certain behavioural changes in the individual to lead an effective life in the society. It inculcates adjustment to new situations, problem solving ability, increase knowledge, awareness, skills, values, attitudes etc. in a person. In fact, the willingness to help others is one essential attitude by which one may lead satisfactory social life. Social knowledge, social awareness, judgement in social situations, etc. and psychological attributes like disposition, emotion, intelligence, etc., may play important role in the development of such positive helping behaviour. It is observed that the internal motivation to engage in a helping behaviour does not occur in an isolated way; rather it occurs as an important conjunction of certain significant factors. In this connection there happens to be the appearance of ‘social intelligence’ and ‘pro-social behaviour.’ Social intelligence may be considered as one of the important factors which is said to play a significant role in the development of helping actions and pro-social behaviour. Social intelligence is very important for an individual to lead a successful life in the society which can help to build and maintain cordial relation with other members of the society. A well-adjusted person is the one who is molded according to the requirements of the society and when he/she develops positive attitude towards other fellow members of the society. In this context social intelligence of a person may help to create and develop a kind of behaviour which is pro-social. Pro-social behaviours are those actions or behaviours that have been motivated with the intention to help others. There had been times that people suffered so much or even lost their precious life just because of the bystander attitude of people who were nearby but refused to help. Hence pro-social behaviour has to be inculcated among the people.

The term pro-social behaviour relates to behaviour which is positive and intended to benefit other individuals (Eisenberg & Fabes, 1998). It is a kind of action which involves more of voluntariness. It could be explained as that which ‘covers the broad range of actions intended to benefit one or more people other than oneself,

behaviours such as helping, comforting, sharing, and cooperating'(Batson et al.,2003). Basically, the intentions and the actions done for the benefit of others and the society are considered as pro-social behaviour.

The aim of education is to train a child to become a better person in the society. This can be done by imbuing in children the spirit of helping his/her neighbours and other children in the school and in the family. Hence, pro-social behaviour will help children to become more human in their dealing with their fellow human beings. Pro-social behaviour is also an important part of socialization process of a person. Therefore, in order to build good society we need to encourage pro-social acts like helping, co-operating, sharing, sympathizing, serving, empathizing, etc.

The opposite of pro-social behaviour is anti-social behaviour. It is noticed that all behaviours are not pro-social because there are some actions that are harmful to others which can be termed as anti-social behaviour. When a child grows in such an atmosphere, full of anti-social behaviour, he/she tends to be more aggressive in the later period of his/her life as one research clearly shows that the anti-social behaviour of a pupil can grow into much more aggressive and also criminal behaviour in adult life (Mooij, 1999). So tending the child from an early age is important so that unwanted behaviour can be prevented at their later stages of life.

Therefore, there is a need to understand that kind of behaviours that are developing in the children and find out the causes to prevent anti-social behaviour in them at an early age. At the same time pro-social behaviour needs to be inculcated in the children. Education has to play an important role in this task of inculcating pro-social behaviour and social intelligence in the students to prepare better human beings for the society. At this juncture academic achievement of the student which is the outcome of education may have been influenced by social intelligence as affirmed by Vinodhkumar and Pankajam (2017) and pro-social behaviour as declared by Jevtic (2017) and Ingles et al., (2009). The present research tries to study the relationship among social intelligence, pro-social behaviour and academic achievement in order to facilitate the well-being of the students and the society as a whole.

1.2. Social Intelligence

Intelligence is the ability to memorize, comprehend, understand, reason out, think abstractly, learn new things and judge the merit of the situations. Intelligence is used for knowing, solving and adjusting problems and situations. An intelligent person can make use of his/her imagination, creativity and skills to protect and improve his/her life and that of others. Thorndike (1920) presented the idea that intelligence can be divided into three aspects which included social, mechanical and abstract intelligences and defined social intelligence as ‘the ability to act wisely in a social relationship’; mechanical intelligence as ‘the skill of dealing with materials, instruments, and devices’ and abstract intelligence as ‘theoretical behaviour and the ability in dealing with symbols, verbs, and forms’ (Nazir, Tasleema & Ganai, 2015; Kriemeen & Hajaia, 2017). Since then there has been a series of research on the concept of social intelligence.

Social intelligence plays a very important role in forming and shaping the life of children and children are desired by the parents to be able to adjust in their life so that they would obtain happiness. The modern world particularly needs a lot of adjustments, especially in social life. Children need to have a strong social knowledge which may be fostered by learning of various social skills and their application in daily life.

Social intelligence like other social phenomena is closely related to the norms and values of a culture. Hence, social intelligence can be understood differently in different cultures. For example, Willmann, Feldt, and Amelang (1997) concluded that for the Chinese, the hallmark socially intelligence is creating harmony and maintain equilibrium by conforming to others’ expectations, whereas the Germans saw obtaining one’s goals and influencing others as social intelligence (Habib, Saleem & Mahmood, 2013). Culture keeps on forming the individuals through its norms, morals and ethics and greatly influences thought and behaviour.

Social life is very complex and needs to be examined carefully and that can be done with the help of social intelligence. For this purpose, social intelligence is considered as the person’s ability to effectively find ways and means to solve

complex social problems. It requires having the ability to understand the emotions and social set up of others, learning how to control his/her emotions, and being able to express clearly to others. According to Reber and Reber (2001) social intelligence concerns how individuals perceive, recall, think about and interpret information about their actions and that of others (Lekshmi, 2012). So, social intelligence is needed to solve complex situations of life.

People who have great social intelligence are said to carry attitude that encourages the person to grow, to create, communicate and befriend others (Buzan, 2002). They are people who are friendly and who can adjust well with others as Lekshmi rightly pointed out that social intelligence is the ability of an individual to get along with others successfully. So, social intelligence deals specifically with people in the society and their adjustment with one another.

A well-adjusted person is the one who moulds himself/herself according to the needs of the society and develops positive attitude towards other fellow members of the society. It is a natural wisdom bestowed on the people in order to be able to live amicably and peacefully. That is the reason why human beings live in a society, nurtured by it and learn to grow in it. Each human being needs the co-operation of others in order to protect himself/herself. So, social intelligence is very important for an individual to lead a successful life in the society which can help to build and maintain cordial relationship with other members of the society.

1.2.1. Meaning of Social Intelligence

Social intelligence is the way individuals understand and interpret their own and other behaviour and their effectiveness in regulating their behaviour (Birknerova, 2011). It is an ability to manage and solve problems in various situations. It is measured on the basis of behaviour in various interpersonal situations, social interactions, and social structures (Ruisel, 1999). Social intelligence is part of intelligence which deals with its social dimension.

Social intelligence is the ability of a person to feel the feelings and emotions of others and to react accordingly. According to Nagra (2014), social intelligence has

two key constituents, i.e., intrapersonal and interpersonal. One is personal which deals with the internal emotion and the other is social in nature.

Social intelligence is a kind of ability possessed by an individual to deal with the different situations encountered in day to day life. Two types of people can be taken as examples: one type are people who could adjust in any situation they encounter in their day-to-day life; they are able to adjust with their neighbours, other people, strangers, etc., since they do not find much difficulty in dealing with any people or situation. In the contrary, another type are people who could not adjust with their life situations, they spent a lot of time in gossiping and grumbling. They are not at peace with their neighbours, other people, strangers, even with their family members. In the above example, the former is said to possess high level of social intelligence while the latter is lacking in it.

Habib, Saleem & Mahmood (2013) views social intelligence as the capacity of an individual to create, facilitate and maintain a set of cohesive and cooperative interpersonal relationships in which he or she, can manipulate, influence, manage and control others through communication, accurate empathy, and social adaptability. So, social intelligence could be understood as the capacity of a person to understand the feelings and emotions of others and react to them accordingly. It enables them to express their viewpoints strongly and make others agree upon it (Nagra, 2014). Social intelligence also helps individuals to become leaders in the society in which they live. Without it, there could be no interpersonal relationship which is a vital quality of leadership.

1.2.2. Definitions of Social Intelligence

Social intelligence is defined in various ways by many of its exponents. Most of the definitions target the interaction and relationship with others and how well a person interact and relate with others. Some of the definitions are given below.

Thorndike (1920) defined social intelligence as the ability to understand others and act wisely in human relations. It focuses on understanding and relationship with others.

Moss and Hunt (1927) defined social intelligence as the ability to get along with others. As human being it is very important that peace is maintained by getting along well with one another. Human beings need, support and encourage one another and this is how they survive in this planet.

According to Vernon (1933), social intelligence is the ability to get along with people in general, social technique or ease in society, knowledge of social matters, susceptibility to stimuli from other members of a group, as well as insight into the temporary moods or underlying personality traits of strangers. This definition included a variety of variables necessary for social intelligence. Basically, social intelligence is a social ability of a person.

Archer (1980) defined social intelligence as the ability to construct accurate interpretations based on non-verbal behaviour such as facial expressions, vocal parallax gauge, kinetic etc. This definition is based on non-verbal expression which is sometimes difficult to read. The person has to be very observant to do that.

Ford & Tisak (1983) defined social intelligence as one's ability to accomplish relevant objectives in specific social settings. Social setting can be numerous and each setting requires different reactions. So a person has to adjust according to specific situation to be able to have social intelligence.

Social intelligence is defined as the degree of ease and effectiveness displayed by a person in social relationships (Goldenson, 1984). According to him, social intelligence is measured by how much ease and effectiveness a person is able to maintain social relationship. If a person could easily mix with people he/she would have greater social intelligence.

Marlowe (1986) defined social intelligence as the ability to understand the feelings, thoughts and behaviours of persons in social or interpersonal situations and to act appropriately based on that understanding. This definition touches the emotions, thinking power and the physical made up of a person.

Jones & Day (1997) defined the social intelligence as the ability in employing cognition for social problems solution. Social intelligence is often and widely

defined as the ability to interpret other individuals' behaviour in terms of mental states (thoughts, intentions, desires and beliefs), to interact both in complex social groups and in close relationships, to empathize with other people's state of mind, and to predict how others will feel, think and behave (Baron-Cohen et. al., 1999; as cited in D'haene, 2015).

Lee, Wong, Day, Maxwell & Thorpe (2000) defined social intelligence as the individual's ability to understand and solve verbal and non-verbal behaviour of others and to interact with them. This definition includes two aspects, viz., cognitive and behavioural aspects.

Social intelligence can be defined as the ability to understand thoughts, feelings and behaviours of the others in different social situations that consisted of the skills which enable individuals to solve social problems (Abuhashim, 2008).

Lekshmi (2012) defined social intelligence as the ability to handle social relationships wisely and effectively which revealed how important a relationship is to human beings and that it should be handled cautiously.

Social intelligence can be defined as a capacity of the individual to create, facilitate, and maintain a set of cohesive and cooperative interpersonal relationships which he or she can manipulate, influence, manage, and control others through effective communication, accurate empathy and social adaptability (Habib, Saleem & Mahmood, 2013). Social intelligence is the internal capacity of a person which comes into display in any human relationship.

Social intelligence refers to the ability to read the mind of other people and understand their intentions and motivations; it is basically the ability to effectively negotiate complex social relationships and environments (Ganaie & Mudasir, 2015).

Rahim, Civelek & Liang (2016) defined social intelligence as the ability of how to be aware of related social situations, and how to handle situational challenges effectively by understanding others' concerns, feelings, building and maintaining

positive relationships in social settings. It is the capacity of a person to know oneself and others in the social environment (Lathesh & Vidya, 2018).

These definitions show that social intelligence is a kind of ability to understand others, their feelings, thoughts and behaviour, adjust with one another, maintaining social and inter-personal relationship with other people, accomplish social task, interpret social behaviour correctly, get along with others nicely, interact with one another, solve social problems amicably, and knowing oneself and others in complex social environment.

1.2.3. Emergence of the concept of Social Intelligence

The term social intelligence was not used until Edward Thorndike, the psychologist explored it for the first time in 1920. He defined social intelligence as the ability to think, understand, manage and act appropriately in social human relationships (Thorndike, 1920). Moss and Hunt (1927) and Venom (1933) viewed social intelligence similar to the view held by Thorndike as the ability to get along with others. Archer (1980) supported by Lee, Wong, Day, Maxwell & Thorpe (2000) spoke about social intelligence as accurate interpretations of verbal and non-verbal expressions. Ford and Tisak (1983) considered social intelligence as something related to relevant social objectives.

While Goldenson (1984) spoke about social intelligence as easeness and effectiveness in human relationship, Marlowe (1986) touched the three important domains of a person, i.e., cognitive, affective and psychomotor abilities. While Jones and Day (1997) stressed on cognitive abilities, Baron-Cohen et. al., (as cited in D'haene, 2015) stressed on cognitive, psychomotor as well as on empathy of a person in social relationship. Social intelligence received impetus with Goleman (2006) who considered social intelligence as something that is concerned with the best interests of others which goes beyond sheer self-interest.

Abuhashim (2008) besides cognitive, affective and psychomotor abilities added one more important part of social intelligence called social skills which is required in problem solving. Social intelligence means understanding and adjusting with people, above and beyond the skills to work together and cooperate successfully with

them. So, social intelligence can be considered as a kind of social ability and skill in dealing with others.

While Lekshmi (2012) spoke about social intelligence as handling of relationship wisely and effectively, Habib, Saleem & Mahmood (2013) spoke about interpersonal relationship and the ability to manipulate others in social relationships. Ganaie & Mudasir (2015) viewed social intelligence as understanding of intentions, motivations and negotiations of social relationships and Rahim, Civelek & Liang (2016) explained it as an awareness of social situations and handling of challenges and recently Lathesh & Vidya (2018) considered social intelligence as knowing oneself and others in the social environment.

So, there has been a continuous development of social intelligence as a concept. It was understood as the ability to understand others and to act wisely in human relationship which includes the cognitive and psychomotor domains of a person. Later it was broadened to include all the three domains, viz., cognitive, affective and psychomotor and recently the meaning of social intelligence was enlarged to include the social skills of a person. There has been a constant development of the concept of social intelligence.

1.2.4. Characteristics of Social Intelligence

Social intelligence has some characteristics noticed by different authors. The characteristics of social intelligence will clarify its meaning better. The following are the characteristics of social intelligence.

1) *Ability to Understand Others:* Understanding others is a very important characteristic of social intelligence. Thorndike had emphasized social intelligence as the ability to understand others. Understanding others can also mean understanding their state of mind like judgment, intentions, wishes and values. It is the finding out of how people think about themselves and others. Those who understand others may also have high social intelligence because understanding others increases the ability of people to adjust and interact with one another.

2) *Ability to Act Wisely in Human Relationships*: Social intelligence helps people to act wisely and purposefully in any human relationships. Relationships can be among family, siblings, friends, neighbours and others. People appreciate the one who knows how to talk and act wisely in dealing with other people. Human relationship will last as long as human beings know how to respect one another.

3) *Ability to Get Along with Others*: Moss and Hunt (1927) explained social intelligence as the ability to get along with others. This is important because human beings do not live alone but in a community or society. A person who has high social intelligence will be able to live meaningfully in the society. He/she will have no problem in dealing with other people. They will know how to adjust with one another and to move along with others in the journey of life.

4) *Ability to Read and Interpret Verbal and Non-Verbal Behaviour*: People communicate with one another verbally through words of mouth or verbal cues and non-verbally through body reactions and facial expressions. Archer (1980) viewed social intelligence as the ability to interpret non-verbal actions. A person who can read and interpret both verbal and non-verbal reactions and expressions will also be a person who can easily socialize with others.

5) *Ability to Empathize with Others*: Ability to empathize with others is another characteristic of social intelligence. It is the ability to feel with others' state of mind (Baron-Cohen, et al., 1999 as cited by D'haene, 2015) especially sad and unpleasant moments of their life. People, who know how to empathize with others' thinking, opinions, needs and faiths, misfortunes, etc., will be much appreciated by others. So, social intelligence is measured by how much a person empathizes with others.

There are other characteristics of social intelligence cited by Kriemeen & Hajaia (2017) which include interest in people, practicing accepted behaviour from society and retaining good relationships with others.

6) *Interest in People*: Interest in people means interest in their qualities, characters, abilities, families, etc. Interest can be seen in both verbal and non-verbal behaviour. A person may show interest in others by talking and listening to them or

by non-verbal behaviour like facial expressions, eye movements, body gestures etc. Interest in people creates the feeling of importance in others and that will help them to build better social harmony.

7) *Practicing Accepted Behaviour*: Society is a place where people mould their behaviour. In course of time, society has its own catalyst to accept or reject behaviour of its members. People would like their behaviour to be approved by the society or in other words they will not like to behave in such a way that society would not accept them. So practicing accepted social behaviour is a sign of social intelligence because it is an indication of socially intelligent being.

8) *Retaining Good Relationships with Others*: Good social relationship is a great indicator of social intelligence and retaining social relationship is one of its characteristics. Good relationship means ability to deal with one another respectfully and maturely. So, retaining good relationship with others would indicate maintaining and not allowing any word or action that would destroy the good relationship that existed.

1.2.5. Indicators of Social Intelligence

Social intelligence is noticed by the existence of some indicators which are mentioned by Al-khaldi (as cited in Kriemeen & Hajaia, 2017). They are the abilities of the individual in understanding others, the appropriate response with those of different motives, developing friendships, ability in interaction with others and behaving wisely with them.

(a) *Ability to Understand Others*: People who have social intelligence also have the ability to understand others. So if the person has the ability to understand other's emotions, feelings, dispositions, suffering, etc., that person surely has high social intelligence. And when a person does not understand others, that person has low or lacking social intelligence.

(b) *Appropriate Response with those of Different Motives*: It is not always an easy task to deal with people who have different motives. So an appropriate

response to people with different motives is an indicator of high social intelligence. A person with high social intelligence can adjust to any situation in life.

(c) *Developing Friendships*: The root of social intelligence is relationship and that is possible only if friendship is built. A friendly gesture will help in maintaining social relationship with others. So when friendship is built, social intelligence will increase.

(d) *Ability to Interact with Others*: Individuals want to interact with one another. They do not want to sit idle without any interaction with one another. There are many things that happen around the globe and in the locality that need discussion and interaction. A person with high social intelligence has the ability to interact with other people, listening and talking to them.

(e) *Behaving Wisely with Others*: A person who has high social intelligence is also wise in dealing and behaving with others. In social life, behaviour does count for a person and speak a lot about his/her character. So persons who have high social intelligence also behave maturely and wisely in their dealings with other people.

1.2.6. Dimensions of Social Intelligence

Social intelligence is a variable which has many dimensions. According to Chadha and Ganesan (2015) there are eight dimensions of social intelligence. They are patience, co-operativeness, confidence, sensitivity, recognition of social environment, tactfulness, sense of humour and memory.

(A) *Patience*: Patience is a calm endurance under stressful situations. Calmness reduces tension in any dire situations. A person who is calm has less social problems. Patience is necessary at home and in the society at large and it cures many social evils.

(B) *Co-operativeness*: Co-operativeness is an ability to interact with other people in a pleasant way and to be able to observe things from all perspectives. A pleasant way does not mean only pleasant words but also pleasant actions that are

used in communication. Co-operativeness is part and parcel of human interactions with one another.

(C) *Confidence*: Confidence is a firm trust in oneself and one's chances. This is very important when it comes to making decisions that will affect the society. A person should not be carried away by any pressure while making decisions. In order to adjust in society, one needs to have self-confidence which is one of the dimensions of social intelligence.

(D) *Sensitivity*: Sensitivity means to be sensitive towards the needs of other people. It is a kind of awareness and responsive feeling towards other human beings. This feeling is important in social relationship. People who are sensitive to feelings and needs of others are loved and respected by other social members.

(E) *Recognition of Social Environment*: Recognition of social environment is the ability to perceive the nature and atmosphere of existing situations. To react to particular social situation, one needs to study and recognize the nature of the social environment. People need to be quick in reading and assessing the existing social environment in order to be able to react to it meaningfully.

(F) *Tactfulness*: Tactfulness means a delicate perception of the right thing to say or do. This is the ability to see the situation from the gestalt point of view. It is a great gift of discernment where the right thing is revealed and chosen in any given situation.

(G) *Sense of Humour*: Sense of humour is the capacity to feel and cause amusement with others and the ability to experience the lighter side of life. Life is a mixture of joy and sorrow, good and bad, seriousness and light moments. Sense of humour can lighten social relationship.

(H) *Memory*: Memory is the ability to remember all relevant issues, names and faces of famous people. Ability to remember and recognize the names and faces of prominent persons in the society is a sign of high social intelligence.

Besides the eight dimensions of social intelligence given above, many authors and researchers have also given other dimensions of social intelligence which show the vastness of the term. Lathesh in 2018 recognized four different dimensions of social intelligence which are self-awareness, art of reading of others, conflict handling and relationship management.

(I) *Self-Awareness*: Self-knowledge or self-awareness is very important part of social interaction. It was the Greek philosopher Socrates who expounded the phrase “know thyself” and Plato laid down the importance of knowing oneself in order to know the nature of human being. Self-awareness is being aware of oneself, one’s feelings, actions, dispositions etc. When one knows about oneself, it will be easier to know about others as well.

(J) *Art of Reading of Others*: Human beings live in a community and that is the reason for the importance of knowing others. Knowing others or reading of others is an art where the actions, emotions, dispositions of others are carefully read and evaluated. When evaluation is done correctly, then people will understand one another better and this will enable them to live in harmony.

(K) *Conflict Handling*: Social intelligence deals with social life and its problems and conflicts. There may be conflicts at home, workplace, community or society. Conflicts may come in life but how much a person can handle these conflicts would show his/her class. If he/she can handle successfully, then he/she has great social intelligence.

(L) *Relationship Management*: Social intelligence also deals with relationships between two or more people or between groups of people. A person who has greater social intelligence, will be able to manage and maintain social relationship more effectively. So, maintaining relationship is one of the dimensions of social intelligence.

Weis and Sub (as cited in Fischman, 2015) identified another three dimensions of social intelligence, viz., social understanding, social memory and social knowledge.

(M) *Social Understanding*: There is a need to understand one another while living in a community. A person needs to comprehend the needs and feelings of others in a community. Social understanding is the ability to appreciate social incentives. It is an understanding of the world from the point of view of society. It is an understanding that a person is not living alone but together as a community.

(N) *Social Memory*: Social memory included storing and remembering social information objectively. Crumley (as cited by Anderlini, Gerardi & Lagunoff, 2009) describes social memory as ‘the means by which information is transmitted among individuals and groups and from one generation to another’. It is a constant effort to remember one’s own social history.

(O) *Social Knowledge*: Social knowledge referred to social content stored in a person’s procedural memory. Social knowledge is a collective body of knowledge produced by a community or social circle. As years pass by, people have more knowledge about their own social life. The knowledge about social life of people will help them to adjust with one another.

Besides the above, Ebrahimpoor, Zahed & Elyasi(2013) recognized social skills, social information processing, social awareness and social desirability of organizational performance as dimensions of social intelligence. Social intelligence also has some elements like attitude towards society, social knowledge and social adjustment that are mentioned by Thorndike (as cited by Singh, 2006). These dimensions of social intelligence help people to recognize whether a person has social intelligence or not.

1.2.7. Determinants of Social Intelligence

There are some factors that determine the social intelligence of a person and some of them are given by Habib, Saleem & Mahmood (2013) such as culture, values and norms, social setup, social roles and responsibility and child rearing practices. Besides these, school environment and sex too can be considered as determinants of social intelligence.

1. *Cultures, Values and Norms*: The social behaviours and characteristics that one culture considers socially intelligent may not be considered as such by another culture. In Chan's study (as cited by Habib, Saleem & Mahmood, 2013) it was seen that normally collectivistic cultures like Pakistan, India and China demanded trust and loyalty to social norms and values and show greater willingness to fulfill their responsibilities and duties to others than those in individualistic cultures. The same can be spoken of social values and norms.

2. *Social Set-up*: Social set-up is the patterned social structure or arrangement in society that may evolve from the actions of the individuals or groups. The social set up of the place will determine the social actions of the people in the society.

3. *Social Roles and Responsibilities*: A social role is a set of behaviours that are required from someone who has an important status in the society. For instance, a leader would naturally have higher social intelligence than ordinary people. Social responsibility is an ethical or moral framework that forces everyone to act for the benefit of society at large. In such cases, persons who are holding important position and responsibility would sometimes be forced to act for the good of the society due to their social responsibility.

4. *Child Rearing Practices*: Child rearing is the process of promoting and supporting the physical, mental, emotional, spiritual and social development of a child from infancy to a state of adulthood. If rearing is positive then the child will have better ideas of social intelligence and will become a good citizen. If child rearing is negative then there is a danger of a child becoming anti-social later on.

5. *School Environment*: School environment is the atmosphere in and around the school campus which includes curricular and co-curricular activities. Gadre (2004) found that better school atmosphere highly influence the development of social intelligence among students. The study conducted by Harpreet and Ashu (as cited by Nagra, 2014) also discovered that environment has positive effect on social intelligence.

6. *Sex*: The findings of sex analysis revealed that female students have higher social intelligence than male students (Nagra, 2014). So sex too can be considered as one of the determiners of social intelligence.

1.2.8. Factors of Social Intelligence

Habib, Saleem & Mahmood (2013) give five factors of social intelligence, viz., social manipulation, social facilitation, social empathy, extroversion, and social adaptability.

1. *Social Manipulation*. Social manipulation includes using others for one's own purposes, dominating others, self-praise, careless about others' emotions and feeling, do not feel insulted easily, self-centered, cleverness, diplomat and leg pulling.

2. *Social Felicitation*: Social felicitation includes ability to convince others, active participation in social activities, socially popular, problem solving skills, confident, able to express effectively, active and alert, attractive personality, realistic, innovative, ability to make decision and leadership skills.

3. *Social Empathy*: Social empathy includes helping others, handling interpersonal relationship effectively, trusting, guiding, helping others in difficult situations and understanding others' situations.

4. *Extroversion*: Extroversion includes friendly attitude, initiate interaction with others, caring others, humorous and talkative. It is the ability to express oneself in the society.

5. *Social Adaptability*. Social adaptability is adapting according to situation, accepting others, courteous and polite, positive and optimistic, consistent, moderate attitude, accepting one's mistakes, tolerant and insightful.

1.2.9. Functions of Social Intelligence

Social intelligence is the capacity of a person to use his/her social abilities, expertise and attitude that enable him/her to adjust and to survive in the society. Social intelligence

gives people a feeling of being safe and guides them to resolve interpersonal problems like disagreement, opposition and friction that may drain energies.

Nagra (2014) is of the opinion that it is difficult to live a normal successful life without social intelligence. When dealing with different kinds of people in the society, one has to adjust according to the social norms and customs and that adjustment is enabled effectively by social intelligence. Investigations have shown that persons who have high level of social intelligence are able to meet the demands of everyday functioning and are equipped to handle participation and responsibility for their own welfare and the welfare of others (Lekshmi, 2012). So, social intelligence is the need of the hour in the society because it needs a lot of social adjustment.

According to Cantor and Kihlstrom (1987), social intelligence is specifically meant for solving social problems, managing different tasks of life, current concerns or personal projects which the person selects or which other people impose from outside. Goleman (1998) and Jones and Day (1997) consider social intelligence as the key element in what makes people succeed in life and Buzan (2002) has stated that social intelligence is vital if one has to get on in life and enjoy themselves. So, social intelligence has many functions to perform.

Today's society focuses more and more on personal gain than the overall social benefits and this outlook has to be changed through social intelligence as accurately pointed by Lekshmi (2012). There is a need to teach the children how to interact in the school and the society as a whole. They need to survive and prosper in the society in which they live and social intelligence will become handy later in their life.

Experimental evidence of the studies conducted by Hooda, Sharma and Yadava (2009) suggested that there is a positive strong connection between social intelligence and psychological health of the people. Gilbert (1995) and Zaccaro, Gilbert, Thor and Mumford (as cited by Lekshmi, 2012) have affirmed the importance of social intelligence in enabling leaders to be effective. Hackworth and Brannon (2006) pointed out that social intelligence has a positive impact on social influence effectiveness and Wawra (2009) argued that social intelligence is a necessary prerequisite for being a successful intercultural communicator. Lekshmi

also stated that students who have low social intelligence also lack social skills and interpersonal relationship. Students who possess low level of social skills and also lack interpersonal relationship, are found wanting, and the reason was that most of them were not aware of social intelligence competencies and their benefits. So the main function of social intelligence is to help people to widen their area of thinking from the narrow individual to the broad social outlook.

1.2.10. Importance of Social Intelligence

Since human beings cannot live alone, they need a community or society for their survival. There should be a give and take exchange economically, physically, socially and culturally. With regards to social exchange, they need certain decorum, norms and set of rules to be followed and all these are depended on social intelligence. How much one is socially intelligent can be seen from the success of his/her dealing with others because no human being wants to live in isolation. Living together in a society, respecting one another in social dealings, adjusting with others, getting along with others are all part and parcel of social intelligence.

Kriemeen & Hajaia (2017) opines that the success of a person does not depend much on cognitive intelligence but on social intelligence which means that a person will be successful if he positively interacts with others. Social intelligence brings success because it is built on adjustment, understanding, appropriate responses and interaction with one another. Hence, it has become a vital component for human well-being and success of any institution (Asadi, 2016). Success does not depend on the actions of one individual alone but on the actions of all the members of the organization or society. Social intelligence brings success because with it, all human actions are ultimately aimed at one's happiness and the well-being of others.

It was found that individuals who have higher social intelligence on an average perform better in their academic achievement (D'haene, 2015) which implies that if students want to improve their academic life, they can start by improving their social intelligence because it is closely related to their academic achievement. Hence, social intelligence is also important to the parents who want their children to shine in their academic life.

Goleman & Boyatzis (as cited in Fischman, 2015) explained the importance of social intelligence even in business, where it helps people to improve their business enterprises. Goleman (as cited by Fischman, 2015) discovered that social intelligence helped people to change their mental dispositions and considered other people not as things but as other human beings who also have feelings and emotions.

Social intelligence is also important in educational institutions because it helps the principals or authorities in solving problems and they can make use of it in meetings, seminars, conferences, evaluations and communication (Kriemeen & Hajaia, 2017). Social intelligence helps in forming and shaping the future of the students by enabling them to adjust with one another. Social intelligence also helps people to make better decision during the time of crisis; it aids mental activities and smoothens communication with one another (Ebrahimpoor, Zahed, & Elyasi, 2013). Social intelligence aims at social adjustment and it is of great importance in solving social problems. Thompson & Aarset (2012) stated that social intelligence helps in the process of interpretation and implementation of effective solution of social problems.

Social intelligence is important in daily life of a human being. D'haene (2015) showed that social intelligence is important for individuals who have to communicate and interact with others. It helps them to adapt, understand and respond to any situation in life (Njoroge & Yazdanifard, 2014) in order to become effective leaders. It also influences intercultural communication considerably (Wawra, 2009).

Social intelligence influences the thought, actions and behaviour of people individually as well as collectively. Marlowe (as cited in Nazir, Tasleema, & Ganai, 2015) suggested that individuals who are socially intelligent appear to experience a rich, meaningful life, as opposed to truncated affective experiences. Lathesh & Vidya (2018) acknowledged that social intelligence helps to overcome difficulties and maximizes personal and organizational success.

The study by Rezayee & Khalilzadeh (as cited by Ebrahimpoor, Zahed & Elyasi, 2013) found that social intelligence has a positive impact on job satisfaction where teachers were more happy and satisfied when their employers or managers have high social intelligence. Njoroge & Yazdanifard (2014) reviewed many studies and found that social intelligence has a positive impact on the performance of employees.

It is noticed that people share their feelings with one another, care for one another, and are concerned for the welfare of others. As such, social intelligence helps people to be friendly in spite of disagreement and misunderstanding. Without social intelligence it will be difficult for people to interact with other people especially when there is disagreement and that will be harmful to the society as a whole. So social intelligence helps people to build a peaceful society and reconcile with one another.

1.2.11. Methods of Teaching Social Intelligence

Social intelligence is a kind of intelligence which deals with the relationship with other people. Its importance cannot be denied and hence societies and scholars feel the need to study and improve the social intelligence of the students and the people in general. After reviewing related literature, Fischman (2015) found that there is a consensus that social intelligence can be taught. It can be taught in family, schools, colleges and universities. Social intelligence can be taught when the person is still very young till old age. Society that wants to improve social life encourages the learning and improving of social intelligence of its members.

There should always be some methods and ways of teaching social intelligence and new methods can be experimented too. Fischman encouraged participants in all types of situations to find out more opportunities and new tactics to neutralize the social situations. So also new methods in teaching social intelligence ought be encouraged and studied. Many scholars have given their own methods of teaching social intelligence. Social intelligence though inherited unconsciously from fore-parents, it still needs to be learned systematically. The social intelligence of a person will depend

on how he/she was taught on the subject and how observant the person is. There are different methods of teaching social intelligence. They are given below.

a) *Creating Awareness of the Importance of Social Intelligence*: The first step towards learning of social intelligence is to become aware of its importance. Social intelligence is important for dealings with other people because there is always an adjustment in the society. Being aware of the importance of social intelligence, people will feel the need to learn and improve it. Once awareness is created, it will become easier to teach social intelligence.

b) *Observing and Imitating Others*: Sigmar, Hynes & Hill (2012) agreed with the previous research that people can learn social skills by observing and imitating others. The best way to teach social intelligence is by showing examples. People may speak and lecture about it, but if they do not give examples, it will not have any effect on children's life. A child learned something more by observing and imitating the elders. So, social intelligence is no exception to that. If the elders show high social intelligence and social skills, a child will try to observe and copy their actions. Modern learning speaks about pedagogical learning or learning by observing and imitating the teachers and other students.

c) *Creating and Observing Social Norms*: Some societies are having strict rules and regulations while others may tolerate to some extent. A well-being of the society depended on following customs, norms and regulations. If norms do not exist then they have to be created for the purpose. Social norms and customs have to be formulated and observed so that social intelligence of people will be enhanced.

d) *Training in Social Intelligence*: As mentioned by D'haene (2015), social training is effective for all types of individuals. Some individuals may need more training than the others. Training is a systematic application of action to achieve certain goal. Hence, training in social intelligence means application of knowledge and practices of social intelligence systematically so that a person may become more socially intelligence after the training.

e) *Understanding the Others' Point of View*: It is very important that in social relationship people understand others from the others' point of view. This

will bring closer to the feelings and emotions of others. It is a practice given to others especially young ones to understand others better by putting themselves into others' shoe. Social intelligence can be taught by teaching people to understand one another better because understanding others better would favour social intelligence.

The teaching methods of social intelligence is still evolving and therefore limited, but scholars agreed on the use of experiences, involvement in activities, and repetition as important methods to teach social intelligence (Fischman, 2015).

f) *Experience*: Experience is the original teacher of everyone. Children learn more by experience and this type of learning has lasting effect on their life. So also the experiences of social intelligence encouraged and enriched the child's feelings and emotions. So the child can be taught in social intelligence by leading, guiding and allowing him/her to experience positive social interactions and adjustments. Once the child experienced social intelligence, he/she would continue to show the same to others in future.

g) *Involvement in Activities*: One method of teaching social intelligence is by involving the trainees in activities. They should be involved and engaged in interactions and activities and not just studying them (Fischman, 2015). As the saying goes 'actions speak louder than words' so when students do some positive social activities they would increase their social intelligence. This was reiterated as well by Fischman when he opined that through performance tasks and stimulations people can increase social intelligence.

h) *Repetition*: Another method of teaching social intelligence is repetition. A person learns and retains more by repetitions. Repetitive learning was a key to creating new pathways (Fischman, 2015). So social intelligence should be made aware to people repeatedly and at the same time make trainees repeat the positive social activities and actions that will increase social intelligence.

i) *Team Work*: Teaching people to work as a team is another way of teaching social intelligence. Team work is importance for the growth of social intelligence in a person. People who learn team work are also people with high social intelligence. Team work builds the society and unites it. So individuals

should be taught the importance of team work so that they can become more socially intelligent.

j) *Interaction with Others*: Social intelligence could also be taught through interactions with others. Social life is built on the interactions of people with one another. The more people can interact, the better will be their social life and social intelligence will increase. So people should be encouraged to positively interact with others and by doing so, they will improve their social intelligence.

1.3. Pro-Social Behaviour

Pro-social is a combination of two words i.e. social and pro. Pro is a prefix to the word social. Social is something that concerns the society and pro-social means something that is meant for the good of the society and pro-social behaviour means a behaviour that is meant for the good of the society or community. Pro-social behaviour refers to 'voluntary actions that are intended to help or benefit another individual or group of individuals' (Eisenberg & Mussen, 1989). It includes a broad range of activities like sharing, comforting, rescuing, and helping (Albert & Thilagavathy, 2013) donating, volunteering, following rules in a game, being honest and cooperating with others in social situations (Afolabi, 2014) and providing assistance and protecting someone from harm (Spivak, Lipsey, Farran & Polanin, 2014). It also includes actions like providing leadership, expressing empathy, providing verbal support and general friendliness or kindness (Rosen, Glennie, Dalton, Lennon & Bozick, 2010). It includes a variety of behaviours that are ultimately pro-social.

1.3.1. Definitions of Pro-Social Behaviour

Pro-social behaviour is defined in various terminologies that explain specifically about behaviour that is meant for the good of others and the society as a whole. It is a very broad concept that needs to be defined for better understanding of the term. Some of the definitions are given as follows:

1. Pro-social behaviour is defined as voluntary actions that are intended to help or benefit another individual or group of individuals (Eisenberg & Mussen, 1989). There should be no force from others to do any action meant for the common good. It should stem from the person himself/herself.

2. Penner, Dovidi, Piliavin and Schroeder (2005) defined pro-social behaviour as an act performed to benefit another person. The aim of pro-social behaviour is the good of the other person more than one's own good.

3. Anderson and Costello (2009) defined pro-social behaviour as behaviour that benefits society. They considered society as the place where pro-social behaviour takes place.

4. Pro-social behaviour is generally defined as voluntary and intentional behaviour which has positive consequences for the well-being of other persons (Eisenberg & Miller, 1987).

5. Pro-social behaviour can be defined as voluntary behaviours made with the intent of benefiting others or society (Albert & Thilagavathy, 2013).

6. Pro-social behaviour is voluntary and intentional behaviour that results in benefits for another person; a 'social glue' that enables people of different ages to live together peacefully and productively (Lay & Hoppmann, 2015).

7. Pro-social behaviour is a voluntary, intentional behaviour that results in benefits for another person (Eisenberg & Miller, 1987).

8. Pro-social behaviour is any act performed with the goal of benefiting another person (Aronson, Wilson, & Akert, 2004).

9. Pro-social behaviour is defined as behaviour directed toward promoting the well-being of another (Gupta & Thapliyal, 2015).

10. Reykowski (1982; as cited by Klemola, 2013) defined social intelligence as that which covers a wide range of phenomena such as helping, sharing, self-sacrifice, and norm observing. The direction of the action is towards others which can be a person, some group of people or even a society. Pro-social behaviours are meant for protecting, maintaining and enhancing the happiness of others.

The above definitions clearly show that pro-social behaviour is a directional voluntary action with the aim of promoting the well-being of the other person and the society as a whole. Pro-social actions can neither be forced nor demanded from someone but should come voluntarily from the desire to help and to make the world a better place.

1.3.2. Emergence of the Concept of Pro-Social Behaviour

Some attention to pro-social behaviour in psychology has its beginning with McDougall (1908), who put an argument that pro-social behaviour could be the result of 'tender emotions' created by the parental instinct, but most of the other

researches have the roots in lay and scientific reactions to the non-responsive of the bystanders to the brutal murder of Katherine 'Kitty' Genovese in 1964 (Penner, Fritzsche,, Craiger & Freifeld, 1995) where she was attacked with multiple stabs on her body with the knife and the thirty eight neighbours who were passing by did nothing but watched the whole tragic scene and it was only when she was dead that one of them called the police (Milgram & Hollander, 1964). The tragic death of Katherine was the result of the failure of her neighbours to act pro-socially where they could have stop the murderer from stabbing her before it was too late.

After that there was a subtle change in the focus of social psychology because Kitty's neighbours failed to act pro-socially in that dire situation. That failure was debated at length by two psychologists John Darley and Bibb Latane; who claimed that the likelihood of responding to an emergent condition is influenced by the number of people present at the sight known as the Bystander Effect (Jena, Bhattacharya, Hati, Ghosh& Panda, 2014). If pro-social behaviour means helping people, its absence in the Genovese case motivated much speculation and finally, systematic investigation was carried out to investigate the circumstances under which persons will or will not help others (Verma, 1997). It raises the question on the validity of pro-social behaviour of the bystanders.

1.3.3. Components of Pro-Social Behaviour

According to Penner, Fritzsche, Craigerand Freifeld (1995) and Penner (2002) there are seven components of pro-social battery which are social responsibility, empathetic concern, perspective taking, personal distress, altruism, other oriented moral reasoning and mutual concern moral reasoning. Sprecher and Fehr (2005) considered moral reasoning, empathic concern, ability to take the perspective of others, and agreeableness as the components of pro-social behaviour. The components of pro-social behaviour can be listed as follows:

A) *Social Responsibility*: Social responsibility is an obligation or duty to act in a manner that benefits society (Carlo & Randall, 2002). It means the responsibility to decide and behave for the greater good of the society. It refers to the responsibility of an individual in the community which should be executed at a proper timing.

B) *Empathy*: Empathy is the ability to experience the emotions of someone else (Kakavoulis, 1998). It is the ability to recognize the feelings, expressions, experiences, etc., of another person. It denotes emotion that is directed towards the good of the other person in the forms of warmth, compassion, thoughtfulness, etc.

C) *Perspective Taking*: Perspective taking is the ability to perceive a situation from someone else's point of view (Kakavoulis, 1998) which means the ability to perceive a situation from victim's point of view. It refers to ability to read and understand mental state of another person, his/her thought, feelings or desire and so on (Abdullahi & Kumar, 2016)

D) *Moral Obligation*: Moral obligation is the ability to see the particular situation from the point of view of prevailing moral principles and values. Moral obligation can be other moral reasoning which is directed more towards others and assessing more of the situation while making decision of right and wrong and mutual concern moral reasoning which happens when two or more people have the same philosophy and observation about the judgment of right and wrong in the community (Abdullahi & Kumar, 2016). There is also a possibility that moral obligation may not be the same in every society and it may alter from time to time.

E) *Altruism*: Altruism is the fact of caring about the need and happiness of other people more than one's own. It is putting others and community in the first place and when it comes to decision making, the welfare of others is considered as the most important. Penner (2002) considered self-reported altruism as one of the components of pro-social personal battery. It is the interest of a person in helping and promoting the wellbeing of other individuals and society even at the cost of personal happiness.

F) *Reciprocity*: Reciprocity is the act of giving benefits to another in return for benefits received (Molm, Schaefer and Collett, 2007). It simply means the act of mutual giving and receiving from one another. Societies and communities are built on the reciprocity of their members. There will be nice feeling in the society when there is reciprocity and people will feel comfortable in dealing with one another because a sense of trust and belonging to the society is built through reciprocity.

G) *Equity*: Equity is the state of being just and fair with more focus on the deprived sections of the society/community/caste/tribe, etc. It is a practical justice where each one is judged according to one's ability and opportunities. In any society, there may be some sections – women, children, girls, tribes and sub-tribes, castes and sub-castes and others who were always deprived and exploited by others. Equity is a concept where all are treated equally according to one's needs and abilities. The implementation of equity will add to the pro-social behaviour of people in general.

H) *Self-Sacrifice*: Self-sacrifice is the sacrifice or surrendering of self-interests, likings, hobbies, etc., for the sake of other people or for any social cause. It is an ability of a person to put the interest of others before his/her own or sometimes to help for some cause of the society. It is a giving up of something dear for the sake of the greater good of the community. Sometimes, it is a giving up of what is wanted so that other people may have what they need.

I) *Personal Distress*: Personal distress denotes any kind of worry be it anxiety, stress or any negative state of emotion, of another's emotional condition (Abdullahi & Kumar, 2016). It is a self-focus emotion arising from others' state of mind or conditions. Helping behaviour is sometimes influenced by how much personal distress a person has. A person may feel discomfort when he/she saw another person suffering and he/she may be urged to do some pro-social acts like helping and comforting.

J) *Agreeableness*: Agreeableness is a kind, sympathetic, cooperative, warm and considerate behaviour of a person (Thompson, 2008). A person possessing high agreeableness is generally affectionate, sociable, considerate, optimistic and able to cope with others. Agreeableness is another social quality which smoothenes the well running of a society. People will have to agree to be able to make group decisions in committees, villages, towns and cities. Agreeableness promotes pro-social behaviour since it encourages the other person or group of persons to do some pro-social acts.

1.3.4. Types of Pro-Social Behaviour

Carlo & Randall (2002) identified six types of pro-social behaviour. They are altruistic, compliant, emotional, public, anonymous and direct pro-social behaviours.

1. *Altruistic Pro-Social Behaviour*: Altruistic pro-social behaviour is defined as voluntary helping motivated primarily by concern for the needs and welfare of another, often induced by sympathy responding and internalized norms/principles consistent with helping others (Eisenberg and Fabes, 1998). Moreover, because the helper is primarily concerned with the welfare of the needy, these behaviours sometimes incur a cost to the helper.

2. *Compliant Pro-Social Behaviour*: Compliant pro-social behaviour is defined as helping others in response to a verbal or non-verbal request (Eisenberg-berg, Cameron, Tryon & Dodez, 1981). Compliant helping is more frequent than spontaneous helping and much of the research on this type of helping has been conducted with children rather than adolescents (Carlo & Randall, 2002) because children would like to do actions as requested or commanded by older people.

3. *Emotional Pro-Social Behaviour*: Emotional pro-social behaviour is conceptualized as an orientation toward helping others under emotionally evocative circumstances and some helping situations can be characterized as highly emotionally charged (Carlo & Randall, 2002). Sometimes people could help better when their emotions run high.

4. *Public Pro-Social Behaviour*: Public pro-social behaviour is a pro-social behaviour done in front of audience which is likely to be motivated, at least in part, by a desire to gain the approval and respect of others (e.g., parents, elders and peers) and enhance one's self-worth. Pro-social acts with the tendency to perform in front of others can be termed as public pro-social behaviours.

5. *Anonymous Pro-Social Behaviour*: Anonymous pro-social behaviour is defined as helping done without knowing the identity of the recipients. It is a kind of anonymous helping or caring behaviour.

6. *Dire Pro-Social Behaviour*: Dire pro-social behaviour is a pro-social behaviour when done in crisis or emergency situations. There are times that pro-social actions need to be done immediately without delay. Consequences would be harmful if pro-social behaviour is not done in time.

1.3.5. Predictors of Pro-Social Behaviour

There are predictors of pro-social behaviour which can be categorized as follows:-

1. *Past Behaviour*: Ajzen (2002) is of the opinion that past behaviour is the best predictor for future behaviour. A person who behaves pro-socially in the past would most likely do so in the future. This is often witnessed with almsgiving and other helping behaviour. Past behaviour always has influence in the present and the future behaviour.

2. *Education*: Positive education can be considered as predictor of pro-social behaviour because it helps people to behave more pro-socially (Van Ootegem, 1993, as cited by Weymans, 2010). So if children received positive education in schools and colleges, they will become more pro-social in their life.

3. *Moral Judgement*: According to a cognitive developmental view, the quality of pro-social behaviour is improved as the individual has greater moral judgement as reported by Raboteg-Saric (1997). A person with high moral is expected to become more pro-social and show more helping behaviour too.

4. *Environmental Determinants*: Environmental determinants are the determinants in the environment such as reinforcements and modeling. Reinforcement is giving reward or praise for pro-social acts of the children and this is seen more in the villages than in the town. It is a well-known fact that people demonstrate pro-social behaviour in their life and from experience it was seen that people who live in the villages show more pro-social behaviour than those in the town (Afolabi, 2014). This is because people in the villages live as one family, they know practically all those who live in the village and they sympathize with one another frequently. They are more open to social relationship and hence have more pro-social behaviour. Modeling means following some models shown by parents or

elders and modeling can increase pro-social responding in the laboratory (Radke-Yarrow & Zahn-Waxler, 1986, as cited by Kakavoulis, 1998).

5. *Psychological Predictors:* Psychological predictors of pro-social behaviour include personality traits, attitude, motivations gratitude culture, nationality and ethnicity.

a. *Personality Traits:* People have their personality that stems from their physical and mental made up. In general, there is a consensus among researchers about the proposition that how people feel about helping others is affected by their personal norms (Piliavin & Charng, 1990, Schwartz & Howard, 1984, as cited by Weymans, 2010).

b. *Attitude:* Attitude is the internal disposition or the state of mind which influences the decision of a person. Fishbein and Ajzen (as cited by Weymans, 2010) consider attitude as an important predictor of pro-social behaviour. Thus it can be said that if the internal disposition of a person is favourable, the person would do more pro-social acts as compared to those whose internal disposition is non-favourable.

c. *Gratitude:* One of the recent researches has shown that individuals who habitually experiencing gratitude engage more frequently in pro-social behaviour than individuals who experience gratitude less often (McCullough, Emmons & Tsang, 2002). The findings support the view that gratitude facilitated pro-social behaviour (Bartlett & DeSteno, 2005). When there is emotion of gratitude, people will naturally feel like helping in return of the good deeds done to them.

d. *Motivations:* There have been many researches concerning behavioural models in the past years where motivation is assumed to be an important predictor for behaviour (Weymans, 2010). Other oriented motivation or motivation to help others can influence the person's desire to help which in turn will predict his/her pro-social behaviour.

6. *Culture, Nationality, and Ethnicity:* It has been found that some cultures promote pro-social behaviour while others do not; they lack the initiative to help, care,

and share or comfort (Cook, 2012, as cited by Afolabi, 2014). For example, children from Kenya, Mexico and Phillipines socialized to help in family chores and these same children, according to Donaldson (as cited by Afolabi) scored highest in helpful behaviours. Collectivist indigenous societies, such as Polynesian societies have also been found to be more pro-social when compare to Western societies (Afolabi, 2014). So, pro-social behaviour of the individuals differs from one culture to the other, from one country to the other and from one ethnic group to the other.

1.3.6. Agents of Pro-Social Behaviour

Interpersonal relationship is a source and basis for promotion of pro-social behaviour. Lai, Siu and Shek (2015) are of the opinion that parental influence among many interpersonal influences is the most important promoter, followed by peer and then school influence.

1. *Parents & Family Members:* Pro-social behaviour increases when parents and family members are warm, supportive, responsive, and sensitive to children's needs and in contrast, less pro-social behaviour is found among children whose parents are authoritarian, strict, or punitive (Albert & Thilagavathy, 2013). Parents and family members can influence the pro-social behaviour of the younger generations because children will look up to their parents and elders as real life example of how to behave in the society.

2. *Peer and Friends:* Larson and Richards (as cited by Carlo, Fabes, Laible & Kupanoff, 1999) considered the formation of peer network as part and parcel of early adolescence. Peer and friends can influence one another's pro-social behaviour through close interpersonal relationship or modeling (Lai, Siu & Shek, 2015). Sometimes peer pressure is so strong that boys and girls will find difficult to be able to behave independently regarding pro-social behaviour. If their friends encourage and support, then pro-social activities will increase, if not it will decrease automatically.

3. *School:* School atmosphere is another significant promoter of pro-social behaviour after peer/friend influence (Lai, Siu & Shek, 2015). Students are in the school campus for many hours every day and they will be influenced by what they see, hear, touch, smell, taste etc. within their school premises. If the school atmosphere promotes pro-social behaviour then they will become more pro-social in their words and actions.

4. *Elders:* When children are engaged by the elders in pro-social behaviour like helping, caring and other pro-social actions, they will see the positive effects of their action

and thus gain social approval. Those actions will be repeated in the future similar situations as well (Eisenberg, Fabes & Spinrad, 2006). So, the pro-social behaviour of the elders will directly influence the pro-social action of the younger generations because they look to the elders for guidance and approval.

1.3.7. Requirements of Pro-Social Behaviour

There are certain requirements that a person should do in order to become pro-social. They are:

1. *Efforts and Sacrifices*: Efforts and sacrifices from the part of the citizens are required (Tweng, Baumeister, DeWall, Ciarocco & Bartels, 2007) because without effort and sacrifice, pro-social behaviour will not be possible. Anything that is meant for the benefit of other people does not come without sacrifices of time, talent, treasure, etc.

2. *Positive Emotion*: Another requirement of pro-social behaviour is positive emotion (Aknin, Van de Vondervoort & Hamlin, 2018). Positive emotion is a type of emotion that favours helping, cooperating, sharing, etc. It is the type of emotion that persuades people to react favourably towards the good of the society and others. People could behave more pro-socially when their positive emotion is involved. The term 'pro-social' itself is related to positive behaviours which are intended to benefit other individuals (Jena, Bhattacharya, Hati, Ghosh & Panda, 2014). When the benefit of the action is meant for the good of the society, then positive emotion is involved in the action.

3. *Cost and Risk*: Pro-social behaviour involves cost and risk to the performer or actor of pro-social behaviour. The action is performed to benefit others, rather than to benefit the self. It often involves cost or risk to the self.

Pro-social behaviour is always useful to the society as a whole. Human beings are social beings hence any act to benefit the society is welcomed and much appreciated by its members. Pro-social behaviour is important in school set up too because it is through pro-social behaviour that children are taught to be of help to one another. The school and society appreciate pro-social acts like helping, comforting, volunteering, co-operating, etc. They help the society to live in peace and harmony. Pro-social

behaviour is also important in the present context where the society is moving towards individualism and selfishness. This trend has to change because the society will not survive if its members think only for their own benefits and neglecting the benefits of others. Pro-social behaviour will be of great help in this task.

1.3.8. Importance of Pro-Social Behaviour

The importance of pro-social behaviour to the society cannot be denied because human beings depend so much on the pro-social acts of others. Some pro-social acts such as helping, sharing and cooperating can be vital sources of social harmony and good interpersonal relationships (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007). For example, pro-social acts have three types of rewards: it can increase the probability of reciprocity in the future; it can reduce the personal rewards gain by distress of the bystander; and gain social approval thus increased the self-worth of a person (Afolabi, 2014). Pro-social behaviour is also important for the day to day functioning of society (Albert & Thilagavathy, 2013) because without it, society will not be able to function properly. It is this pro-social behaviour that keeps the hope and aspirations of the society alive.

Pro-social behaviour promotes the well-being of other people and allows people to express themselves through helping and caring for others (Afolabi, 2014). Pro-social behaviour is helpful for making a society a welfare society and it brought about desired changes in the behaviour of young people. It encourages altruism and restitution (Verma, 1997) which aim at the well-being of the community and young people have benefited from the development of pro-social behaviour. It is very important for mutual understanding and social harmony and it can contribute to the well-being of the person as an individual as well as a group (Lai, Siu & Shek, 2015). Pro-social behaviour has many good effects on the society as well such as social well-being, harmony, peace, etc.

Pro-social behaviour gives benefit to the recipient (Penner, Dovidi, Piliavin & Schroeder, 2005) as well as to the actor (Lay & Hoppmann, 2015). Based on the past studies they further explained that pro-social behaviour has benefits for physical health, cognitive functioning, social integration and well-being of a person. The

recipient gets benefits physically, intellectually, emotionally and socially. He/she feels better when someone does a pro-social act to him/her. Such feeling will move the person to behave in the same manner in the future. The actor too gets satisfaction when some pro-social acts are extended to someone emotionally and there is a feeling of fulfillment too.

Pro-social behaviour is behaviour of a person which is meant for the betterment, benefit and good of the society. People live in society and therefore should do something for it. Any act that is meant for the uplift of the society is a pro-social behaviour. When people are pro-social, the society will greatly benefit. When people love, respect and care for one another, life in this world would be worth living. There are a lot of unrests, wars, conflicts in this world because people are less pro-social.

Pro-social behaviour is needed in every society and community and the best place to develop it, is at home, school and its surroundings. It is much easier to teach children about pro-social behaviour at home among siblings than elsewhere and this could be carried on to the society through schools. School is not only a place of academic learning but also a place to nurture students for future society. So, if a child is taught how to become pro-social at school, he/she will continue to do so in the future because past behaviour always has some influence or connection with the present and future behaviour (Ajzen, 2002). So, pro-social behaviour is of great importance to the society as a whole.

1.4. Need and Justification of the Study

Humans are social beings and always live in a community or society. They have always adjusted with one another for their very existence. The more a person is able to adjust with other people, the better it is for his/her well-being. Students too live in a community, i.e., at home, in the neighbourhood as well as in the school. They need to understand, adjust, love and help one another. The school atmosphere will be better if there is greater adjustment and social intelligence in the pupils. As social intelligence is the ability to deal with people, it helps one to adjust in a better way in any situation and maintain good relation with others. Lack of social intelligence will breed problems not only for oneself but also for others. People with social intelligence may also have positive attitude towards others and may extend their

helping hand to the needy which is the result of pro-social behaviour. Pro-social behaviour is a positive behaviour through which a person does actions such as helping, comforting, sharing, and cooperating intentionally to benefit other individuals. But in the present day context, people shy away from helping one another because they feel that the other people are not their brothers, sisters, parents or relations. The spirit of helping and co-operating is diminishing day by day and there are times that the life of people is in danger and need immediate action. Unless the people have this spirit of helping and co-operating, they will not lend their helping hand.

To extend the helping hand to the needy, one should understand the needs of the society. For understanding the needs of the society and its members, social awareness along with social intelligence is required. For building a good society, the role of pro-social behaviour is very important and to achieve it, education is necessary. Hence, both social intelligence and pro-social behaviour are very much necessary for the welfare of the society. A student should be able to relate with other peers in the school and its surroundings. If the student is able to adjust comfortably with others, he/she tends to be happy and contented and this may increase academic achievement. Students with social intelligence and pro-social behaviour have greater chance to perform well in their life and also in academic achievement. Hence, all the three variables are considered as vital and need of in-depth research.

Social intelligence and pro-social behaviour are important concept of social life. Social intelligence is necessary for adjustment and effective dealings in society and it can be supplemented by pro-social behaviour. Pro-social acts will further strengthen adjustment and social dealings in the society. The society will become better when social intelligence and pro-social behaviour are high. When people understand one another, adjust with each other and helping one another, the society will improve in relationship which is the foundation of any society.

The world needs more citizens who are pro-social. Violence everywhere has to be stopped or prevented. People should learn to help, cooperate and adjust with one another in the society. People live in family, village, town and cities and they are

interdependent on one another. Anti-social behaviour will only bring disgrace to the family and society and it should be prevented. Instead, pro-social behaviour has to be encouraged because society needs it.

When students help, adjust and co-operate, they will have peace of mind and that will be a bonus for academic activities. Hence, pro-social behaviour may improve the students' academic achievement and performance which is very important for the future life of the students. Parents and teachers aim at excellence academic performance by their children and would sweat to achieve it. So, when pro-social behaviour helps in increasing academic achievement, then pro-social behaviour should be taken seriously by the students, the educational institutions and parents. Hence, in this perspective also, social intelligence and pro-social behaviour need to be studied and find ways and means to improve them for the benefit of all.

From the review of related literature, it was found that many studies have been conducted on social intelligence and pro-social behaviour separately. However there was no study found on social intelligence and pro-social behaviour in relation to academic achievement in East Khasi Hills District of Meghalaya. Therefore, there is a need to study these variables and to know whether they have any relationship to one another and to know whether these variables are important for creating better educational environment for the students, teachers and the educational institutions.

1.5. Statement of the Problem

The present research attempts to study the social intelligence and pro-social behaviour of higher secondary students of East Khasi Hills District in Meghalaya and to find out whether they have correlation to each other and to academic achievement.

1.6. Title of the Study

The title of the present study is “*Social Intelligence and Pro-Social Behaviour in Relation to Academic Achievement of Higher Secondary Students in East Khasi Hills District in Meghalaya*”

1.7. Operational Definition of Terms

- i) *Social Intelligence*: Social intelligence refers to the ability to understand and deal with other people and to adapt better in a society. Its dimensions are (A) patience, (B) co-operativeness, (C) confidence, (D) sensitivity, (E) recognition of social environment, (F) tactfulness, (G) sense of humour and (H) memory.
- ii) *Pro-Social Behaviour*: Pro-social behaviour refers to positive actions intended to benefit one or more people other than oneself - behaviours such as helping, comforting, sharing, and cooperating. Its components are (A) social responsibility, (B) empathy, (C) perspective taking, (D) moral obligation, (E) altruism, (F) reciprocity, (G) equity and (H) self-sacrifice.
- iii) *Academic Achievement*: Academic achievement refers to marks obtained in the final examination, i.e., class XI.
- iv) *Higher Secondary Students*: Higher secondary students refer to the students studying in classes XI and XII.
- v) *Type of School Management*: Type of school management refers to the authority that finance and run the school. In this study, only three types of school managements are being considered, viz., *government* which is purely managed by the central or state governments, *government aided* which is managed by private individuals or entities but help by the government in form of grant-in-aid and *private* school management which is purely run by private individuals or entities.
- vi) *Locality*: Locality refers to urban and rural areas. Urban is the area that falls within Shillong municipality and cantonment while rural is the area outside

the Shillong municipality and cantonment which includes mostly students from villages of East Khasi Hills District of Meghalaya.

1.8. Objectives of the Study

1. To construct pro-social behaviour scale (PSBS) for higher secondary students.
2. To study the levels of social intelligence and pro-social behaviour of higher secondary students in East Khasi Hills District.
3. To study the social intelligence of students with respect to demographic variables, i.e., sex, locality, type of school and parent's occupation.
4. To study the pro-social behaviour of students with respect to demographic variables, i.e., sex, locality, type of school and parent's occupation.
5. To find out the relationship between social intelligence and pro-social behaviour of higher secondary students in East Khasi Hills District.
6. To find out the relationship between social intelligence and academic achievement of higher secondary students in East Khasi Hills District.
7. To find out the relationship between pro-social behaviour and academic achievement of higher secondary students in East Khasi Hills District.
8. To find out the multiple regressions of social intelligence and pro-social behaviour on academic achievement of higher secondary students.

1.9. Hypotheses

- H₀1(a). There is no significant difference in social intelligence of higher secondary students of East Khasi Hills District with respect to sex.
- H₀1.(b). There is no significant difference in social intelligence of higher secondary students with respect to locality.

- H₀1.(c). There is no significant difference in social intelligence of higher secondary students with respect to type of school.
- H₀1.(d). There is no significant difference in social intelligence of higher secondary students with respect to parent's occupation.
- H₀2.(a). There is no significant difference in pro-social behaviour of higher secondary students with respect to sex.
- H₀2.(b). There is no significant difference in pro-social behaviour of higher secondary students with respect to locality.
- H₀2.(c). There is no significant difference in pro-social behaviour of higher secondary students with respect to type of school
- H₀2.(d). There is no significant difference in pro-social behaviour of higher secondary students with respect to parent's occupation.
- H₀3. There is no significant relationship between social intelligence and pro-social behaviour of higher secondary students in East Khasi Hills District.
- H₀4.(a) There is no significant relationship between social intelligence and academic achievement of higher secondary students.
- H₀4.(b) There is no significant relationship between social intelligence and academic achievement of higher secondary students when pro-social behaviour is partialled out.
- H₀5.(a). There is no significant relationship between pro-social behaviour and academic achievement of higher secondary.
- H₀5.(b). There is no significant relationship between pro-social behaviour and academic achievement of higher secondary students when social intelligence is partialled out.

H₀₆. There is no significant multiple regressions of social intelligence and pro-social behaviour on academic achievement of higher secondary students in East Khasi Hills District

1.10. Delimitation of the study

The present study has been delimited to class XII students of higher secondary schools of East Khasi Hills District of Meghalaya only. But for the purpose of academic achievement the marks have been collected from previous promotion examination, i.e., class XI.

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1. Review of Literature

Review of related literature has a very important place in all types of researches. It is meant to find gaps in the research. Koul (2009) considered review of research journals, books, dissertations, theses and other sources of information on the problem to be studied as one of the essential steps in the preparation and planning of any research study. It is a kind of survey of the past and present, published and non-published, printed and online materials on a selected research problem. The present review tries to peruse the different studies conducted by researchers on social intelligence and pro-social behaviour.

2.2. Studies conducted on Social Intelligence

2.2.1. Studies on Social Intelligence conducted Abroad

Willmann, Feldt and Amelang (1997) conducted a study on ‘Prototypical behaviour patterns of social intelligence: An intercultural comparison between Chinese and German subjects’. The sample consisted of Chinese subjects (18 women and 21 men) and German subjects (13 women and 16 men). The study found that the construct of social intelligence was culture dependent; the Chinese subjects rated acts as being high prototypical of social intelligence when they tended to support harmony within the culture or family group; the German subjects selected a much larger spectrum of acts as being high prototypical of social intelligence than did the Chinese subjects; the only area where both sample groups rated the items as high prototypical was for demonstrating leadership qualities, that is, the ability to influence others in a positive manner and it was also found that the Chinese subjects rated all of the control items significantly higher for proto-typicality than the German subjects.

In a study on ‘The relationships between social intelligence, empathy and three types of aggression’, Kaukiainen et. al., (1999) found that social intelligence was related to

indirect aggression which means that the more an individual used indirect aggression, the higher would be his/her level of social intelligence. Direct forms of aggression, either verbal or physical, were not associated with social intelligence and empathy lessened aggressive behaviour according to their study which means that the perpetrator of aggression must have a certain amount of impudence and insolence.

Kobe, Reiter-Palmon and Rickers (2001) in the study 'Self-reported leadership experiences in relation to inventoried social and emotional intelligence' found that there was a positive correlation among emotional intelligence, social intelligence and leadership which means that participants who scored high in social intelligence also scored high in emotional and self-reported leadership; it was also found that the variance accounted for in leadership was added by social intelligence more than emotional intelligence and the result also concluded that social intelligence and emotional intelligence were necessary for the university students.

Fedakova and Jelenova (2004) conducted a study to find out the strength of the relationship between emotional and social intelligence and found that male showed more social awareness when compared to female undergraduate students; the means of male and female students for other Tromso Social Intelligence Scale (TSIS) subscales were not significantly different but male students scored lower than female students and there was a significant relationship between the empathy component of emotional intelligence and the social information processing component of social intelligence

Meijs, Cillessen, Scholte, Segers and Spijkerman (2010) in the study on 'Social intelligence and academic achievement as predictors of adolescent popularity' found that girls had significantly more social intelligence than boys and boys had significantly more perceived popularity than girls; there was a positive correlation between social intelligence and perceived popularity for both boys and girls; there is also a correlation between social intelligence and sociometric popularity for girls only but not for boys; no significant correlation was found between academic achievement and social intelligence for either boys or girls. It was also found that academic performance had very little influence on sociometric popularity of students who had low social intelligence, but a strong influence was seen at higher levels of social intelligence.

Tanakinci and Yildirim (2010) in a study on 'The Impact of social intelligence on academic achievement of students studying media' found that weak correlation existed between social intelligence and academic achievement of the vocational students of Istanbul and only one dimension of social intelligence was found to be strongly correlated to the academic performance of the students.

Birknerova (2011) in 'Social and emotional intelligence in school environment' found that there was no statistically significant difference between subscales of social intelligence and position in organization; significant differences were discovered in aspect of self-respect between headmasters and teachers, as well as between headmasters and students and the difference was in favour of headmasters; there was no significant difference between factors of social intelligence and gender. There were connections between the age of the respondents and subscale of social intelligence – social awareness.

A study was conducted by Eshghi, Arofzad and Hosaini (2013) on 'Relationship between Social intelligence with effective influence among physical education expertise in Isfahan education organizations' and they found that significant correlation existed between overall social intelligence and overall effective influence. Significant difference existed between academic performance and social intelligence. However, significant difference was not found between males and females in social intelligence and effective influence.

A research on 'Role of theory of mind and executive function in explaining social intelligence: A structural equation modeling approach' was carried out by Yeh (2013). The sample consisted of 177 participants (age 56–96). The results showed that only the path coefficient from theory of mind to social intelligence, and not from executive function, was significant. This finding supported the hypothesis that performance on theory of mind was more strongly associated with social intelligence than was performance on executive function in the elderly. Another interesting finding showed that only theory of mind can predict social intelligence in old adults and executive function did not predict social intelligence in the elderly subjects.

The study conducted by Ebrahimipoor, Zahed and Elyasi (2013) titled ‘The study of relationship between social intelligence and organizational performance (Case study: Ardabil regional water company's managers)’ revealed that positive and significant correlation existed between social intelligence and organizational performance; there were direct and meaningful relationships between social skills and organizational performance, social information processing and organizational performance, social awareness and organizational performance, and social desirability and organizational performance; and multiple correlation showed statistically significant correlation between social intelligence and organizational performance.

A study was conducted on ‘Development and validation of social intelligence scale for university students’ by Habib, Saleem and Mahmood (2013) and they found that social manipulation had significant negative correlation with social empathy and significant positive relation with social facilitation and extroversion. Social facilitation, extroversion and social adaptability were found to have significant positive correlation. The significant difference was found between male and female participants on social manipulation and social skills. Male students scored significantly higher than females on social manipulation and social skills factors. No significant difference was found between male and female university students on social empathy, extroversion and social adaptability factors of social intelligence and social intelligence remained unrelated to age.

A study on the ‘The Importance of social intelligence for entrepreneurial leaders’ by Marecki (2014) had found that every participant rated social intelligence as “very important” and one of them considered it as one of the most important things in the society; there were some participants who considered social intelligence as more important than analytical skills, while others put social intelligence and analytical skills at par with each other which implied that social intelligence was as essential as analytical skills. The study also found that some participants considered social intelligence as important because of its effect on the motivation of employees and its influences on the relationship between entrepreneurial leadership and entrepreneurial attitudes and behaviours in employees

In a study conducted on ‘The Influence of social intelligence on imitation’ D’haene (2015) measured social intelligence according to the Dutch version of the Tromso

Social Intelligence Scale (TSIS) which has three sub-scales, i.e., social perspective, social skills and social awareness. The study found that social intelligence correlated only with anticipated action and not with imitation behaviour; total social intelligence did influence anticipated action by a person and also influences the score on the social perspective subscale. It was also found that empathy did not affect the level of social intelligence and the amount of imitation behaviour but the amount of imitation behaviour depended on person's social intelligence.

Praditsang, Hanafi & Walters (2015) in 'The relationship among emotional intelligence, social intelligence and learning behaviour' found that the levels of emotional and social intelligence of the first-year university students were high and that of learning behaviour was at an average level; there was significant correlation between social intelligence and learning behaviour, except for sub-dimensions of social cognition, self-presentation, influence and concern; the type of family structure might had an effect on the emotional and social intelligence of the adolescents and it was also found that four sub-dimensions of social intelligence, viz., social cognition, self-presentation, influence and concern were found to be related significantly with learning behaviour.

Saffarinia, Abbaspour and Dehestani (2015) in 'Comparison of social intelligence and Pro-social personality in medical students with and without internet addiction' found that the results of variance analysis for comparison between men and women showed that there were no differences in social intelligence between men and women. The results also showed that scores of both social intelligence and pro-social personality were lower in students with internet addiction.

Kriemeen and Hajaia (2017) in a study titled 'Social intelligence of principals and its relationship with creative behaviour' found that the level of principals' social intelligence at Tafila Directorate of Education from teachers' point of views was mid and their creative behaviour too had mid rank mean. They also showed that positive correlative relationship between social intelligence and creative behaviour was statistically significant. They also revealed the significance of social intelligence to create constructive work climate to enhance additional methods in

communication, exchange ideas, support ideas of change, recognize risk and find out various ways of problem solving.

Serrieh (2017) investigated on 'The impact of social intelligence on organizational conflict management strategies: A field study on Jordanian telecommunication companies' and concluded that there was a significant impact of social intelligence on organizational conflict management strategies in the Jordanian telecommunication companies; strong impact among social intelligence variables (organizational awareness, social skills, empathy, situational awareness, situational response) on organizational conflict management strategies (integrating, obliging, dominating, avoiding, compromising) was recognized in the study and when the score in social intelligence and its variables was higher, the negative attitudes recorded by employees disappeared and thus creating an atmosphere of co-operation and respect among themselves.

Gkonou and Mercer (2017) in a study on 'Understanding emotional and social intelligence among English language teachers' found that overall the participants had high levels of Emotional and social intelligence; a significant positive correlation was seen between social intelligence and educational-context-specific social intelligence; moderate to high significant positive correlation was noticed between emotional intelligence and social intelligence, emotional intelligence and educational-context specific social intelligence, social intelligence and educational-context-specific emotional intelligence and educational-context-specific social intelligence; a moderate positive correlation was found between overseas experience and social intelligence; a very weak correlation was found between social intelligence and teaching experience; correlation between trait social intelligence and age was not statistically significant and age and educational level of present teaching were not significant predictors of social intelligence.

2.2.2. Studies on Social Intelligence conducted In India

A study was conducted by Agrawal (2003) on 'Social intelligence and teacher effectiveness' and the objective was to study and compare the social intelligence of

the teachers in relation to their sex and educational qualification and to study the relationship between social intelligence and teacher effectiveness. The study found that female teachers were better in comparison to male teachers in respect to sensibility, tactfulness, sense of humour and memory dimensions of social intelligence; sex difference did not exist in relation to patience, cooperativeness and confidence dimensions of social intelligence; the different educational qualification groups did not differ in patience, cooperativeness, confidence, tactfulness, sense of humour and memory dimensions of social intelligence; the graduate teachers were highly sensitive, while the trained graduate teachers were least sensitive.

The aim of the study investigated by Gadre (2004) on 'Effect of school climate on social intelligence in Maharashtra' was to study social intelligence of the gifted and average students in different school environments varying on the dimension of enrichment. Two enriched environment and two non-enriched environment schools were selected from fifteen different schools that were studied for existing school environment. The comparison showed that better school atmosphere was advantageous for the improvement of social intelligence in average students. In case of gifted students observed mean differences were insignificant.

A study on 'Emotional and social intelligence as predictors of happiness in adolescents' was conducted by Pinky (2010). The aim of the study was to assess the degree of emotional and social intelligence and happiness among adolescents, to examine the association between social intelligence and happiness and to explore social intelligence as a predictor of happiness in adolescents. The adolescents were found to be below average in all the dimensions of social intelligence except in one dimension, i.e., sensitivity. There was a significant association between social intelligence and happiness in adolescents and of these two types of intelligence, emotional intelligence emerged out as more potent predictor of happiness than social intelligence, i.e., two out of four dimensions of emotional intelligence, and only one out of eight dimensions of social intelligence emerged out as predictors of happiness.

Khan, Khan and Haider (2011) conducted a research on 'Social Intelligence of the students of physical education' and the aim of the study is to find out if the duration of participation in physical education activities and the study of the subjective

physical education had any impact on social intelligence. They found that there was no significant difference between bachelor of physical education (B.P.Ed) and bachelor of physical education (B.P.E) in social intelligence except in one dimension, i.e., tactfulness.

In a study on 'Social intelligence of college students', Sembian and Visvanathan (2012) found that girls had higher social intelligence than boys; the students from rural schools had higher social intelligence than those from the urban areas; the students from government schools had higher social intelligence than those from private schools; the joint nuclear students had higher level of social intelligence than the nuclear students and the students of B. Ed colleges had higher level of social intelligence than those of the Arts and Science streams.

Haider (2012) conducted a study on 'Achievement motivation, emotional and social intelligence of hockey players at different levels of participation' with the purpose of finding out the difference amongst the players of different levels on the variable of social intelligence, to discover the relationship between achievement motivation and social intelligence and to find out the relationship between emotional intelligence and social intelligence. The study found that national and inter-collegiate as well as intervarsity and inter-collegiate level hockey players had significant mean difference in social intelligence; whereas national and intervarsity level hockey players had insignificant difference in social intelligence; Inter-varsity level hockey players had insignificant positive correlation between achievement motivation and social intelligence and national level hockey players had significant positive correlation between emotional intelligence and social intelligence.

'A comparative study on social intelligence of single child and child with siblings' was investigated by Goel and Aggarwal (2012) and they described family as the prime agency for learning which is responsible for promoting social skills, providing fundamental knowledge, modifying behaviour, developing language, etc., the change in the family structure affected a child and the study concluded that there was significant difference between social intelligence of a single child and a child with siblings.

Beheshtifar and Roasaei (2012) in their paper titled 'Role of social intelligence in organizational leadership' tried to show through a literature review that social intelligence was essential for effective leadership, they explained that the most important activity of a leader was that of networking in order to amplify the latter's performance; emerging leadership theories indicated that social intelligence was more important for leaders, because cognitive and behavioural adaptability and flexibility were important traits of competent leaders. They also found that enhanced social problem-solving abilities, experienced leadership, and positive interpersonal experiences were associated with the practical and functional aspects of social intelligence and people who learned to magnify their self-social intelligence abilities were relatively more successful in developing the creativity and productivity of those who work under them or report to them and successively, were more acknowledged for their leadership skills.

Lekshmi (2012) conducted a study on 'Developing a package for enhancing social intelligence of students at primary level' and the purpose of the study was to identify the existing level of social intelligence of primary school students, to develop a package for enhancing social intelligence of primary school students, to find out the effect of the prepared package on social intelligence of primary school students. The study clearly showed that the existing level of social intelligence of primary school students was low; most of the teachers (87.33%) had identified a need for training to enhance empathy skills of students; a large proportion of teachers (89.33%) favored training for enhancing communication skills of students and almost all teachers (94.67%) who had participated in the survey perceived that there was a need for training for enhancing conflict management skills of students. The study found that the social intelligence of the students after the experiment was raised to a high level, girls had higher level of social intelligence than boys, students from schools located in urban area had higher level of social intelligence than students from schools located in rural area, and aided school students had higher level of social intelligence than government school students.

In a research on 'Social intelligence of undergraduate students in relation to their gender and subject stream' Saxena and Jain (2013) found that significant difference

existed between gender on overall social intelligence; significant difference was also observed in patience, cooperativeness, sensitivity and recognition of social environment dimensions between male and female students. It was also discovered that female students had higher social intelligence than male students, female students had more patience and sensitivity, better cooperativeness and recognition of social environment than their counterparts and significant difference did not exist between gender in confidence, tactfulness, sense of humor and memory dimensions of social intelligence.

Kasture and Bhalerao (2014) in a study on 'Social intelligence of pupil teachers' found that all teacher educators were aware of social intelligence and agreed that it is important for effective individual and social life, most of the students had high patience, half of the students had high cooperativeness, most of the students had high confidence, maximum students had low and very low sensitivity, many students had low recognition of environment, maximum students had low tactfulness, most of the students had low sense of humor and all students had average and low memory.

Rai and Singh (2014) conducted a descriptive survey titled 'A study of social intelligence among college students in relation to their subject stream in Bijnor District' and they found that there was no significant difference between arts and science subject stream in relation to their overall social intelligence and its patience, cooperativeness, recognition of social environment, tactfulness, sense of humour and memory dimensions and there was significant difference between arts and science college students in relation to their confidence and sensitivity dimensions of social intelligence.

Nagra (2014) investigated on 'Social intelligence and adjustment of secondary school students' and found that secondary school students had average level of social intelligence which meant that secondary school students had average adjustment levels; neither government nor private school students and neither boys nor girls students differed significantly in their social intelligence as well as adjustment level scores as the values of t-test applied were found to be insignificant. It was also found that there was no significant difference between government and private as well as

boys and girls secondary school students on the basis of social intelligence levels and adjustment levels.

The purpose of ‘A study of social intelligence & academic achievement of college students of District Srinagar’ conducted by Ganaie and Mudasir (2015) was to observe and calculate the social intelligence and academic achievement of college students. The sample consisted of 275 degree college students (science = 150 and social science = 125) selected from different degree colleges of Srinagar district. The study showed that social science college students had more social intelligence than science college students. It was revealed that science students had higher academic achievement than social science students, male and female college students differed from each other significantly. It was also indicated that science and social science college students differed from each other significantly and the advantage was with social science college students. It was also found that female and science college students had higher academic achievement than male and social science college students respectively.

Nazir, Tasleema and Ganai (2015) in ‘Social Intelligence and academic achievement of college students – A study of District Srinagar’ found that significant difference existed between students from urban and rural colleges and students from urban areas were found to have higher social intelligence, hence, urban college students were more cooperative, sensitive, recognized to social environment, tactful, humorous and had good memory when compared to rural college students. It was also found that significant difference existed between urban and rural college students with regards to academic achievement and urban college students had higher academic achievement.

The study on ‘Social intelligence among arts and science college students’ conducted by Prabu (2015) revealed that students of art and science colleges had high level of social intelligence; there was no significant significance difference between gender; students from rural and urban areas significantly differed in their social intelligence; students of government and private schools did not differ significantly in their social intelligence and significant difference was found between graduate and post graduate students..

A study on 'Social intelligence of higher secondary school students in Nagaland' was conducted by Dhingra and Tiakala (2016) and found that the difference between male and female students in cooperativeness, confidence and sensitivity dimensions of social intelligence was significant and the difference was in favour of girls for cooperativeness and sensitivity and in favour of boys for confidence. No significant difference between boys and girls was found in overall social intelligence and in patience, tactfulness, sense of humour dimensions. There was no significant difference in social intelligence of students in relation to family income which meant that family income had no role in social intelligence of the students; and there existed no significant difference in social intelligence of students in relation to number of siblings, except confidence which meant that the more the numbers of siblings in the family, the higher would be their confidence.

Karanam and Vardhini (2016) in a study on 'Social intelligence of secondary school teachers with respect to their gender and age' found that both the male and female secondary school teachers have equal level of social intelligence, significant variation was found among the age groups of the secondary school teachers towards total social intelligence; significant difference existed in social intelligence of secondary school teachers among their age groups with regards to all the dimensions of social intelligence except tactfulness and sense of humour and teachers who were working in secondary schools of 46 years and above age group demonstrated higher social intelligence than their counter parts for the dimensions, viz., patience, cooperativeness, confidence, sensitivity and memory.

Paul and Arjunan (2016) in their research, 'Demographic factors in social intelligence of secondary school teachers' found that only 17.80% of the secondary school teachers of Kerala fell in the high social intelligence group, majority of them (64.41%) possessed average social intelligence, while another 17.80% possessed low social intelligence; it was also found that there was a gender difference with regard to the social intelligence of secondary school teachers and the difference was in favour of male teachers; the type of school management was a significant factor affecting the social intelligence of teachers; there was no significant difference between the trained graduate and trained postgraduate teachers in secondary schools and there was significant difference among high, average and low experienced teachers in their social intelligence.

Bhatia and Daga (2017) in 'A study of social intelligence of liberal studies and engineering students' found that majority of the university students, irrespective of their course or gender, achieved a high score on the social intelligence scale, there was a significant difference in the social intelligence of liberal studies students and engineering students and on an average, engineering students possessed higher social intelligence, the confidence and memory level are higher in engineering students than in liberal studies students, no significant difference is found in the social intelligence of male and female university students and the confidence and memory levels were higher in male students, whereas the sense of humor level was higher in female students.

Thomas and Rathina (2017) conducted a study on 'Interactionaleffect of social intelligence and emotional intelligence on mental health status of secondary school students' and the study revealed that social intelligence and emotional intelligence had a significant major effect and interaction effect on mental health status of secondary school students. Interaction effect of social intelligence and emotional intelligence is significant for mental health status of secondary school students with respect to gender. They also found that differences in mental health of the adolescents can be attributed to the joined effect of their emotional intelligence and social intelligence with respect to gender; social intelligence and emotional intelligence had significant main effect on mental health status of secondary students from both joint and nuclear families; social intelligence and emotional intelligence also had significant main effect and interaction effect on the mental health of students from all socio-economic sections.

Sreeja& Nalinilatha, (2017) in 'A Study on relationship between social intelligence and academic achievement of higher secondary students' discovered that significant relationship did not exist between social intelligence and academic achievement, students found difficult to develop social intelligence in schools, no significant difference is found in social intelligence between medium of instruction among higher secondary school students, there was no significant difference between gender in social intelligence, significant difference did not existbetween location of the school in social intelligence and there was no significant difference in social intelligence between the types of school among higher secondary school students.

Vinodhkumar and Pankajam (2017) in a study on 'Social intelligence and achievement in science among higher secondary school students' found that significant correlation existed between social intelligence and achievement in science students and among high school students at high and low level of achievement and at the same time there is significant relationship between social intelligence and achievement in science among high school students at moderate level of achievement.

Lathesh and Vidya (2018) conducted a study on 'Social intelligence and its impact on employee performance of insurance sectors in Mysuru city' and the results indicated that employees who possessed high level of social intelligence could easily learn new skills and perform much better than those who were in the low level; they also found that there was no significant difference between different age groups with regard to the different impact of social intelligence. The study also indicated that differences of social intelligence reflect differences on employee performance and the respondents were adopting new skills of social intelligence in their work life so that they can perform better in their work.

2.3. Studies Conducted on Pro-Social Behaviour

2.3.1. Studies on Pro-Social Behaviour conducted Abroad

Carlo and Randall (2002) in 'The development of a measure of pro-social behaviours for late adolescents' found that altruistically inclined adolescents reported higher levels of internalized, principled pro-social moral reasoning, perspective taking, sympathy, ascription of responsibility, and lower levels of hedonistic and approval-oriented pro-social moral reasoning, in late adolescence, public and altruistic pro-social behaviours were strongly negatively interrelated, and the dire and emotional pro-social behaviours were strongly positively interrelated and adolescent girls scored higher than adolescent boys on altruistic, anonymous, compliant, and emotional types of pro-social behaviours.

Another study on 'Pathways to children's academic performance and pro-social behaviour: Roles of physical health status, environmental, family and child factors' was conducted by King et al. (2005) and they found that recreational participation

and behavioural functioning were the main predictors of pro-social behaviour and there were four major pathways to pro-social behaviour - firstly, cognitive functioning influences recreational participation, which in turn affects pro-social behaviour, secondly, cognitive functioning affects hyperactivity/inattention, with the effects of hyperactivity/inattention on pro-social behaviour then being significantly mediated by behavioural functioning, thirdly, greater social support to parents and greater neighbourhood cohesion lead to better family functioning, which in turn affects children's behavioural functioning and thereby their pro-social behaviour and fourthly, greater social support and neighbourhood cohesion lead to greater recreational participation, which affects pro-social behaviour.

A study on 'Motivational predictors of pro-social and anti-social behaviour in football' was conducted by Kavussanu (2006) and the main aim of the study was to determine the main and interactive effects of goal orientations and perceived motivational climate on pro-social and anti-social behaviour. The study found that task orientation and mastery climate were positive predictors of pro-social behaviour while ego orientation and performance climate were positive predictors of anti-social behaviour; Further, task orientation negatively predicted anti-social behaviour, while ego orientation negatively predicted pro-social behaviour; and mastery climate negatively predicted anti-social behaviour for those who had played many seasons for the team.

Tsang (2006) conducted a study on 'Gratitude and pro-social behaviour: An experimental test of gratitude, cognition and emotion' on 40 undergraduate psychology students at Baylor University where the main purpose was to find out the pro-social effect of gratitude with the effect of positive mood on helping. It was found that participants receiving a favour helped more and reported more gratitude compared to participants in the chance condition. Participants gave more money to their partners tended to be less motivated to acquire resources for themselves, and more motivated to act pro-socially toward the other participant.

Twenge, Baumeister, DeWall, Ciarocco and Bartels (2007) conducted a study titled, 'Social exclusion decreases pro-social behaviour.' And in seven experiments, they tried to manipulate social exclusion by telling people that they will end up alone later in life or that other participants had rejected them. They found that social exclusion

caused a substantial reduction in pro-social behaviour, socially excluded people donated less money to a student fund, were unwilling to volunteer for further lab experiments, were less helpful after a mishap, and co-operated less in a mixed-motive game with another student.

Vaculík, Prochazka and Kveton (2007) in a study on 'The relation between pro-social behaviour and demanding pro-social behaviour' found a very low relationship between the tendency to act pro-socially and the tendency to demand pro-social behaviour, gender had no influence on the tendency to pro-social behaviour and gender influenced the tendency to demand pro-social behaviour and women showed a slightly higher tendency to demand pro-social behaviour than men.

Martin, Martin, Gibson and Wilkins (2007) conducted a study on 'Increasing pro-social behaviour and academic achievement among adolescent African American males' where intervention in the study included activities such as individual and group coaching; cultural, social and entertaining activities which included also nutritional food. The finding of the study showed that comprehensive after-school intervention yielded better result in academic achievement and lessening unwanted behaviour among adolescent African American male students. The program was conducted for about two years and in the early stages, the result indicated that there was increase daily attendance, lessening of discipline breaking and there was no suspension or expulsion; it was also found that African American adolescents performed poorly when compared to peers in both behavioural and academic aspects of their educational experience.

Sage and Kavussanu (2008) in their study 'Goal orientations, motivational climate, and pro-social and anti-social behaviour in youth football: Exploring their temporal stability and reciprocal relationships' had tried to examine the temporal stability and reciprocal relationships among task and ego orientation, task and ego involving climates, and pro-social and anti-social behaviour in youth football. The sample taken was 156 males 24 female footballers. It was found that the mean values for behaviours across the season showed that, in general, players 'sometimes' to 'often' engaged in pro-social behaviour and 'rarely' to 'sometimes' engaged in anti-social behaviour. It was also found that anti-social behaviour could prompt athletes to

attend to the rivalry that existed in the sport and this focus may subsequently lead to further anti-social acts.

A study conducted by Kavussanu, Stamp, Slade and Ring (2009) on 'Observed pro-social and anti-social behaviours in male and female soccer players' investigated gender differences in observed pro-social and anti-social behaviours in soccer and the role of personal and social factors in explaining those differences. The sample was forty-six soccer teams, recruited from various recreational local leagues in England. The results indicated that male and female soccer players did not differ in pro-social behaviours, but male player engaged in more anti-social acts than female players and it was also found that the effects of sex on anti-social behaviour were substantially reduced when behaviour scores were adjusted for empathy, perceived performance climate, or soccer experience.

Anderson and Costello (2009) in 'Relationships between pro-social behaviour, spirituality, narcissism, and satisfaction with life' found that spirituality was the only significant variable, accounting for 9% of the variance of pro-social behaviour; the other two variables were not significant predictors; spirituality was also positively correlated with pro-social behaviour, public pro-social behaviour was positively correlated with narcissism, dire pro-social behaviour was positively correlated with spirituality and finally, altruistic pro-social behaviour was positively correlated with spirituality. It was also found that narcissism and satisfaction with life did not account for any significant amount of variance of pro-social behaviour; satisfaction with life also did not account for any of the variance of pro-social behaviour in this study and spirituality was positively correlated with both pro-social behaviour and satisfaction with life.

Johnston and Krettenauer (2011) conducted a study on 'Moral self and moral emotion expectancies as predictors of anti- and pro-social behaviour in adolescence: A case for mediation?' and found that there was a systematic relationship between adolescents' moral emotion expectancies and anti-social behaviour, with lack of moral emotion expectancies in adolescents shown to be associated with higher levels of anti-social behaviour, there was a systematic relation between the self-importance

of moral values and pro-social action and the relation between pro-social behaviour and the self-importance of moral values did not change across adolescence.

Rutten et al. (2010) in a pilot study 'Using forum theatre in organized youth soccer to positively influence anti-social and pro-social behaviour: A pilot study' found significant differences in moral team atmosphere and on-field anti-social behaviour indicating a positive change in moral team atmosphere and a reduction of on-field anti-social behaviour, irrespective of the athletes' characteristics. As expected, higher levels of perceived moral team atmosphere were negatively associated with on-field anti-social behaviour at both measurement points, the post-test revealed a slight reduction in on-field anti-social behaviour of the young soccer players and a small, but positive change in the moral atmosphere in their team; no changes were found in moral reasoning and fair play attitude of the athletes and moreover, no significant changes in off-field behaviour and on-field pro-social behaviour were found.

Lukacikova (2011) conducted a study on 'Pro-socialbehaviour of adolescent in school and after-school environment' to find out the generation of teenagers who were interested in pro-social behaviour for assistance in the school environment and beyond it. The study claimed that helping behaviour disappeared from today's adolescent youth; family from which a child came did not affect the behaviour of the children to help; popularity and attractiveness were significant factors for assistance and about a quarter of respondents would help a person in need, even if they were in a hurry.

Kumru, Carlo, Mestre and Samper (2012) in a study on 'Pro-social moral reasoning and pro-social behaviour among Turkish and Spanish adolescents' found significant cultural group differences on both pro-social moral reasoning subscales and peer rating of pro-social behaviour with Spanish adolescents scoring higher than Turkish adolescents, there were also age group and gender differences on some types of pro-social moral reasoning and behaviours, but the effect sizes were small and the differences were very small and findings suggested culture-specific patterns of pro-social behaviour among the adolescents in the two samples.

The aim of the study on ‘Anticipated feelings of guilt and shame as predictors of early adolescents’ anti-social and pro-social interpersonal behaviour’ conducted by Olthof (2012) was to examine how early adolescents’ anticipated guilt and shame before adults in response to wrong doing are related to each other and to their anti-social and pro-social behaviour; to find out the correlation between shame before parents and shame before teachers and the relations between anticipated moral affect and behaviour. Participants consisted of 187 boys and 176 girls who were in 15 different classes from six different elementary schools in a medium-sized town in the vicinity of Amsterdam, the Netherlands. The study found that gender was related to all four measures of behaviour (guilt, Shame, pro-social and anti-social behaviour) and indicating that boys showed more anti-social behaviour than girls and that girls showed more pro-social and outsider behaviour than boys, it was also found that there was correlation between shame before parents and shame before teachers and between pro-social behaviour and outsider behaviour was also significant.

In order to find out the influencing situations for pro-social behaviour in men and women who were both married and unmarried and between 20-40 years of age, Iqbal (2013) conducted a study on ‘Pro-social behaviour in different situations among men and women’ where 240 participants were presented with four different situations, viz., accident victim, neighbor fighting, molestation and shoplifting and asked to jot down on how they would intervene in the situations as provided in the options. The results showed that more people will help indirectly than directly and few persons would not help at all; it was proved that helping behaviour differed from situation to situation; there was no significant difference between married and unmarried individuals with regards to direct and indirect helping.

Afolabi (2014) in a study ‘Psychosocial predictors of pro-social behaviour among a sample of Nigerian undergraduates’ found that there was a significant correlation between religiousity and pro-social behaviour. This implied that religious individuals were more pro-social than those that were less religious. There was also a significant correlation between life satisfaction and pro-social behaviour among the sample. The relationship between perceived social exclusion and pro-social behaviour was negatively significant. It implied that undergraduates living in the village were more pro-social than those living in the city. It was also found that

respondents residing in a village were more pro-social than those in a city. Lastly, cultural/ethnic differences significantly influenced pro-social behaviour.

The study conducted by De Caroli, Falanga and Sagone (2014) on 'Pro-social behaviour and moral reasoning in Italian adolescents and young adults' found that girls showed more pro-social behaviour than boys in emotional critical and dire situation; boys were better than girls in public behaviour and young adults scored higher than adolescence in anonymous behaviour. While girls scored higher than boys in internalized and hedonistic pro-social moral reasoning, boys scored higher than girls in stereotypical, needs oriented, and approval oriented pro-social moral reasoning. It was also found that young adults scored higher in internalized and hedonistic pro-social moral reasoning, adolescents had higher score than young adults in stereotypical, needs oriented, and approval oriented pro-social moral reasoning. There was also a significant relationship between pro-social behaviour and pro-social moral reasoning.

A study on 'Learning others' point of view: Perspective taking and pro-social behaviour in preschoolers' was conducted by Cigala, Mori and Fangareggi (2015) with the aim to verify the possibility of promoting perspective taking in preschoolers using ecological training. They found that there was a significant improvement in most of the investigated areas after the training, confirming the possibility of promoting perspective taking abilities, the study also indicated that children with greater perspective taking skills were also more inclined to behave in a pro-social way during peer interactions.

Lai, Siu and Shek (2015) in a study 'Individual and social predictors of pro-social behaviour among Chinese adolescents in Hong Kong' found that a large proportion (64.9%) of the participants perceived their experience of volunteering as positive, female participants had significantly higher helping intention than males, but there were no gender differences in pro-social behaviour; male participants had higher empathy scores; females perceived their parents as having a higher helping intention than males and perceived their school as offering more recognition of pro-social behaviour than males. It was also found that pro-social reasoning did not correlate significantly with either pro-social behaviour or helping intention. Pro-social behaviour had significant correlations with peer influence, school influence and

parental influence. The findings also indicated that social influence was strongly linked to pro-social behaviour which implied that socialization and social support for pro-social norms and behaviour could exert a powerful influence on the behaviour of young people in a Chinese population.

The study titled ‘Influence of subjective well-being and gender differences on pro-social behaviour among a sample of Nigerian police personnel’ was conducted by Onyenko and Afolabi (2018) who found that the effect of subjective well-being to pro-social behaviour of an individual did not have any significance which implied that subjective well-being did not influence the pro-social behaviour of a person; there was no significant effect of gender upon pro-social behaviour which means that gender had no effect on pro-social behaviour of an individual and rank of police personnel did not have any significant effect on pro-social behaviour. The results also showed that marital status, job rank and educational qualification significantly related to police personnel’s pro-social behaviour and individuals with a better score in subjective wellbeing had higher pro-social behaviour when compared to those with lower subjective wellbeing.

2.3.2. Studies on Pro-Social Behaviour conducted in India

Verma (1997) conducted a study on ‘Pro-social behaviour development in relation to family structure and value of parents’ and found that there was increase in average pro-social scores with advances in age, children whose mothers were of high moral value and fathers were of low moral value had scored the highest while children whose mothers were of low moral value and fathers of high moral value had scored the lowest; children of parents both of high moral value stood second and those of parents both of low moral value stood third in respect of their pro-social behaviour and no significant difference was found in pro-social behaviour of children who belong to nuclear and joint families.

Chadha and Misra (2006) in a study on ‘Pro-social reasoning and behaviour among Indian children: A naturalistic study’ tried to investigate the nature and development of patterns of pro-social reasoning and behaviour of 167 Indian children and found that the orientation of the children towards physical needs and to honour the request

of others increased as they grow older; there was significant difference between male and female children and social economic status in pro-social reasoning and however, age did not significantly influence pro-social behaviour of the children.

Albert and Thilagavathy (2013) in 'A study on pro-social behaviour and parental behaviour of higher secondary students' tried to discover the level of pro-social behaviour and parental behaviour of higher secondary students and to infer the difference, if any, in pro-social behaviour and parental behaviour scores between boys and girls, and the students of rural and urban schools. The study found that the levels of pro-social behaviour and parental behaviour of higher secondary students were average, boys and girls did not differ significantly in their mean pro-social behaviour, there was no significant difference between rural and urban higher secondary students in their pro-social behaviour, students from rural and urban areas did not differ significantly in their mean parental behaviour and pro-social behaviour and parental behaviour of higher secondary students were found to be positively and significantly related.

The purpose of a study on 'Emotional intelligence & pro-social behaviour: multidimensional trait analysis of technical students' conducted by Jena, Bhattacharya, Hati, Ghosh and Panda (2014) was to find out the associability between emotional intelligence and pro-social behaviour. The sample of the study included 300 male and female students consisting of postgraduate and research scholars of various departments of IIT, Kharagpur. To measure pro-social behaviour, 'Pro-social Personality Battery' by Penner, Fritzsche, Craiger and Freifeld (1995) was used. The results of correlation between Global Trait Emotional Intelligence on one hand and two factors of pro-social behaviour (Other-oriented Empathy and Helpfulness) showed significant positive associability and the findings also conveyed that individuals with higher levels of well-being, emotionality and sociability would have helpful dispositions.

Misra and Yadav (2015) in a study on 'Gender differences in pro-social behaviour in Indian youth' found that there were no gender differences in pro-social behaviour in Indian youth. There was a linear relationship between empathy and pro-social behaviour, and between intrinsic religious orientation and pro-social behaviour.

Additionally, empathy and intrinsic religious orientation acted as the predictors of pro-social behaviour.

Gupta and Thapliyal (2015) conducted a 'Study of pro-social behaviour and self-concept of adolescents' to find out the correlation between pro-social behaviour and self-concept and they found that overall self-concept of adolescents was average and favourable; no significant difference was found between self-concept of male and female adolescents; the pro-social behaviour of the participants too was found to be average and favourable; significant difference existed between pro-social behaviour of male and female participants and significant relationship existed between pro-social behaviour and self-concept of the participants.

Mahejabin (2015) in a study on 'Social harmony and pro-social behaviour: Two aspects of one coin' concluded that pro-social behaviour and social harmony should have the same elements and should be inter-correlated to each other; pro-social behaviour strengthened social harmony, hence, pro-social behaviour and social harmony were the two sides of the same coin which meant that when pro-social behaviour improved, there would be an increase in social harmony. The study also found that there was an effective instrument to decrease social conflict and build up mutual respect for one another.

Mallick and Cour (2015) in 'Pro-social behaviour among senior secondary school students in relation to their home environment' found that the private senior secondary school students had average level of pro-social behaviour; significant difference existed between government and private senior secondary school students in pro-social behaviour and the difference was in favour of private senior secondary school students; no significant difference existed between gender in pro-social behaviour; and there was a positive correlation between pro-social behaviour and home environment in control, deprivation of privileges and nurturance dimensions. There was a negative correlation with regard to protectiveness, punishment, conformity, social isolation, reward and rejection dimensions of home environment.

Martela and Ryan (2016) in a study 'Pro-social behaviour increases well-being and vitality even without contact with the beneficiary: Causal and behavioural evidence'

found that gender differences did not exist on any of the variables under investigation; there was significant difference between the two conditions in the sense of beneficence of the subjects; so pro-social behaviour was increased by the manipulation on the subjects and it was also found that benevolent acts tended to improve positive affect and meaningfulness of the experience and slightly improved vitality.

Abdullahi and Kumar (2016) studied on 'Gender differences in pro-social behaviour' and the results indicated that females scored significantly higher than males on two dimensions of pro-social personality battery, i.e., perspective taking and other oriented moral reasoning; there was no significant difference on the other five dimensions of pro-social personality battery, viz., social responsibility, emphatic concern, personal distress, mutual concern moral reasoning and self-report altruism dimensions and that indicated that the difference is negligible between males and females in most of the pro-social behaviour dimensions. Women were perceived as those who nurture help while men were perceived mostly for courageous and heroic help.

The aim of the study conducted by Khanna, Sharma, Chauhan and Pragyendu (2017) titled 'Effects of pro-social behaviour on happiness and well-being' was to find out the impact of pro-social behaviour on happiness and well-being. They found that the subjects on average possessed high pro-social behaviour, wellbeing and happiness; significant positive correlation existed between pro-social behaviour and well-being; positive relation was noticed between happiness and pro-social behaviour but it was not significant. There was a positive correlation between happiness, well-being and pro-social behaviour of the subjects.

After perusing the studies conducted in India and abroad, it was found that a good number of studies had been conducted on pro-social behaviour in relation to some variables like aggressive behaviour, gratitude, academic achievement, classroom climate, emotional intelligence, personality traits, self-concept, moral values, religiosity, life satisfaction, social exclusion, etc. There had been studies conducted on social intelligence with some variables like social participation, behavioural patterns, emotional intelligence, achievement motivation, effective music teaching, theory of mind and effective function, teacher effectiveness, etc. The present review revealed that studies had been conducted on social intelligence and pro-social behaviour

separately by many researchers. However, there was no study found on social intelligence and pro-social behaviour in relation to academic achievement. Therefore, there is a need to study these variables since they are important for creating better educational environment for the students, teachers and the educational institutions.

CHAPTER III

METHODOLOGY

Methodology is a systematic procedure of carrying out any research work. According to Webster Dictionary, methodology is a science of method of arrangement. It includes the method, population and sample, procedure for data collection, tools and statistical techniques.

3.1. Method

Descriptive survey method has been used for the present study as it is an attempt to find the relationship between social intelligence and academic achievement and also between pro-social behaviour and academic achievement of higher secondary students.

3.2. Population

The population of the present study comprises of all the higher secondary school students of East Khasi Hills District of Meghalaya. It consisted of 24339 students from 101 higher secondary schools in East Khasi Hills District as shown in the following table.

Table 3.1: Population of the study

District	Type of Management	No. of School	Male	Female	Total
East Khasi Hills	Government	9	943	747	1690

Govt. Aided	30	2738	4050	6788
Private	62	7146	8715	15861
Grand Total	101	10827	13512	24339

Source: UDISE 2014-15

3.3. Sample

The sample for the present study consisted of 1025 students from 41 schools of East Khasi Hills District as shown in table 3.2. The sample size has been selected by using sample size calculator from “Creative Research System Survey” software with 95% confidence and with confidence interval of 3. Simple random technique has been used to select the sample with the help of random table.

Table 3.2:Sample of the study

District	Type of Management	No. of School	Male	Female	Total
East Khasi Hills	Government	7	88	87	175
	Govt. Aided	15	180	195	375
	Private	19	230	245	475
Grand Total		41	498	527	1025

3.4. Tools

The following tools were used for the present study.

- (i) **Social Intelligence Scale (SIS):** Social intelligence scale was constructed by N. K. Chadha and Usha Ganesan (2011) which consists of eight dimensions and

66 items. Its dimensions are (A) patience, (B) cooperativeness, (C) confidence, (D) sensitivity, (E) recognition of social environment, (F) tactfulness, (G) sense of humour and (H) memory. The reliability is determined with the help of test-retest reliability co-efficient on 75 males and 75 females. The reliability co-efficient is calculated dimension wise i.e., patience (.94), cooperativeness (.91), confidence (.90), sensitivity (.93), recognition of social environment (.95), tactfulness (.84), sense of humour (.92) and memory (.97). All the results are significant at .01 level. The social intelligence scale has validity co-efficient of .70. For the purpose of the present study the reliability of the scale has been re-established on 200 samples by using Cronbach's Alpha and the reliability co-efficient found is .671.

Scoring: The minimum and maximum scores for items of patience, cooperativeness, confidence and sensitivity dimensions is 1 and 3 respectively and the minimum and maximum scores for items of recognition of social environment, tactfulness, sense of humour and memory dimensions is 0 and 1. The minimum score of the whole social intelligence scale is 36 and the maximum score is 138.

(ii) **Pro-Social Behaviour Scale:** Pro-social behaviour scale was constructed by the investigator for higher secondary students. The components selected are (A) social responsibility, (B) empathy, (C) perspective taking, (D) moral obligation, (E) altruism, (F) reciprocity, (G) equity and (H) self-sacrifice. The scale consists of 64 items. Its validity is verified by educational experts who gave a favourable opinion to the scale. The reliability of the scale is high where Cronbach's Alpha is .890, Guttman Split-Half Coefficient is .865 and Spearman-Brown Coefficient is .867. (Details of the tool construction is provided in chapter IV)

Scoring: The scale is a Likert-type five point scale where the scoring starts from 1 to 5 for the positive statements and from 5 to 1 for the negatives. The minimum and maximum scores for each item in all the components of the scale is 1 and 5 respectively and the minimum score for the whole scale is 64 and the maximum is 320.

3.5. Procedure for Collection of Data

The investigator personally went to meet the principals of schools and arranged the appropriate timing for collecting data. Instruction was given to the students about

the importance of being true to themselves and to write the same in the scales. The data was collected from the 1025 sample of students from the higher secondary schools in East Khasi Hills District by using the above tools.

3.6. Statistical Techniques

Appropriate statistical techniques were used for analyzing the data like frequency, percentages, mean, standard deviation, 't' test, One way ANOVA and Pearson product movement correlation, partial correlation and multiple regression.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF THE DATA

Analysis is the careful examination of the detail of something in order to see its significance, order, pattern, elements and relationships with other things. It is necessary to discover some hidden facts and finding explanation to them which is also called interpretation. Interpretation is the explanation of what is obtained from the analysis and this can be done in simple language so that other readers will understand. This chapter deals with the analysis and interpretation of the data collected. The detailed construction of pro-social behaviour scale which is one of the tools that was used to collect data for the present study has been shown. The scale is constructed by the investigator by following the procedure for tool construction. For the purpose of analysis and interpretation of data, the 95 % confidence is taken as the critical value for t-test and F-test and the 99% confidence for Pearson 'r' and multiple regressions.

Objective 1

4.1. Construction and Standardization of Pro-Social Behaviour Scale (PSBS) for Higher Secondary Students.

To construct a scale certain procedures like preparation of the items, seeking expert opinion on the draft, pre-tryout, try-out and item analysis were followed meticulously.

4.1.1. Preparation of the Items: The investigator reviewed related literature on pro-social behaviour in India and abroad and eight components were selected for the scale. They are social responsibility (SR), empathy(EM), perspective taking (PT), moral obligation (MO), altruism (AL),reciprocity (RE),equity (EQ) and self-sacrifice (SS). It consisted of 160 items which included both positive and negative items as shown in table 4.1. The draft scale is a five point Likert-type with options of strongly agree, agree, uncertain, disagree and strongly disagree.

Table 4.1: Distribution of Items according to Components of Pro-Social Behaviour Scale

Sl. No.	Components	Positive Items	Negative Items	Total Number of Items
A	Social Responsibility (SR)	14	9	23
B	Empathy(EM)	13	6	19
C	Perspective Taking (PT)	13	5	18
D	Moral Obligation (MO)	12	13	25
E	Altruism (AL)	14	7	21
F	Reciprocity (RE)	13	6	19
G	Equity (EQ)	12	6	18
H	Self-Sacrifice (SS)	14	3	17

Total	105	55	160
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4.1.2. Expert Opinion on the Draft: The draft scale which consisted of 160 items was given to 11 experts for their expertise opinions, suggestions and recommendations for each item as well as for the whole scale. Based on their recommendations 8 items were deleted and 152 items were retained with necessary modifications. The expert opinions for the whole scale are given in table 4.2.

Table 4.2: Expert Opinions on the Draft of Pro-Social Behaviour Scale

Sl. No	Opinion On	To a great extent	To quite an extent	To some extent	Not at all
1	Items as representative of pro-social behaviour	64%	27%	9%	--
2	Measurement of level of pro-social behaviour	46%	36%	18%	--
3	Coverage of the subscales of pro-social behaviour	36%	64%	--	--

4	Suitability in terms of content presented for higher secondary students	27%	64%	9%	--
5	Suitability in terms of item difficulty for higher secondary students	27%	64%	9%	--
6	Suitability in terms of language used for higher secondary students	45%	55%	--	--

4.1.3. Pre-tryout: The draft scale which consisted of 152 items was given for pre-try-out to 50 higher secondary students with the instruction to leave out the items if they were too difficult to understand or inappropriate.

4.1.4. Preparation for Try-out: Based on the analysis of the data collected from pre-try-out, 8 items were deleted because majority of the students did not attempt. Some items were modified to make the scale more appropriate for the higher secondary students. So, the total items retained for try-out was 146.

4.1.5. Tryout: The items in the draft scale were shuffled and the total 146 items were administered for try-out to 200 higher secondary students in East Khasi Hills District.

4.1.6. Item Analysis: From the data collected, the investigator sorted the data according to value from the highest to the lowest value and selected the upper 27% and lower 27% for item analysis and t-test was conducted at 0.01 level of significance. It was taken care that both positive and negative items were selected for the scale. It may be mentioned here that the number of positive items are more in number since pro-social behaviour itself is positive and negative statements were meant for cross checking the responses. The analysis of items in each component of pro-social behaviour scale is given in annexure – I.

4.1.7. Final Form of the Scale: There are 64 items in the final form of pro-social behaviour scale which includes 40 positive and 24 negative items as shown in table 4.3.

Table 4.3: Distribution of Items for the Final Pro-Social Behaviour Scale

Sl. No	Components	Serial Number of Positive Items	Serial number of Negative Items	Total no. of Items	Min Score	Max Score
1	Social Responsibility (SR)	2,10,47,53,64	12,17,61	8	8	40
2	Empathy(EM)	6,16,21,32,48	9,41,58	8	8	40
3	Perspective Taking (PT)	22,26,37,49,54	4,40,60	8	8	40
4	Moral Obligation (MO)	27,39,62,63	18,19,34,36	8	8	40
5	Altruism (AL)	1,5,14,30,57	38,44,55	8	8	40
6	Reciprocity (RE)	24,31,33,42,56	11,20,28	8	8	40
7	Equity (EQ)	3,7,13,29,35	25,50,52	8	8	40
8	Self-Sacrifice (SS)	8,23,43,45,46,59	15,51	8	8	40
	Total	40	24	64	64	320

4.1.8. Scoring Procedure of the Scale: The scoring is based on Likert's scale as shown in table 4.4.

Table 4.4: Scoring of Positive and Negative Items of Pro-Social Behaviour Scale

Items	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Positive Items	5	4	3	2	1
Negative Items	1	2	3	4	5

4.1.9. Establishment of Reliability: Reliability refers to the measurement of consistency of a test. To calculate the reliability of the scale, Cronbach Alpha (α) was used for the internal consistency of the scale, Split Half Method was also used where the whole scale was split into two halves based on even and odd item numbers. Spearman Brown Formula too was calculated and the coefficients are shown in table 4.5.

Table 4.5: Internal Consistency of Pro-Social Behaviour Scale

N	Reliability coefficient	
200	Cronbach's Alpha	.890
200	Guttman Split-Half Coefficient	.865
200	Spearman-Brown Coefficient	.867

4.1.10. Establishment of Validity: Validity is the extent of how well a scale measures what it is intended to measure.

a. **Face Validity:** Face validity of the scale was established based on the opinion of the experts to whom the scale had been given. The experts gave a favourable opinion that the scale does measure pro-social behaviour as shown in table 4.2.

b. **Content Validity:** The scale was given to the experts and their suggestions and recommendations regarding the content of the scale had been taken into consideration. Many statements were modified into simpler language

and some of them were rejected. Therefore, the pro-social behaviour scale has content validity.

c. **Establishment of the Norms:** In order to establish the norms, the data was collected from 500 samples of higher secondary students. Then the data was first converted to z-score and with the help of NPC, norms were established and their descriptive interpretation is given in table 4.6.

Table 4.6: Norms for Interpretation of Levels of Pro-Social Behaviour

Range of raw score	Range of z score	Frequency	Percentage	Descriptive Interpretation
277 and above	+1.8 and above	17	3.4	Very High
250 to 276	+.6 to +1.8	133	26.6	High
233 to 249	– .6 to +.6	196	39.2	Average
210 to 232	– 1.8 to – .6	137	27.4	Low
209 and below	– 1.8 and below	17	3.4	Very Low
Total		500	100	

Objective 2

4.2. Levels of Social Intelligence and Pro-Social Behaviour

The levels of overall social intelligence of higher secondary students of East Khasi Hills is sorted and shown in table 4.7.

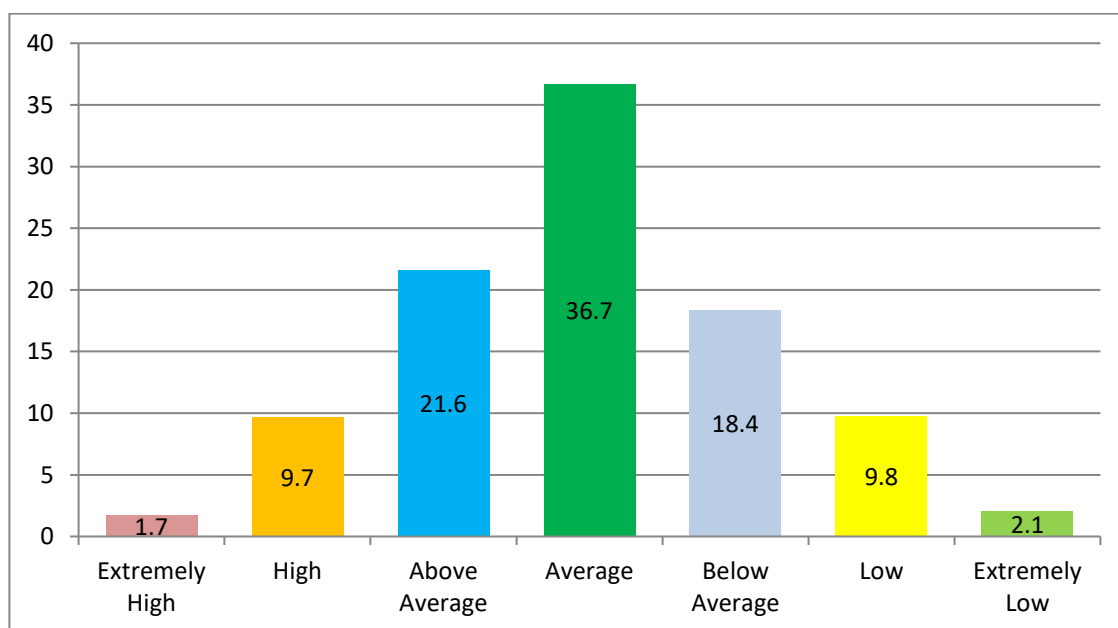
Table 4.7: Levels of Social Intelligence of Higher Secondary Students of East Khasi Hills District.

Range of Raw Scores	Range of z Scores	Frequency	Percentage	Level
120 and above	+2.01 and above	17	1.7	Extremely High
109 - 119	+1.26 to +2.00	99	9.7	High
98 - 108	+0.51 to +1.25	221	21.6	Above Average
82 - 97	– 0.50 to + 0.50	376	36.7	Average
71 -81	– 1.25 to – 0.51	189	18.4	Below Average
60 - 70	– 2.00 to – 1.26	101	9.8	Low
59 and below	– 2.01 and below	22	2.1	Extremely Low
Total		1025	100	

From the above table, it is observed that 36.7% of the higher secondary students have average social intelligence, 21.6% above average social intelligence, 18.4% below average social intelligence, 9.8% low social intelligence, 9.7% high social intelligence, 2.1% extremely low social intelligence and 1.7% extremely high social intelligence. The above analysis indicates that the maximum number of students (376 out of 1025) fall within the average level of social intelligence, a good number of them (221 of 1025) fall in the above average, quite many of them (189 of 1025) fall below average, many of them (101 of 1025) fall in lowlevel, some of them (99 of 1025)fall in high level, few of them (22 of 1025) fall in extremely lowand very few of them (17 of 1025) fall in extremely high level of social intelligence.

The levels of social intelligence of the higher secondary students of East Khasi Hills District can be represented as shown in the following figure.

Figure 1: Levels of Social Intelligence of Higher Secondary Students of East Khasi Hills District



The levels of overall pro-social behaviour of higher secondary students in East Khasi Hills is calculated and shown in table 4.8.

Table 4.8: Levels of Pro-Social Behaviour of Higher Secondary Students in East Khasi Hills District.

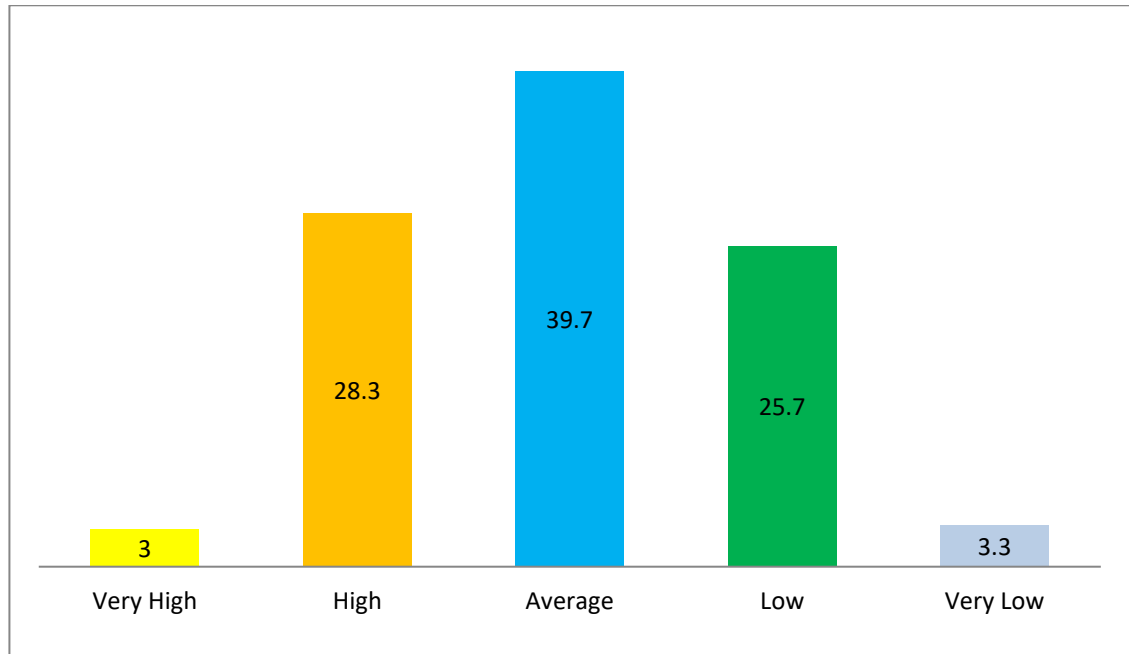
Range of Raw Score	Range of z Scores	Frequency	Percentage	Level
277 and above	+1.8 and above	31	3.0	Very High
250 - 276	+.6 to +1.8	290	28.3	High

233 - 249	– .6 to +.6	407	39.7	Average
210 - 232	– 1.8 to – .6	263	25.7	Low
209 and below	– 1.8 and below	34	3.3	Very Low
Total		1025	100	

From the above table, it is observed that, 39.7% of the higher secondary students have average pro-social behaviour, 28.3% have high pro-social behaviour, 25.7% have low pro-social behaviour, 3.3% have very low pro-social behaviour and 3.0% have very high pro-social behaviour. The above analysis indicates that the maximum number of students (407 of 1025) is on the average level of pro-social behaviour. A good number of them (290 of 1025) are on the high level and about a quarter (263 of 1025) is on the low level. Very few students (34 of 1025) and (31 of 1025) are on the very low and very high levels of pro-social behaviour respectively.

The different levels of pro-social behaviour of higher secondary students of East Khasi Hills District can be represented in the following figure.

Figure 2: Levels of Pro-Social Behaviour of Higher Secondary Students of East Khasi Hills District.



Objective 3

4.3. Social Intelligence of Higher Secondary Students with respect to Demographic Variables

4.3.1. Social Intelligence with respect to Sex: The sample includes 498 male and 527 female students taken from higher secondary schools of East Khasi Hills District.

H_{01(a)}: There is no significant difference in social intelligence of higher secondary students in East Khasi Hills District with respect to sex.

The mean difference between sexes of higher secondary students regarding the overall social intelligence and its different dimensions is given in the table below.

Table 4.9: Mean Difference between Male and Female Students with respect to Social Intelligence and its Dimensions

Variable/ Dimension	Sex	N	Mean	SD	df	t- value	Table Value	Interpretation
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(.05)

Social Intelligence		Male	498	104.46	7.226			
(Overall)						1023	2.77	Significant
	Female	527	105.68	6.844				
A) Patience	Male	498	19.89	2.652		1023	2.30	Significant
	Female	527	20.25	2.427				
B) Cooperativeness	Male	498	25.24	2.627		1023	4.58	Significant
	Female	527	25.96	2.412				
C) Confidence	Male	498	19.40	2.187		1023	.24	Not significant
	Female	527	19.43	2.091				
D) Sensitivity	Male	498	20.87	2.351		1023	1.35	1.96
	Female	527	21.06	2.187				Not significant
E) Recognition of Social Environment	Male	498	1.03	.792		1023	1.20	Not significant
	Female	527	1.09	.785				
F) Tactfulness	Male	498	3.88	1.201		1023	3.64	Significant
	Female	527	3.60	1.272				
G) Sense Of Humour	Male	498	3.34	1.326		1023	.61	Not significant
	Female	527	3.29	1.471				
H) Memory	Male	498	27.35	4.633		1023	1.24	Not significant
	Female	527	26.98	4.677				

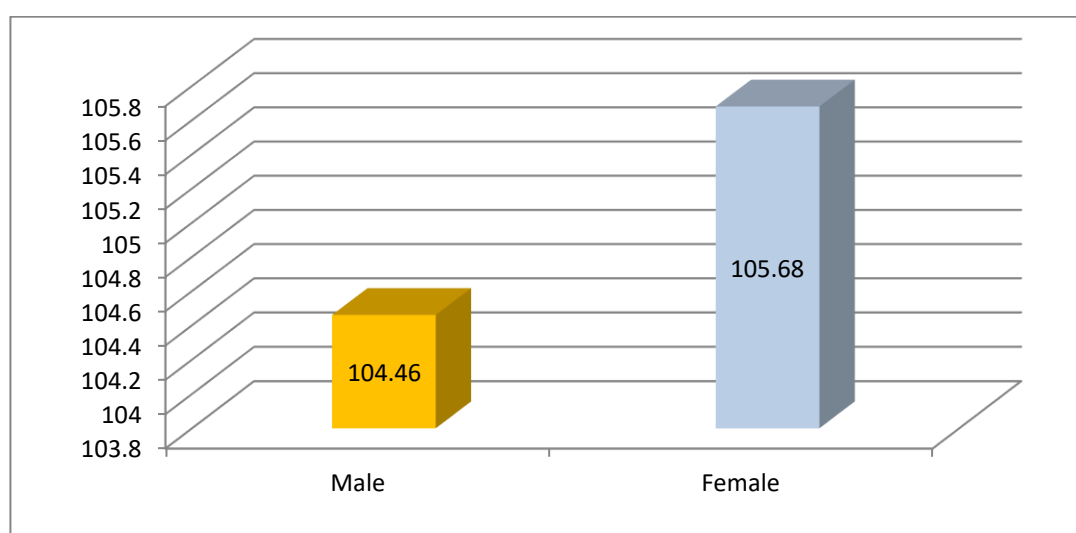
From the above table, it is observed that the means of male and female students with regards to overall social intelligence are 104.46 and 105.68 respectively and SDs are 7.226 and 6.884 respectively. The calculated t-value is 2.77 which is greater than the table value 1.96 with df 1023 at .05 level of significance; hence, it is significant and the mean difference is in favour of the female students. Therefore, the null hypothesis ‘there is no significant difference in social intelligence of higher secondary students of East Khasi Hills District with respect to sex’ is rejected.

Significant mean difference is also found between sexes with respect to some dimensions of social intelligence, viz., (A) patience, (B) cooperativeness and (F) tactfulness and the mean is in favour of female students for patience and cooperativeness and male students for tactfulness. Thus the null hypothesis is rejected in these dimensions, viz., patience, cooperativeness and tactfulness.

However, no significant mean difference is found in the remaining dimensions of social intelligence, viz., (C) confidence, (D) sensitivity, (E) recognition of social environment, (G) sense of humour and (H) memory. Thus, the null hypothesis is retained.

The mean difference between male and female students in overall social intelligence is shown in figure 3.

Figure 3: *Mean Difference between Male and Female Students with respect to Overall Social Intelligence.*



4.3.2. Social Intelligence with respect to Locality: The sample includes 351 urban and 674 rural higher secondary students.

H_{01(b)}: There is no significant difference in social intelligence of higher secondary students of East Khasi Hills District with respect to locality.

The mean difference between urban and rural higher secondary students regarding overall social intelligence and its dimensions is given in table below.

Table 4.10: Mean Difference between Urban and Rural Students with respect to Social Intelligence and its Dimensions

Variable/Dimension	Locality	N	Mean	SD	df	t-value	Table Value (.05)	Interpretation
Social Intelligence (Overall)	Urban	351	105.56	7.212	1023	1.56		Not significant
	Rural	674	104.84	6.964				
A-Patience	Urban	351	20.07	2.621	1023	.04		Not significant
	Rural	674	20.08	2.505				
B) Cooperativeness	Urban	351	25.76	2.469	1023	1.35	1.96	Not significant
	Rural	674	25.53	2.579				
C) Confidence	Urban	351	19.32	2.106	1023	.94		Not significant
	Rural	674	19.46	2.153				
D) Sensitivity	Urban	351	21.08	2.286	1023	1.11		Not significant
	Rural	674	20.91	2.260				
E) Recognition of Social Environment	Urban	351	1.17	.794	1023	3.14		Significant
	Rural	674	1.00	.781				

F) Tactfulness	Urban	351	3.82	1.192	1023	1.65	Not significant
	Rural	674	3.69	1.271			
G) Sense Of Humour	Urban	351	3.39	1.432	1023	1.18	Not significant
	Rural	674	3.28	1.386			
H) Memory	Urban	351	27.74	4.629	1023	2.91	Significant
	Rural	674	26.86	4.646			

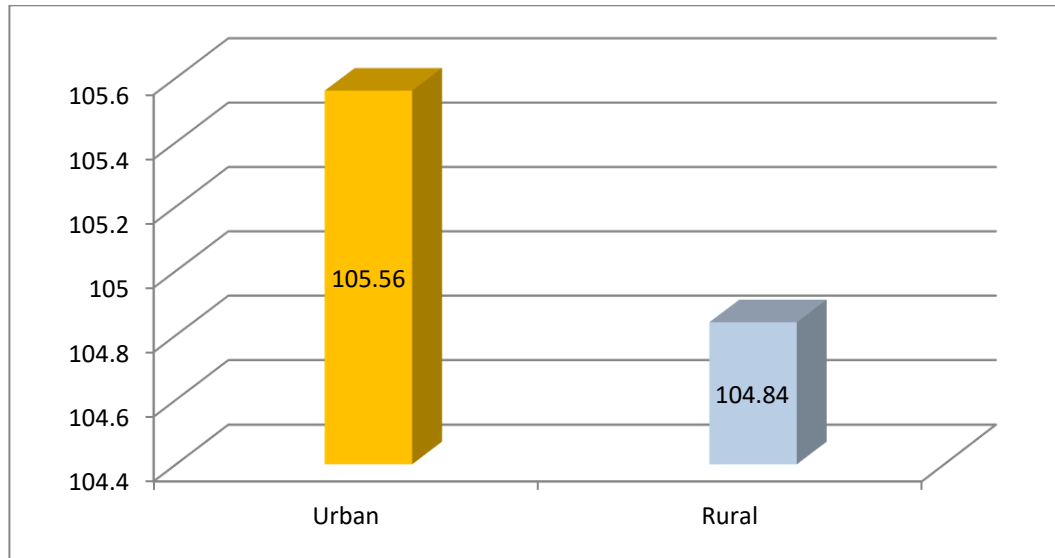
The above table reveals that the means of urban and rural students with regard to overall social intelligence are 105.56 and 104.84 respectively and SDs are 7.212 and 6.964 respectively. The t-value of 1.56 is less than the table value 1.96 with df 1023; hence it is not significant. Therefore, there is no significant mean difference between urban and rural higher secondary students with regard to overall social intelligence though from mean difference it is noticed that urban students have slightly higher mean than rural students. In this case the null hypothesis ‘there is no significant difference in social intelligence of higher secondary students of East Khasi Hills District with respect to locality’ is retained.

However, it is noticed that there is significant mean difference between students from urban and rural areas in recognition of social environment and memory dimensions of social intelligence and the mean is in favour of urban students. Thus the null hypothesis is rejected with regard to the above two dimensions of social intelligence.

The table also reveals that significant mean difference does not exist between urban and rural students with regards to other dimensions of social intelligence, viz., patience, cooperativeness, confidence, sensitivity, tactfulness and sense of humour.

Graphically, the mean difference between urban and rural higher secondary students of East Khasi Hills is represented in the figure below.

Figure 4: Mean Difference between Urban and Rural Higher Secondary Students with respect to Social Intelligence



4.3.3. Social Intelligence with respect to Type of School: The sample includes 175 government, 375 government aided and 475 private higher secondary students of East Khasi Hills District.

H_{01(c)}: There is no significant difference in social intelligence of higher secondary students in East Khasi Hills District with respect to type of school.

To find out the significant difference among types of schools in social intelligence, one-way ANOVA is performed. The results are shown in the table below.

Table 4.11: ANOVA Results of Social Intelligence of Higher Secondary Students with respect to Type of School.

Variable/ Dimension	Source of Variance	Sum of Squares	df	Mean Square	F	Table Value (.05)	Interpreta- tion
Social Intelligence (Overall)	Between Groups	798.583	2	399.291	8.13	3.00	Significant
	Within Groups	50168.689	1022	49.089			
	Total	50967.272	1024				
A) Patience	Between Groups	33.041	2	16.520	2.56		Not significant
	Within Groups	6594.472	1022	6.453			

B) Co-operativeness	Between Groups	137.130	2	68.565	10.81	Significant
	Within Groups	6484.772	1022	6.345		
C) Confidence	Between Groups	6.150	2	3.075	.67	Not significant
	Within Groups	4670.110	1022	4.570		
D) Sensitivity	Between Groups	118.451	2	59.226	11.75	Significant
	Within Groups	5153.486	1022	5.043		
E) Recognition of Social Environment	Between Groups	3.056	2	1.528	2.47	Not significant
	Within Groups	633.432	1022	.620		
F) Tactfulness	Between Groups	15.699	2	7.849	5.10	Significant
	Within Groups	1572.122	1022	1.538		
G) Sense Of Humour	Between Groups	19.198	2	9.599	4.92	Significant
	Within Groups	1994.386	1022	1.951		
H) Memory	Between Groups	247.000	2	123.500	5.75	Significant
	Within Groups	21962.760	1022	21.490		

With regard to overall social intelligence, analysis of variance (One-way ANOVA) results show that the sum of squares between groups and within groups are 798.583 and 50168.689 respectively and mean squares are 399.291 and 49.089 respectively. The calculated F-value 8.13 is greater than the table value 3.00 with dfs 2,1022 at .05 level of significance. Hence, it is significant and the null hypothesis 'there is no significant difference in social intelligence of higher secondary students of East Khasi Hills District with respect to type of school' is rejected. Therefore, there is significant difference among type of school in social intelligence.

Significant difference is also found among type of school in many dimensions of social intelligence, viz., cooperativeness, sensitivity, tactfulness, sense of humour and memory. Hence, the null hypothesis is rejected with respect to the said dimensions.

However, the results show that no significant difference is found among type of school in some dimensions of social intelligence, viz., patience, confidence and recognition of social environment. So, the null hypothesis is retained.

For further analysis Scheffe Post Hoc multiple comparisons has been done at .05 level of significance and the findings are given in table below.

Table 4.12: Multiple Comparisons of Means of Social Intelligence of Higher Secondary Students with respect to Type of School.

Variable/Dimension	(I) Type of School	(J) Type of School	Mean Difference (I-J)	Std. Error	p-value
Social Intelligence (Overall)	Government	Govt-Aided	2.228*	.641	.002
	Government	Private	2.419*	.620	.001
A) Cooperativeness	Government	Govt-Aided	1.014*	.231	.000
	Government	Private	.929*	.223	.000
D) Sensitivity	Government	Govt-Aided	.977*	.206	.000
	Private	Govt-Aided	.445*	.155	.016
F) Tactfulness	Government	Private	.350*	.110	.006
G) Sense Of Humour	Government	Private	.365*	.124	.013
H) Memory	Government	Private	1.380*	.410	.004

*** Significant at .05 level**

As reflected in the above comparisons table, there is significant difference between government and government aided higher secondary students in overall social intelligence and the mean difference is in favour of government students. This indicates that government higher secondary students have significantly higher social intelligence than government aided higher secondary students.

Significant mean difference is also found in cooperativeness and sensitivity dimensions of social intelligence and the mean difference is in favour of government students.

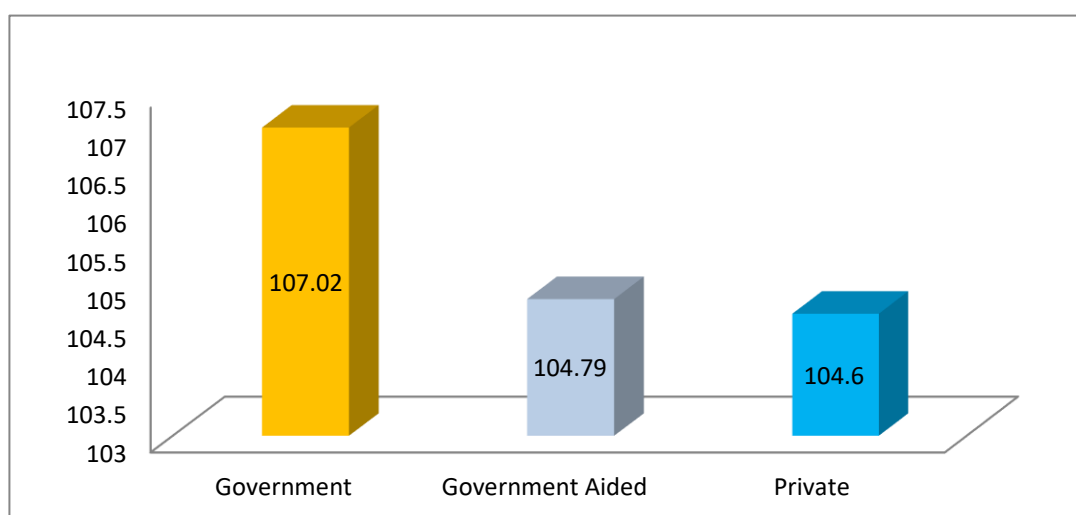
Again significant difference is found between government and private school students in overall social intelligence and the mean difference is in favour of the government higher secondary students.

Significant difference is also found between government and private school students in many dimensions of social intelligence, viz., cooperativeness, sensitivity, tactfulness, sense of humour and memory and the mean difference is again in favour of government students.

There is significant difference between private and government aided higher secondary students in one dimension, i.e., sensitivity and the mean difference is in favour of private students.

The mean difference among type of school is given in the graph below.

Figure 5: Mean Difference of Higher Secondary Students in Social Intelligence with respect to Type of School



4.3.4. Social Intelligence with respect to Parent's Occupation: The sample taken for the study includes higher secondary students whose parent is a labourer (502), a government employee (240), a businessperson (155), a teacher (67), a private employee (37) and a parent with no professional occupation (24).

$H_01(d)$: There is no significant difference in social intelligence of higher secondary students of East Khasi Hills District with respect to parent's occupation.

To test the above hypothesis, one-way ANOVA is performed. The ANOVA results of parent's occupation are given in the following table.

Table 4.13: ANOVA results of Social Intelligence of Higher Secondary Students with respect to Parent's Occupation

Variable/ Dimension	Source of Variance	Sum of Squares	df	Mean Square	F	Table Value (.05)	Interpre- tation
Social Intelligence (Overall)	Between Groups	1723.775	5	344.755			
	Within Groups	49243.498	1019	48.325	7.134		Significant
	Total	50967.272	1024				
A) Patience	Between Groups	41.015	5	8.203			
	Within Groups	6586.497	1019	6.464	1.269		Not Significant
B) Coopera- tiveness	Between Groups	313.906	5	62.781			
	Within Groups	6307.996	1019	6.190	10.142		Significant
C) Confidence	Between Groups	22.792	5	4.558			
	Within Groups	4653.468	1019	4.567	.998	2.22	Not Significant
D) Sensitivity	Between Groups	72.902	5	14.580			
	Within Groups	5199.036	1019	5.102	2.858		Significant
E) Recognition of Social Environment	Between Groups	9.628	5	1.926			
	Within Groups	626.860	1019	.615	3.130		Significant
F)Tactfulness	Between Groups	20.929	5	4.186			
	Within Groups	1566.891	1019	1.538	2.722		Significant
G)Sense Of	Between Groups	68.113	5	13.623	7.135		Significant

Humour	Within Groups	1945.471	1019	1.909		
	Between Groups	671.171	5	134.234		
H) Memory					6.351	Significant
	Within Groups	21538.589	1019	21.137		

With regards to overall social intelligence as shown in the above table, the ANOVA results revealed that the sum of squares between groups and within groups are 1723.775 and 49243.498 respectively and the mean squares are 344.755 and 48.325 respectively. The calculated F-value 7.134 is higher than the table value 2.22 with dfs 5,1019. Hence, it is significant and the null hypothesis is rejected. Therefore, there is significant difference among higher secondary students of East Khasi Hills with respect to parent's occupation in overall social intelligence.

It is also noticed that the calculated F-value is higher than the table value with regards to many dimensions of social intelligence, viz., cooperativeness, sensitivity, recognition of social environment, tactfulness, sense of humour and memory. Hence, it is significant and the null hypothesis is rejected with respect to the above dimensions. Therefore, there is significant difference among higher secondary students with respect to parent's occupation in cooperativeness, sensitivity, recognition of social environment, tactfulness, sense of humour and memory dimensions of social intelligence.

Further, it is also found that the F-value is less than the table value in patience and confidence dimensions of social intelligence. Hence, it is not significant and the null hypothesis is retained. Therefore, no significant difference is found among higher secondary students with respect to parent's occupation in patience and confidence dimensions of social intelligence.

For further analysis the Scheffe Post Hoc multiple comparisons has been done at .05 level of significance and the findings are given in table below.

Table 4.14: Multiple Comparisons of Means of Social Intelligence of Higher Secondary Students with respect to Parent's Occupation

Variable/ Dimension	(I) Parent's Occupation	(J) Parent's Occupation	Mean Difference (I-J)	Std. Error	p- value
Social Intelligence (Overall)	Government Job	Labour	2.449*	.546	.001
	Business	Labour	2.640*	.639	.005
B) Cooperativeness	Government Job	Labour	1.160*	.195	.000
	Business	Labour	1.083*	.229	.000
G) Sense Of Humour	Government Job	Labour	.518*	.108	.000
	Teaching	Labour	.661*	.180	.020
H) Memory	Government Job	Labour	1.630*	.361	.001

*** Significant at .05 level**

As it is evident from the above table, there is significant difference between students whose parent is a government employee and a labourer in overall social intelligence and the students whose parent is a government employee scored significantly higher than students whose parent is a labourer.

Significant difference is also found between students whose parent is a government employee and a labourer in some dimensions of social intelligence,

viz., cooperativeness, sense of humour and memory and the mean difference is in favour of students whose parent is a government employee.

Again, it is evident that there is significant difference between students whose parent is a businessperson and a labourer in overall social intelligence and the mean difference is in favour of students whose parent is a businessperson.

Significant difference is also observed between students whose parent is a businessperson and a labourer in cooperativeness dimension of social intelligence and the mean difference is in favour of students whose parent is a businessperson.

Further, there is significant difference between students whose parent is a teacher and a labourer in sense of humour dimension of social intelligence and the mean difference is in favour of students whose parent is a teacher.

Since Post Hoc has not shown where the significant mean difference lie in between the variables, the t-test has been calculated to verify and it is shown in the table below.

Table 4.15: t-test of Parent's Occupation with respect to Sensitivity, Recognition of Social Environment and Tactfulness dimensions of Social Intelligence

Dimension	(I) Parent's Occupation	(J) Parent's Occupation	Mean Difference (I-J)	df	t-value	Table value (.05)	Interpretation
D) Sensitivity E) Recognition of Social Environment	Business	Labour	.611	655	2.972		Significant
	Government Job	Labour	.180	740	2.897		Significant
	Business	Labour	.193	655	2.649	1.96	Significant
	Teaching	Labour	.232	567	2.229		Significant
F-Tactfulness	Government Job	Labour	.252	740	2.616		Significant

Business	Labour	.283	655	2.625	Significant
Business	No Occupation	.548	177	2.177	Significant

From the above table, it is seen that there is significant mean difference among students whose parent is a businessperson and a labourer in some dimensions of social intelligence, viz., sensitivity, recognition of social environment and tactfulness and the mean difference is in favour of students whose parent is a businessperson.

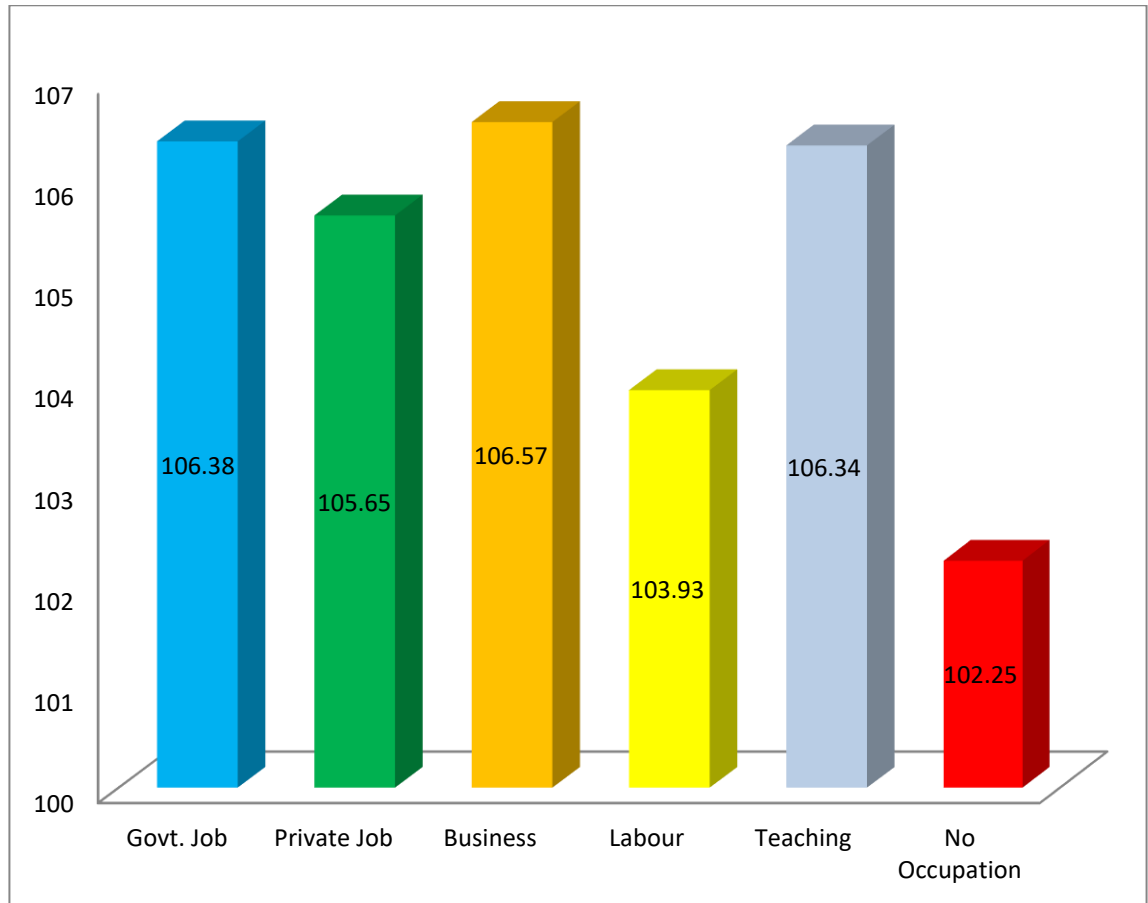
Again, there is significant mean difference between students whose parent is a government employee and a labourer in recognition of social environment and tactfulness dimensions of social intelligence and the mean difference is in favour of students whose parent is a government employee.

There is also significant mean difference between students whose parent is a teacher and a labourer in recognition of social environment dimension and the mean difference is in favour of students whose parent is a teacher.

Further, there is significant mean difference between students whose parent is a businessperson and parent who has no occupation in tactfulness dimension of social intelligence and the mean difference is in favour of students whose parent is a business person.

The mean of higher secondary students in pro-social behaviour with respect to parent's occupation can be depicted in the form of a graph as shown below.

Figure 6: Mean of Higher Secondary Students in Social Intelligence with respect to Parent's Occupation



Objective 4

4.4. Pro-Social Behaviour of Higher Secondary Students with respect to Demographic Variables

4.4.1. Pro-Social Behaviour with respect to Sex: The sample includes 498 male and 527 female higher secondary students of East Khasi Hills District.

H_{02(a)}: There is no significant difference in pro-social behaviour of higher secondary students in East Khasi Hills District with respect to sex.

The mean difference between boys and girls with regard to overall pro-social behaviour and its components is given in the following table.

Table 4.16: Mean Difference between Male and Female Students with respect to Pro-Social Behaviour and its Components

Variable/ Component	Sex	N	Mean	SD	df	t- value	Table Value (.05)	Interpretation
Pro-Social Behaviour (Overall)	Male	498	234.18	24.045	1023	3.881		Significant
	Female	527	240.01	24.049				
A) Social Responsibility	Male	498	30.99	4.126	1023	2.415		Significant
	Female	527	31.58	3.782				
B) Empathy	Male	498	28.89	4.437	1023	4.201		Significant
	Female	527	30.07	4.581				
C) Perspective Taking	Male	498	28.23	3.811	1023	2.672		Significant
	Female	527	28.88	3.941				
D) Moral Obligation	Male	498	29.88	4.511	1023	2.267	1.96	Significant
	Female	527	30.51	4.481				
E) Altruism	Male	498	28.84	4.283	1023	3.838		Significant
	Female	527	29.88	4.379				
F) Reciprocity	Male	498	29.46	4.327	1023	1.618		Not significant
	Female	527	29.89	4.189				
G) Equity	Male	498	29.82	5.138	1023	1.962		Significant
	Female	527	30.45	5.082				
H) Self-sacrifice	Male	498	28.26	4.185	1023	2.994		Significant
	Female	527	29.04	4.102				

From the table above, the means of male and female higher secondary students with respect to overall pro-social behaviour are 234.18 and 240.01 respectively and SDs are 24.045 and 24.049 respectively. The calculated 't' value 3.881 is higher than the table value 1.96 at .05 level with df 1023. Hence, it is significant and the null hypothesis is rejected. Therefore, there is significant difference between boys and girls with regard to overall pro-social behaviour and the mean difference is in favour of female students.

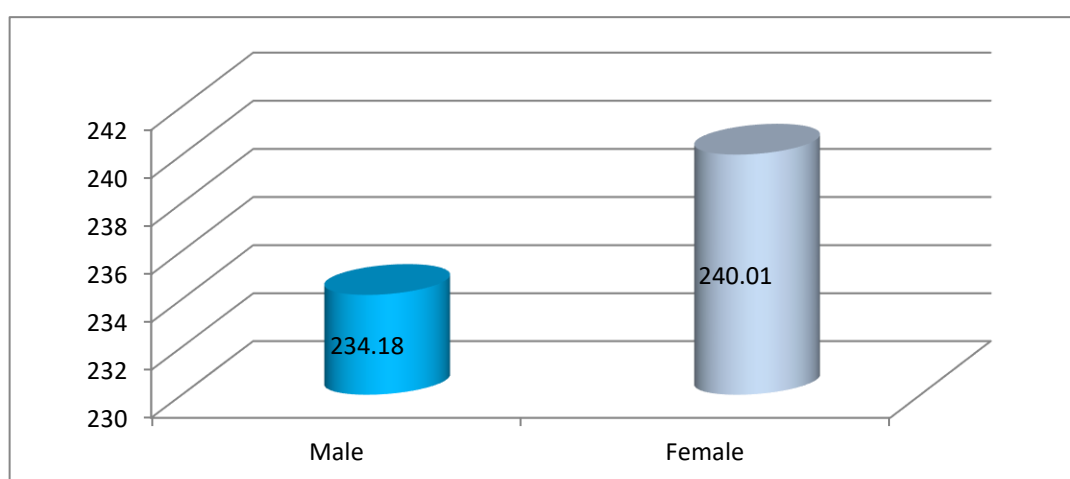
It is also observed that the calculated 't' value is higher than the table value in almost all the components of pro-social behaviour, viz., (A) social responsibility, (B) empathy, (C) perspective taking, (D) moral obligation, (E) altruism, (G) equity and

(H) self-sacrifice. Hence it is significant and the null hypothesis is rejected in the above components. Therefore, significant difference is found between boys and girls with respect to social responsibility, empathy, perspective taking, moral obligation, altruism, equity and self-sacrifice components of pro-social behaviour and the mean score is in favour of female students.

However, the null hypothesis is accepted with regard to one component, i.e., (F) reciprocity because the calculated 't' value is lesser than the table value. Therefore, no significant difference is found between male and female students with respect to reciprocity component of pro-social behaviour.

The mean difference between male and female students in overall pro-social behaviour is shown in the figure below.

Figure 7: Mean difference between Male and Female Students in Overall Pro-Social Behaviour.



4.4.2. Pro-Social Behaviour with respect to Locality: The sample includes 351 urban and 674 rural higher secondary students.

H₀2(b): There is no significant difference in pro-social behaviour of higher secondary students in East Khasi Hills District with respect to locality.

The mean difference between urban and rural higher secondary students regarding overall pro-social behaviour and its components is given in the table below.

Table 4.17: Mean Difference between Urban and Rural Higher Secondary Students in Pro-Social Behaviour and its Components

Variable/ Component	Locality	N	Mean	SD	df	t- value	Table Value (.05)	Interpretation
Pro-Social Behaviour (Overall)	Urban	351	243.39	23.666	1023	6.032		Significant
	Rural	674	233.94	23.875				
A) Social Responsibility	Urban	351	31.63	3.840	1023	1.939		Not significant
	Rural	674	31.12	4.016				
B) Empathy	Urban	351	30.28	4.314	1023	3.990		Significant
	Rural	674	29.09	4.617				
C) Perspective Taking	Urban	351	29.28	4.003	1023	4.301		Significant
	Rural	674	28.19	3.779				
D) Moral Obligation	Urban	351	31.32	4.318	1023	5.831	1.96	Significant
	Rural	674	29.62	4.493				
E) Altruism	Urban	351	30.22	4.081	1023	4.522		Significant
	Rural	674	28.93	4.440				
F) Reciprocity	Urban	351	30.55	4.225	1023	4.784		Significant
	Rural	674	29.22	4.210				
G) Equity	Urban	351	31.43	4.857	1023	5.919		Significant
	Rural	674	29.47	5.123				
H) Self-Sacrifice	Urban	351	29.00	4.107	1023	1.910		Not significant
	Rural	674	28.48	4.177				

With regards to overall pro-social behaviour, it is noticed from the above table that the means of urban and rural students are 243.39 and 233.94 respectively and SDs are 23.666 and 23.875 respectively. The calculated 't' value 6.032 is higher than the table value 1.96, hence it is significant and the null hypothesis is rejected. Therefore, there is significant difference between urban and rural students with regard to overall pro-social behaviour and the mean difference is in favour of urban students.

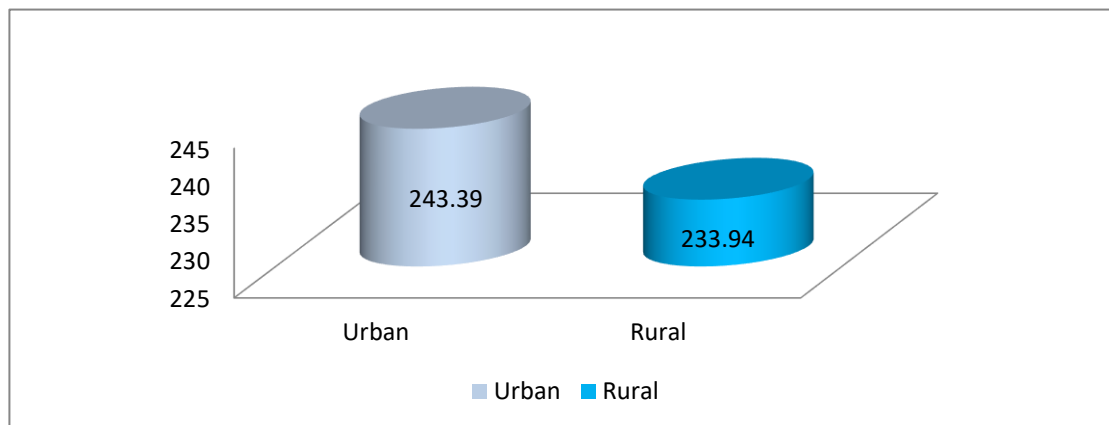
The results also reveal that the calculated 't' value of many components of pro-social behaviour, viz., empathy, perspective taking, moral obligation, altruism, reciprocity

and equity components is higher than the table value. Hence it is significant and the null hypothesis is rejected with regard to the above components. Therefore, there is a significant difference between urban and rural higher secondary students in East Khasi Hills District with respect to empathy, perspective taking, moral obligation, altruism, reciprocity and equity components of pro-social behaviour and the mean difference is in favour of urban students.

However, the calculated 't' value is lesser than the table value in social responsibility and self-sacrifice components of pro-social behaviour. Hence it is not significant and the null hypothesis is retained. Therefore, there is no significant difference between urban and rural students with respect to social responsibility and self-sacrifice components of pro-social behaviour.

The mean difference between urban and rural higher secondary students in pro-social behaviour is represented in the following figure.

Figure 8: Mean Difference between Urban and Rural Higher Secondary Students in Overall Pro-Social Behaviour



4.4.3. Pro-Social Behaviour with respect to Type of School: The sample includes 175 government, 375 government aided and 475 private higher secondary students of East Khasi Hills District.

H₀2(c): There is no significant difference in pro-social behaviour of higher secondary students of East Khasi Hills District with respect to type of school.

One way ANOVA is performed in order to find out the significant difference among types of school regarding their pro-social behaviour and the results are shown in the table below.

Table 4.18: ANOVA results of Pro-Social Behaviour of Higher Secondary School Students with respect to Type of School.

Variable/ Dimension	Source of Variance	Sum of Squares	df	Mean Square	F	Table Value (.05)	Interpreta- tion
Pro-social Behaviour (Overall)	Between Groups	16651.893	2	8325.947			
	Within Groups	583602.497	1022	571.040	14.580		Significant
	Total	600254.390	1024				
A) Social Responsibility	Between Groups	9.848	2	4.924			
	Within Groups	16065.172	1022	15.719	.313		Not significant
B) Empathy	Between Groups	348.747	2	174.374			
	Within Groups	20835.491	1022	20.387	8.553		Significant
C) Perspec- tive Taking	Between Groups	597.347	2	298.674			
	Within Groups	14898.717	1022	14.578	20.488		Significant
D) Moral Obligation	Between Groups	81.820	2	40.910			
	Within Groups	20699.971	1022	20.254	2.020	3.00	Not significant
E) Altruism	Between Groups	942.171	2	471.085			
	Within Groups	18537.718	1022	18.139	25.971		Significant
F) Reciprocity	Between Groups	182.147	2	91.073			
	Within Groups	18397.965	1022	18.002	5.059		Significant
G) Equity	Between Groups	959.002	2	479.501			
	Within Groups	25848.916	1022	25.292	18.958		Significant
H) Self- sacrifice	Between Groups	1.045	2	.523			
	Within Groups	17709.124	1022	17.328	.030		Not significant

With regards to overall pro-social behaviour as shown in the above table, the ANOVA results show that the sums of squares between groups and within groups are 16651.893 and 583602.497 respectively and their mean squares are 8325.947 and

571.040 respectively. The calculated F-value 14.580 is greater than the table value 3.00 at .05 level of significance with dfs 2,1022. Hence it is significant and the null hypothesis ‘there is no significant difference in pro-social behaviour of higher secondary students of East Khasi Hills District with respect to type of school’ is rejected. Therefore, there is a significant difference among type of school in overall pro-social behaviour.

It is also found that the calculated F-value is greater than the table value in many components of pro-social behaviour, viz., empathy, perspective taking, altruism, reciprocity and equity. Hence, it is significant and the null hypothesis is rejected. Therefore, there is significant difference among type of school with regard to empathy, perspective taking, altruism, reciprocity and equity components of pro-social behaviour.

However, the calculated F-value is lesser than the table value in three components of pro-social behaviour, viz., social responsibility, moral obligation and self-sacrifice. Hence, it is not significant and the null hypothesis is retained. Therefore, there is no significant difference among type of school with regard to social responsibility, moral obligation and self-sacrifice components of pro-social behaviour.

For further analysis the Scheffe Post Hoc multiple comparisons has been conducted at .05 level of significance and the findings are given in the table below.

Table 4.19: Multiple Comparisons of Means of Pro-Social Behaviour of Higher Secondary Students with respect to Type of School.

Variable/ component	(I) Type of School	(J) Type of School	Mean Difference (I-J)	Std. Error	p- value
Pro-Social Behaviour (Overall)	Government	Govt-Aided	11.715*	2.188	.000
	Government	Private	9.029*	2.113	.000
B) Empathy	Government	Govt-Aided	1.630*	.413	.000
	Government	Private	1.464*	.399	.001
C) Perspective Taking	Government	Govt-Aided	2.237*	.350	.000
	Government	Private	1.481*	.338	.000
	Private	Govt-Aided	.755*	.264	.017
E) Altruism	Government	Govt-Aided	2.783*	.390	.000
	Government	Private	1.633*	.377	.000
	Private	Govt-Aided	1.150*	.294	.001
F) Reciprocity	Government	Govt-Aided	1.189*	.388	.009
	Government	Private	1.041*	.375	.022
G) Equity	Government	Govt-Aided	2.795*	.460	.000
	Government	Private	2.232*	.445	.000

*** Significant at .05 level**

As reflected in the above comparisons table, there is significant mean difference between students from government and government aided higher secondary schools in overall pro-social behaviour and the students from government have significantly higher pro-social behaviour than students from government aided schools.

Significant mean difference is also found between government and government aided higher secondary students in many components of pro-social behaviour, viz., empathy, perspective taking, altruism, reciprocity and equity and the mean difference is in favour of government students.

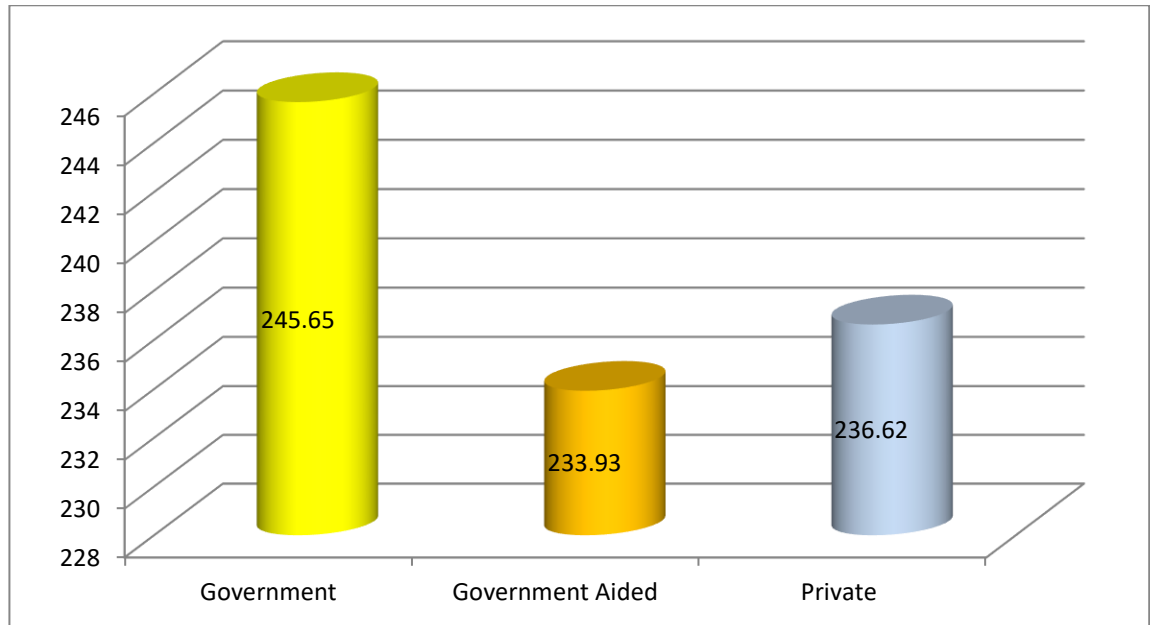
Again, there is significant mean difference between government and private higher secondary students in overall pro-social behaviour and the mean difference is in favour of government students.

Significant mean difference is also found between government and private higher secondary students in many components of pro-social behaviour, viz., empathy, perspective taking, altruism, reciprocity and equity and the mean difference is again in favour of government students.

Further, there is significant difference between private and government aided higher secondary students in perspective taking and altruism components of pro-social behaviour and the mean difference is in favour of private higher secondary students.

The means of government, government aided and private higher secondary students of East Khasi Hills are represented in the following figure.

Figure 9: Means of Government, Government Aided and Private Higher Secondary Students in Pro-Social Behaviour



4.4.4. Pro-Social Behaviour with respect to Parent's Occupation: The sample includes higher secondary students whose parent is a labourer (502), a government employee (240), a businessperson (155), a teacher (67), a private employee (37) and parent who has no professional occupation (24).

H₀₂ (d): There is no significant difference in pro-social behaviour of higher secondary students of East Khasi Hills District with respect to parent's occupation.

To test the above hypothesis, one-way ANOVA is performed and the results are given in the following table.

Table 4.20: ANOVA results of Pro-Social Behaviour of Higher Secondary Students with respect to Parent's Occupation

Variable/ Component	Source of Variance	Sum of Squares	df	Mean Square	F	Table Value (.05)	Interpreta- tion
Pro-Social Behaviour (Overall)	Between Groups	28254.378	5	5650.876			
	Within Groups	572000.012	1019	561.335	10.067		Significant
	Total	600254.390	1024			2.22	
A) Social Responsibility	Between Groups	183.380	5	36.676			
	Within Groups	15891.641	1019	15.595	2.352		Significant
B) Empathy	Between Groups	1049.448	5	209.890	10.622		Significant

	Within Groups	20134.790	1019	19.759		
C)Perspective Taking	Between Groups	980.730	5	196.146	13.770	Significant
	Within Groups	14515.334	1019	14.245		
D) Moral Obligation	Between Groups	257.115	5	51.423	2.553	Significant
	Within Groups	20524.677	1019	20.142		
E) Altruism	Between Groups	617.557	5	123.511	6.672	Significant
	Within Groups	18862.332	1019	18.511		
F)Reciprocity	Between Groups	291.586	5	58.317	3.249	Significant
	Within Groups	18288.525	1019	17.948		
G) Equity	Between Groups	1125.226	5	225.045	8.929	Significant
	Within Groups	25682.692	1019	25.204		
H) Self-sacrifice	Between Groups	117.710	5	23.542	1.364	Not Significant
	Within Groups	17592.460	1019	17.264		

In the above table, the ANOVA results show that the sum of squares between groups and within groups are 28254.378 and 572000.012 respectively and mean squares are 5650.876 and 561.335 respectively. The calculated F-value 10.067 is higher than the table value 2.22 with dfs 5,1019. Hence, it is significant and the null hypothesis is rejected. Therefore, there is significant difference among higher secondary students whose parent is a labourer, a government employee, a businessperson, a teacher, a private employee and a parent who has no professional occupation in pro-social behaviour.

The table also shows that the calculated F-values of most of the components of pro-social behaviour, viz., social responsibility, empathy,perspective taking, moral obligation, altruism, reciprocity andequity are greater than the table value 2.22 at .05 level of significance. Hence, the t-value is significant and the null hypothesis is rejected. Therefore, there is significance difference among higher secondary students with respect to parent's occupation in social responsibility, empathy, perspective taking, moral obligation, altruism, reciprocity and equity components of pro-social behaviour.

However, there is no significance difference among higher secondary students with respect to parent's occupation in self-sacrifice component of pro-social behaviour.

For further analysis the Scheffe Post Hoc multiple comparisons has been done at .05 level of significance and the findings are given in table below.

Table 4.21: Multiple Comparisons of Means of Pro-Social Behaviour of Higher Secondary Students with respect to Parent's Occupation.

Variable/ Component	(I) Parent's Occupation	(J) Parent's Occupation	Mean Difference (I-J)	Std. Error	p- value
Pro-Social Behaviour (Overall)	Government Job	Labour	11.985*	1.859	.000
	Business	Labour	9.210*	2.177	.003
B) Empathy	Government Job	Labour	2.399*	.349	.000
	Business	Labour	1.615*	.408	.008
C) Perspective Taking	Government Job	Labour	2.191*	.296	.000
	Business	Labour	1.694*	.347	.000
D) Moral Obligation	Government Job	Labour	1.204*	.352	.040
E) Altruism	Government Job	Labour	1.731*	.338	.000
F) Reciprocity	Government Job	Labour	1.238*	.332	.017
G) Equity	Government Job	Labour	2.471*	.394	.000

*** Significant at .05 level**

The above table shows that there is significant difference between students whose parent is a government employee and a labourer in overall pro-social behaviour and the students whose parent is a government employee scored significantly higher than students whose parent is a labourer.

Significant mean difference is also found in many components of pro-social behaviour, viz., empathy, perspective taking, moral obligation, altruism, reciprocity and equity and the mean difference is in favour of students whose parent is a government employee.

Again, there is significant difference between students whose parent is a businessperson and a labourer in overall pro-social behaviour and students whose

parent is a businessperson scored significantly higher than students whose parent is a labourer.

Significant mean difference is also found in empathy and perspective taking components of pro-social behaviour and the mean difference is in favour of students whose parent is a businessperson.

Since post hoc did not show where the significant mean difference lie in between the variables, t-test has been calculated to verify and it is shown in the table below.

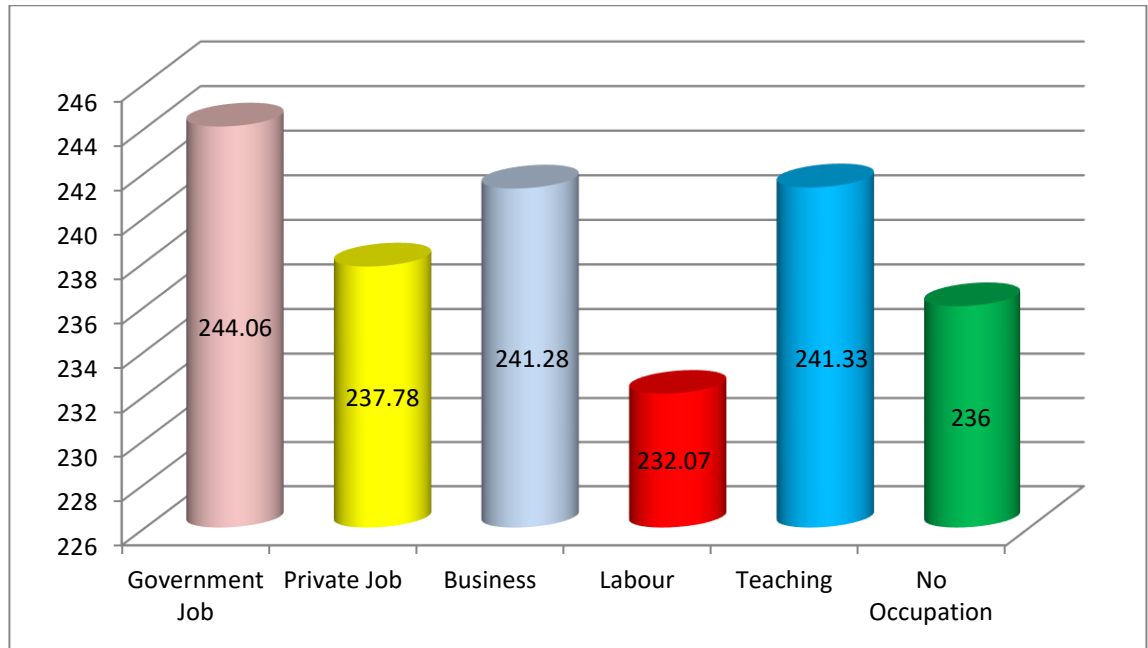
***Table 4.22: t-test of Parent's Occupation with respect to Social Responsibility
Component of Pro-Social Behaviour***

Component	(I) Parent's Occupation	(J) Parent's Occupation	Mean Difference (I-J)	df	t-value	Table value (.05)	Interpretation
(A) Social responsibility	Govt. Job	Labour	.696	740	2.207	1.96	Significant
	Business	Labour	.891	655	2.405	1.96	Significant

The above table shows that there is significant mean difference among students whose parent is a government employee, a businessperson and a labourer in social responsibility dimension of pro-social behaviour and the mean difference is in favour of students whose parent is a government employee and a businessperson.

The mean of higher secondary students in pro-social behaviour with respect to parent's occupation is depicted in the form of a graph as shown below.

Figure 10: Mean of Higher Secondary Students in Pro-Social Behaviour with respect to Parent's Occupation



Objective 5.

4.5. Relationship between Social Intelligence and Pro-Social Behaviour

H₀₃: There is no significant relationship between social intelligence and pro-social behaviour of higher secondary students in East Khasi Hills District

The relationship between social intelligence and pro-social behaviour of higher secondary students is given in the table below.

Table 4.23: Correlation between Social Intelligence and Pro-Social Behaviour of Higher Secondary Students of East Khasi Hill District

Variable	N	'r'	p-value	Interpretation
Social Intelligence	1025	.432	.000	Significant
Pro-Social Behaviour	1025			

The table above indicates that 'r' value is .432 and the p-value is .000 which is significant at 0.01 level. Hence, the null hypothesis 'there is no significant relationship between social intelligence and pro-social behaviour of higher secondary students in East Khasi Hills District' is rejected. So, there is significant

relationship between social intelligence and pro-social behaviour of higher secondary students in East Khasi Hills District. The result shows that there is a positive and substantial or marked correlation between social intelligence and pro-social behaviour of higher secondary students of East Khasi Hills District.

Objective 6.

4.6. Relationship between Social Intelligence and Academic Achievement of Students

H_{04(a)}: There is no significant relationship between social intelligence and academic achievement of higher secondary students in East Khasi Hills District

The relationship between social intelligence and academic achievement of higher secondary students of East Khasi Hills District is given in the table below.

Table 4.24: Correlation between Social Intelligence and Academic Achievement of Higher Secondary Students of East Khasi Hills District

Variable	N	‘r’	p-value	Interpretation
Social Intelligence	1025	.157	.000	Significant at .01 level
Academic Achievement	1025			

It is observed from the table that the value of ‘r’ is .157 and the p-value is .000 which is significant at 0.01 level of significance. Hence, the null hypothesis is rejected. Therefore, there is significant relationship between social intelligence and academic achievement of higher secondary students of East Khasi Hills District. The result indicates that there is a positive relationship between social intelligence and academic achievement. Therefore, it could be inferred that social intelligence has a positive impact on academic achievement of higher secondary students of East Khasi Hills District.

Relationship between Social Intelligence and Academic Achievement of Students when Pro-Social Behaviour is Partialled Out

H_{04(b)}: There is no significant relationship between social intelligence and academic achievement of higher secondary students in East Khasi Hills District when pro-social behaviour is partialled out.

The partial correlation between social intelligence and academic achievement when pro-social behaviour is partialled out is given in the table below.

Table 4.25: Correlation between Social Intelligence and Academic Achievement of Higher Secondary Students when Pro-Social Behaviour is Partialled Out

Controlled Variable	Testing Variables	R _{13.2}	p-value	Interpretation
Pro-Social Behaviour (2)	Social Intelligence (1)	.049	.120	Not significant
	Academic Achievement (3)			

As it is seen in the above table, the coefficient of partial correlation (R_{13.2}) is .049 and the p-value is .120 which is not significant. Hence the null hypothesis is retained. Therefore, there is no significant relationship between social intelligence and academic achievement when pro-social behaviour is controlled.

Objective 7.

4.7. Relationship between Pro-Social Behaviour and Academic Achievement of Students

H_{05(a)}: There is no significant relationship between pro-social behaviour and academic achievement of higher secondary students in East Khasi Hills District

The relationship between pro-social behaviour and academic achievement of higher secondary students in East Khasi Hills District is given in the table below.

Table 4.26: Relationship between Pro-Social Behaviour and Academic Achievement of Higher Secondary Students

Variables	N	'r'	p-value	Interpretation
Pro-social Behaviour	1025	.266	.000	Significant
Academic Achievement	1025			

It is observed from the above table that the value of 'r' is .266 and the p-value is .000 which is significant at 0.01 level of significance. Therefore, the null hypothesis 'there is no significant relationship between pro-social behaviour and academic achievement of higher secondary students in East Khasi Hills District' is rejected. Therefore, there is significant relationship between pro-social behaviour and academic achievement of higher secondary students of East Khasi Hills District. The results indicate a positive relationship between pro-social behaviour and academic achievement. Therefore, it could be inferred that pro-social behaviour has a positive impact on academic achievement of higher secondary students of East Khasi Hills District.

Relationship between Pro-social Behaviour and Academic Achievement of Students when Social Intelligence is Partialled Out

H_{05(b)}: There is no significant relationship between pro-social behaviour and academic achievement of higher secondary students in East Khasi Hills District when social intelligence is partialled out.

The partial correlation between pro-social behaviour and academic achievement when social intelligence is controlled is given in the table below.

Table 4.27: Correlation between Pro-social Behaviour and Academic Achievement of Higher Secondary Students when Social Intelligence is Partialled Out

Controlled Variable	Testing Variables	R _{23.1}	p-value	Interpretation
Social Intelligence (1)	Pro-Social Behaviour (2)	.222	.000	Significant
	Academic Achievement (3)			

From the above table it is seen that the coefficient of partial correlation ($R_{23.1}$) is .222 and p-value is .000 which is significant. Hence, the null hypothesis is rejected. Therefore, there is significant relationship between pro-social behaviour and academic achievement when social intelligence is partialled out. The relationship is positive and significant.

Objective 8.

4.8. Multiple Regressions of Social Intelligence and Pro-Social Behaviour on Academic Achievement

H₀₆: There is no significant multiple regressions of social intelligence and pro-social behaviour on academic achievement of higher secondary students in East Khasi Hills District

The multiple regressions of social intelligence and pro-social behaviour on academic achievement are given in the subsequent tables (Tables 4.28, 4.29 and 4.30).

Table 4.28: Model Summary of Multiple Regressions of Social Intelligence and Pro-Social Behaviour on Academic Achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.270 ^a	.073	.071	10.6237

a. Predictors: (Constant), Social Intelligence, Pro-Social Behaviour

From the above multiple regressions model summary table it is seen that the multiple correlations (R) among the three variables i.e. social intelligence, pro-social behaviour and academic achievement is .270 which reveals a low level of multiple correlation. R square is .073 which means that the social intelligence and pro-social behaviour are responsible for 7% of the variability of academic achievement of higher secondary students.

Table 4.29: ANOVA^a of Multiple Regressions of Social Intelligence and Pro-Social Behaviour on Academic Achievement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9053.195	2	4526.597	40.107	.000 ^b
	Residual	115346.844	1022	112.864		
	Total	124400.039	1024			

a. Dependent Variable: Academic Achievement

b. Predictors: (Constant), Social Intelligence, Pro-social behaviour

From the above ANOVA table, it is found that the calculated F-value is 40.107 and the p-value is .000. And for df 2, 1022, this value is significant at 0.01 level.

Table 4.30: Coefficients^a of Multiple Regressions of Social Intelligence and Pro-Social Behaviour on Academic Achievement

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	99% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	Academic Achievement	11.207	5.109		2.194	.028	-1.978	24.391
	Social Intelligence	.081	.052	.052	1.556	.120	-.053	.216
	Pro-social Intelligence	.111	.015	.243	7.285	.000	.072	.150

a. Dependent Variable: Academic Achievement

The above coefficients table shows the summary of each predictor's contribution in the regression model. The 'B' value for social intelligence is .081 and pro-social behaviour is .111. The 'B' value is the value that if social intelligence or pro-social behaviour is increased by one unit then there will be an increase in academic achievement by 8.1% or 11.1% respectively. The standardized coefficient Beta for pro-social behaviour (.243) is higher than the Beta for social intelligence (.052) which means that pro-social behaviour has greater influence to academic achievement than social intelligence. This is confirmed in the t-value 7.285 for pro-social behaviour and 1.556 for social intelligence. The p-value .000 is significant only in the case of pro-social behaviour. This means that only pro-social behaviour predicts academic achievement significantly while social intelligence does not.

CHAPTER V

FINDINGS AND CONCLUSION

Findings and Discussions

Objective 2

5.1. Levels of Social Intelligence and Pro-Social Behaviour

1. It was found that more than one-third (36.7%) of the higher secondary students of East Khasi Hills District have average social intelligence, more than one-fifth (21.6%) have above average, nearly one-fifth (18.4%) have below average, almost one-tenth (9.8%) have low, about one-tenth (9.7%) have high, very few (2.1%) have extremely low and still very few (1.7%) have extremely high social intelligence.

Discussion: The present findings showed that when average, above average, high and extremely high levels of social intelligence taken together, the percentage was 69.7%. It indicated that the number of students is more in the average and upper levels of the social intelligence which means that majority of the students have the ability to deal wisely and adjust comfortably with other people in the society. The probable reason may be that the people in East Khasi Hills District in general live among the same tribe, i.e., Khasi tribe and therefore friendly to one another. Besides, students in the schools have games and sports which require knowing one another and adjusting with one another. This finding supports the findings by Praditsang, Hanafi and Walters (2015) and Gkonou and Mercer (2017) who found that the level of social intelligence of the first-year university students was high. It is in line with the findings by Nagra (2014) and Kriemeen and Hajaia (2017) who found that the respondents had average social intelligence.

When below average, low and extremely low levels of social intelligence taken together the percentage was 30.3%. This indicated that a good number of students have below average social intelligence which shows that their ability to adjust and interact is lagging behind. This may be due their poor economic, social and family background because many students were from rural areas. The

present finding supports the findings by Pinky (2010) who found that adolescence scored below average in all dimensions of social intelligence except sensitivity dimension and Lekshmi (2012) who found that the primary students have low social intelligence.

2. The study found that more than one third (39.7%) of the higher secondary students in East Khasi Hills have average pro-social behaviour, 28.3% have high, 25.7% have low, 3.3% have very low and 3% have very high pro-social behaviour.

Discussion: The present findings indicated that majority of the students behaved pro-socially in their schools and surroundings and they were aware of the importance of positive social behaviour like helping, sacrificing and reciprocating with one another. The probable reason may be due to the fact that most of the students are Khasi tribals and they are ready to help and co-operate with each other. Pro-social behaviour may also stem from family background where the people in the study area in general, are from the same tribe who have a sense of belongingness and are friendly in nature. The finding is in line with the finding of Albert and Thilagavathy (2013), Mallick and Cour (2015) and Gupta and Thapliyal (2015) who found that the level of pro-social behaviour of higher secondary students is average and the findings of Khanna, Sharma, Chauhan and Pragyendu (2017) who found that the respondents on the average possess high pro-social behaviour. Similar reasons may be applicable to the high and very high pro-social behaviour.

Further, the study revealed that when the low and very low levels of pro-social behaviour taken together the percentage is 29%. This indicated that quite a good number of students have below average pro-social behaviour which shows that they were still lagging behind in pro-social behaviour. The probable reason may be many students were not aware of the importance of pro-social behaviour hence did not make effort to help, co-operate, share and comfort one another.

Objective 3

5.2. Mean Difference in Social Intelligence with respect to Demographic Variables

5.2.1. Mean Difference in Social Intelligence with respect to Sex

3. There is significant mean difference between male and female students with respect to overall social intelligence and female students are significantly more socially intelligent than their counterparts.
4. Significant difference is found between male and female higher secondary students with respect to some dimensions of social intelligence, viz., patience, cooperativeness and tactfulness and the mean difference is in favour of female students for patience and cooperativeness and male students for tactfulness.
5. No significant difference is found with regard to the other dimensions of social intelligence, viz., confidence, sensitivity, recognition of social environment, sense of humour and memory.

Discussion: The study reveals that female students have significantly higher social intelligence than the male students with respect to overall social intelligence. The probable reason may be because by nature females in the study area are more socially oriented than males. Besides, most of the students under investigation are from the Khasi tribe which is a matrilineal society where women and girls are very active in social dealings and in the society as a whole. The present finding supports the findings by Meijjs, Cillessen, Scholte, Segers and Spijkerman (2010), Sembayan and Visvanathan (2012), Lekshmi (2012) and Saxena and Jain (2013) who found that female students have higher level of social intelligence when compared to male students. It is in contrast to the study by Paul and Arjunan (2016) who found that male teachers have higher social intelligence than female teachers. It is in the contrary to the findings by Birknerova (2011), Eshghi, Arofzad and Hosaini (2013), Nagra (2014), Prabu (2015), Dhingra and Tiakala (2016), Karanam and Vardhini

(2016), Sreeja and Nalinilatha (2017) and Bhatia and Daga (2017) who found that social intelligence did not distinguish significantly between males and females.

Female students have more patience and cooperativeness as well when compared to male students. The probable reason may be because female students are gentler in their conversations and dealings with one another. By their nature, they also have more patience and cooperativeness and this is witnessed in day to day life – at home, in schools and other places. However, the present finding showed that male students have more tactfulness as compared to female students. Tactfulness is a delicate perception of the right thing to say or do. This means that the male students can perceive the situation in the better way. The probable reason may be the social and family responsibilities of the male members in the society. Even in the Khasi Tribe which is matrilineal, women do not attend village durbars which run the affairs of the villages. Such responsibilities enable malesto see things from the point of view of the future and to make decisions that will affect life in the long run.

5.2.2. Mean Difference in Social Intelligence with respect to Locality

6. It was found that there is no significant difference between urban and rural students of higher secondary students with respect to overall social intelligence.
7. It was found that two dimensions of social intelligence, i.e., recognition of social environment and memory have significant difference between urban and rural students and the mean score is in favour of urban students.
8. No significant difference is found between urban and rural students with respect to the rest of the dimensions of social intelligence, viz., patience, cooperativeness, confidence, sensitivity, tactfulness and sense of humour.

Discussion: The present findings show that urban and rural higher secondary students of East Khasi Hills District do not differ significantly with respect to overall social intelligence. However, from the means, it is observed that urban students are slightly higher in social intelligence than rural higher secondary students. The present finding supports the findings by Sreeja and Nalinilatha (2017) who found that there is no significant difference between locations of the school among higher

secondary students and it refutes the findings of Prabu (2015) and Sembian and Visvanathan (2012) who found that students from urban and rural areas differed significantly in their social intelligence.

However, with respect to some dimensions of social intelligence i.e., recognition of social environment and memory dimensions, the mean of urban students is significantly higher than that of rural students. The probable reason may be that the urban students are more exposed to various social situations and due to high exposure they become sharper in assessing the existing social atmosphere than those who live in the rural areas. The present finding supports the findings by Lekshmi (2012) and Nazir, Tasleema and Ganai (2015) who found that urban students have higher social intelligence than rural students.

With regard to memory dimension of social intelligence, which is the ability to recall relevant issues, remember names and recognize faces of people, urban students in the study area are more exposed to social issues. They came across social leaders in social media, read about them in the newspapers, and see them in the local news and cable television and will easily recognize their social leaders while the rural students may not have the same opportunities as the urban students to learn, remember and recognize the names of the national leaders or the distinguished persons from different spheres of life. Hence they were less in memory dimension of social intelligence.

5.2.3. Mean Difference in Social Intelligence with respect to Type of School

9. There is significant mean difference between government and government aided higher secondary students with respect to overall social intelligence and the mean difference is in favour of government students.
10. Significant mean difference is also found between government and government aided higher secondary students with regard to two dimensions of social intelligence, viz., cooperativeness and sensitivity and the mean difference is in favour of government students.

11. There is significant difference between government and private higher secondary students with respect to overall social intelligence and the mean difference is again in favour of government students.
12. Significant mean difference is also found between government and private higher secondary students with respect to many dimensions of social intelligence, i.e., cooperativeness, sensitivity, tactfulness, sense of humour and memory and the mean difference is in favour of students from government schools.
13. Further, there is also significant difference between government aided and private higher secondary students with regard to one dimension of social intelligence, i.e., sensitivity and the mean difference is in favour of private higher secondary students.
14. No significant difference is found among government, government aided and private school students with respect to three dimensions of social intelligence, viz., patience, confidence and recognition of social environment.

Discussion: According to the above findings, the students from government schools have higher social intelligence than the students from government aided or private schools. They also scored significantly higher than government aided and private students with respect to cooperativeness and sensitivity dimensions as well. The probable reason may be that government students are mostly from the town which include the elite schools of Shillong as well as Kendriya Vidyalayas (KVs) in and around Shillong town. Government schools in Shillong town are well developed compared to private schools in the outskirts. Besides, government higher secondary schools are not available outside the Shillong town which paved way for small private enterprises to open higher secondary schools in those areas. The present finding supports the findings by Sembiyan and Visvanathan (2012) that government students have higher social intelligence than the private students. The finding is in line with the findings by Paul and Arjunan (2016) who found that school management is a significant factor affecting social intelligence. It is in contrast to the findings of Lekshmi (2012) who found that students from government aided schools had higher level of social intelligence than students from government

schools. It is in contrary to the findings by Prabu (2015), Nagra (2014) and Sreejaand Nalinilatha (2017) who found that students from different types of managements do not differ significantly in social intelligence.

The findings of the present study also show that government students have higher tactfulness, sense of humour and memory than private school students and the probable reason may be because government schools are all situated in and around Shillong town and so have more ability to see and perceive the social situation and to make appropriate decisions. They are able to have fun with their friends and companions because they are more free than government aided and private school students.

It is also evident from the findings that private school students have more sensitivity than government aided students. The probable reason may be because private students in the context of East Khasi Hills District especially in rural area come mostly from families who are economically poor and who cannot afford to study in schools and colleges of the town. Therefore, they attended private schools in the villages or semi-towns. Due to their economic and rural background these students may understand the feelings and the suffering of others in a better way.

5.2.4. Mean Difference in Social Intelligence with respect to Parent's Occupation

15. There is significant difference between students whose parent is a government employee and a labourer with respect to overall social intelligence and the mean difference is in favour of students whose parent is a government employee.
16. Significant difference is also found between students whose parent is a government employee and a labourer with respect to many dimensions of social intelligence, viz., cooperativeness, sense of humour, memory, recognition of social environment and tactfulness and the mean difference is in favour of students whose parent is a government employee.
17. There is significant difference between students whose parent is a businessperson and a labourer with respect to overall social intelligence and the mean difference is in favour of students whose parent is a businessperson.

18. Significant difference is also found between students whose parent is a businessperson and a labourer with respect to four dimensions of social intelligence, viz., cooperativeness, sensitivity, recognition of social environment and tactfulness and the mean difference is in favour of students whose parent is a businessperson.
19. Significant difference is also found between students whose parent is a teacher and a labourer with respect to two dimensions of social intelligence, i.e., sense of humour and recognition of social environment and the mean difference is in favour of students whose parent is a teacher.
20. It is also found that there is significant mean difference between students whose parent is a businessperson and students whose parent has no professional occupation with respect to tactfulness dimension and the mean difference is in favour of students whose parent is a businessperson.
21. There is no significant difference among parent's occupations in other dimensions of social intelligence, i.e., patience and confidence.

Discussion: The findings show that the students whose parent is a government employee scored significantly higher than students whose parent is a labourer in overall social intelligence as well as with regard to its cooperativeness, sense of humour, memory, recognition of social environment and tactfulness dimensions. The findings show that students whose parent is a business person scored significantly higher than students whose parents is a labourer in overall social intelligence as well as its cooperativeness, sensitivity, recognition of social environment and tactfulness dimensions. The finding also shows that the students whose parent is a teacher scored higher than the students whose parent is a labourer in sense of humour and recognition of social environment dimensions. The probable reason may be the social status that parents enjoy in the society; the higher the status of the parents, the higher will be the social recognition, opportunities, income, etc. which enhance social intelligence of the children. Children whose parent is a labourer might have less social recognition, opportunities, income, etc. when compared to students whose parent is a government employee, a businessperson or a teacher. They may have less social confidence due to low economic background and

they may have fewer opportunities to interact and participate in social activities. A labourer might have time constraint to care for his/her children. When people feel respected, they tend to co-operate better and give social recognition to others.

The finding also showed that higher secondary students whose parent is a businessperson has significantly higher means with respect to tactfulness dimension of social intelligence than students whose parents has no professional occupation. The probable reason may be because business is a higher social status than those without professional occupations.

Objective 4

5.3. Mean Difference in Pro-Social Behaviour with respect to demographic variables

5.3.1. Mean Difference in Pro-Social Behaviour with respect to Sex

22. There is significant mean difference between male and female students of higher secondary students with respect to overall pro-social behaviour and the mean score is in favour of female students.
23. Significant mean difference between male and female students is also found with respect to almost all the components of pro-social behaviour, viz., social responsibility, empathy, perspective taking, moral obligation, altruism, equity and self-sacrifice and the mean difference is in favour of female students.
24. However, there is no significant difference between male and female higher secondary students with respect to reciprocity component of pro-social behaviour.

Discussion: The findings of the study illustrates that female students of East Khasi Hills District have higher overall pro-social behaviour than male students; they also have more social responsibility, empathy, perspective taking, moral obligation, altruism, equity and self-sacrifice as compared to male students. The probable reason may be that due to matrilineal culture in the study area which encourages more pro-social behaviour of women and girls due to their increasing participation in social life. Again, female students by their very nature express sympathy more

freely than male students. It was also observed that they have great empathy, want to reduce suffering of others, ready to sacrifice their interest and wish to maintain high morals and struggle for the weaker and needy people. The present study supports the findings by Olthof (2012), De Caroli, Falanga and Sagone (2014) that girls showed more pro-social behaviour than boys. The finding is in line with Chadha and Misra(2006), Kumru, Carlo, Mestre and Samper (2012) and Gupta and Thapliyal (2015) who also found that there are sex differences in pro-social behaviour of participants. The finding of the present study disagrees with the finding by Kavussanu, Stamp, Slade and Ring (2009), Albert and Thilagavathy (2013), Misra and Yadav (2015), Mallick and Cour (2015), Lai, Siu and Shek (2015), Martela and Ryan (2016) and Onyecho and Afolabi (2018) who found that male and female students do not differ significantly in pro-social behaviour.

5.3.2. Mean Difference in Pro-Social Behaviour with respect to Locality

25. There is a significant mean difference between urban and rural higher secondary students of East Khasi Hills District with respect to overall pro-social behaviour and the mean difference is in favour of urban students.
26. Significant mean difference is also found between urban and rural students with respect to most of the components of pro-social behaviour, viz., empathy, perspective taking, moral obligation, altruism, reciprocity and equity and the mean difference is in favour of urban students.
27. However, no significant difference between urban and rural students is found with respect to two components of pro-social behaviour, i.e., social responsibility and self-sacrifice.

Discussion: The findings of the study indicate that urban higher secondary students of East Khasi Hills District have higher overall pro-social behaviour than the rural students; they also have more empathy, perspective taking, moral obligation, altruism, reciprocity and equity as compared to rural students. The probable reason may be that urban students may have consisted of many students from rural areas too as it is the case in Shillong town and they might have influenced the urban students to help others and be more co-operative by interacting, learning and understanding the

need of others. Besides, Shillong may not be considered as a big city because it consists of sub-urban population that move to and fro for education and other activities. Other probable reasons may be the impact of disaster management which encouraged helping others who were affected by calamities, the awareness programmes on rights and duties, and may be the influence of religion which encourages to help one another which is felt more strongly in towns than villages. This finding is in contrast to the findings by Afolabi (2014) who found that respondents living in village were more pro-social than those in the city and also contrary to the findings by Albert and Thilagavathy (2013) who found that rural and urban higher secondary students did not differ significantly in their mean pro-social behaviour.

5.3.3. Mean Difference in Pro-Social Behaviour with respect to Type of School

28. There is significant mean difference between government and government aided higher secondary students with respect to overall pro-social behaviour and the mean difference is in favour of government students.
29. Significant mean difference is also found between government and government aided higher secondary schools with respect to many components of pro-social behaviour, viz., empathy, perspective taking, altruism, reciprocity and equity and the mean difference is in favour of government students.
30. There is significant mean difference between government and private higher secondary students with respect to overall pro-social behaviour and the mean difference is in favour of government students.
31. Significant mean difference between government and private higher secondary students is also found with regard to five components of pro-social behaviour, viz., empathy, perspective taking, altruism, reciprocity and equity and the mean difference is in favour of government students.
32. Further, there is significant mean difference between government aided and private higher secondary students with respect to two components of pro-social behaviour, i.e., perspective taking and altruism and the mean difference is in favour of private higher secondary students.

33. However, there is no significant difference among government, government aided and private school students with regard to the rest of the components of pro-social behaviour, viz., social responsibility, moral obligation and self-sacrifice.

Discussion: The findings of the study show that the government higher secondary students have higher pro-social behaviour than the government aided and the private students. Government students also have more empathy, perspective taking, altruism, reciprocity and equity as compared to government aided and private school students. The probable reason may be that the students of government schools in the study area are situated in and around the town of Shillong. They may have high exposure to life situations and have more opportunities to interact with other people. The finding of the present study is in contrast to the finding by Mallick and Cour (2015) who found that private senior secondary school students have higher pro-social behaviour than government senior secondary school students.

5.3.4. Mean Difference in Pro-Social Behaviour with respect to Parent's Occupation

34. There is significant difference between students whose parent is a government employee and labourer with respect to overall pro-social behaviour and the mean difference is in favour of students whose parent is a government employee.

35. Significant difference is also found between students whose parent is a government employee and a labourer with respect to almost all the components of pro-social behaviour, viz., empathy, perspective taking, moral obligation, altruism, reciprocity, equity and social responsibility and the mean difference is in favour of students whose parent is a government employee.

36. There is significant difference between students whose parent is a businessperson and labourer with respect to overall pro-social behaviour and the mean difference is in favour of students whose parent is a businessperson.

37. There is significant difference between students whose parent is a businessperson and labourer with respect to three components of pro-social behaviour, i.e., empathy, perspective taking and social responsibility and the mean difference is in favour of students whose parent is a businessperson.

38. There is no significant mean difference among parent's occupations with respect to one dimension of pro-social behaviour, i.e., self-sacrifice.

Discussion: The findings show that students whose parent is a government employee and a businessperson have significantly higher pro-social behaviour than students whose parent is a labourer. The probable reason may be the difference in social status of the parents which affect the positive behaviour of the children. Government employees and businessperson enjoy a higher position in society than the labourers. Besides, they also have higher income. The labourers who are very poor may think first and foremost about their basic human needs. Studies showed that income and education level are essential predictors of pro-social behaviour (Weymans, 2010). Since, higher educated persons and individuals with higher annual incomes contributed most in donations (Van Ootegem, 1993, as cited by Weymans, 2010). Students, whose parent is a government employee or a businessperson with higher income, may have higher pro-social behaviour than students whose parent is a labourer.

Objective 5

5.4. Relationship between Social Intelligence and Pro-Social Behaviour of Students

39. There is significant positive correlation between social intelligence and pro-social behaviour of higher secondary students of East Khasi Hills District.

Discussion: The finding shows that social intelligence plays an important role in promoting pro-social behaviour of the students and vice versa. Students would act more pro-socially if they have high social intelligence which is the ability to adjust effectively in the society. In the same way, they will be able to adjust well in the society if they have high pro-social behaviour. The knowledge of this relationship is helpful to create a better social atmosphere through social intelligence and pro-social behaviour of the students. It can be noted that a good number of the students of East Khasi Hills District have average pro-social behaviour and average social intelligence.

Objective 6

5.5. Relationship between Social Intelligence and Academic Achievement of Students

40. There is significant positive correlation between social intelligence and academic achievement of higher secondary students of East Khasi Hills District.

Discussion: The finding of the study indicates that when students have higher social intelligence, they will also excel in academic performance. The probable reason may be when students have more patience, confidence, sense of humour and memory, they will naturally do better in their academic life. As they divert their energy to the fruitful social activities, their mind is free from tensions and that will increase their ability to concentrate and thus increase their academic achievement. The finding is in line with Vinodhkumar and Pankajam (2017) who also found that there is significant relationship between social intelligence and academic achievement. However, it refutes the findings that social intelligence and academic achievement have no significant correlation by Meijs, Cillessen, Scholte, Segers and Spijkerman (2010) and Sreeja and Nalinilatha (2017).

Relationship between Social Intelligence and Academic Achievement of Students when Pro-Social Behaviour is Partialled Out

41. There is no significant correlation between social intelligence and academic achievement when pro-social behaviour is partialled out.

Discussion: While finding out the relationship between two variables, it is more accurate if intervening variables are partialled out. In this case the intervening variable – pro-social behaviour is partialled out and the result is not significant. This shows that social intelligence has no impact on academic achievement of the students in East Khasi Hills District when pro-social behaviour is controlled. The finding emphasizes that social intelligence and pro-social behaviour are to be encouraged side by side because social intelligence needs the presence of pro-social behaviour to have significant relationship with academic achievement.

Objective 7

5.6. Relationship between Pro-Social Behaviour and Academic Achievement of Students

42. There is significant positive correlation between pro-social behaviour and academic achievement of higher secondary students of East Khasi Hills District.

Discussion: Pro-social behaviour is significantly correlated to academic achievement which means that when pro-social behaviour increases, there will be an increase in academic achievement too. This explains that when students help, share, co-operates, think for the welfare of other students, etc., their performance in the examination will also increase. It is a win-win situation for the students because when they perform pro-social acts, it is not only other students who gain from their actions but they themselves benefit academically.

Relationship between Pro-Social Behaviour and Academic Achievement of Students when Social Intelligence is Partialled Out

43. There is significant positive relationship between pro-social behaviour and academic achievement when social intelligence is partialled out.

Discussion: The correlation between pro-social behaviour and academic achievement is significant even when social intelligence is controlled. This indicates that even without the influence of social intelligence, the students continue to perform well in academic achievement when they have high pro-social behaviour. Since academic achievement is being enhanced by pro-social behaviour, parents and teachers has the responsibility to help students to cultivate and practice pro-social behaviour. Students themselves too can increase their pro-social behaviour by doing some pro-social acts whenever opportunity arises.

Objective 8

5.7. Multiple Regressions of Social Intelligence and Pro-Social Behaviour on Academic Achievement

44. There is significant multiple regressions of social intelligence and pro-social behaviour on academic achievement.

45. Pro-social behaviour has greater influence on academic achievement than social intelligence.

46. Pro-social behaviour predicts academic achievement significantly while social intelligence does not.

Discussion: The findings indicate that social intelligence and pro-social behaviour can significantly predict academic achievement of higher secondary students. Both social intelligence and pro-social behaviour can explain 7% of the variability of academic achievement. Pro-social behaviour has greater influence than social intelligence because its Beta coefficient is greater. Though both social intelligence and pro-social behaviour showed positive effects on academic achievement, it is found that only pro-social behaviour showed significant positive effects on academic achievement. The probable reason may be when someone does some pro-social acts like helping, co-operating, sharing, etc., that person will have peace of mind which may help for better concentration in studies and thus increasing academic achievement. When the mind is filled with anti-social feelings, tensions, anger, hatred, etc., it will not be at peace which will in turn affect the academic performance of the person.

5.8. Conclusion

The study focused on social intelligence and pro-social behaviour of higher secondary students of East Khasi Hills District of Meghalaya. The study provides knowledge on social intelligence and pro-social behaviour of the students. The findings of the study revealed that many students have average social intelligence and pro-social behaviour. The study also found that female and urban higher secondary students have significantly higher social intelligence and pro-social behaviour than their counterparts. The study also revealed that there is significant difference among school managements as well as among parent's occupations regarding social intelligence and pro-social behaviour of higher secondary students of East Khasi Hills District.

The study also establishes the relationship between social intelligence and pro-social behaviour, social intelligence and academic achievement and between pro-social behaviour and academic achievement. Even when social intelligence is partialled

out the significant relationship between pro-social behaviour and academic achievement stands. When social intelligence increases, there is also an increase in pro-social behaviour and in academic achievement, and when there is an increase in pro-social behaviour, there is also an increase in social intelligence and in academic achievement. So if academic achievement is to be increased and improved, students should behave pro-socially in their dealings with one another. The multiple regressions of social intelligence, pro-social behaviour and academic achievement shows that only pro-social behaviour significantly predicts the academic achievement of higher secondary students of East Khasi Hills District.

From the above findings and discussions, it can be concluded that social intelligence, pro-social behaviour and academic achievement are important concepts that can help to create awareness among the students about the importance of living together and respecting one another. Hence, it is also important that students behave pro-socially in the society. Hence all the stakeholders should take responsibility to enhance the social intelligence and pro-social behaviour among the higher secondary students so that academic performance can be improved.

CHAPTER VI

IMPLICATIONS AND RECOMMENDATIONS

6.1. Educational Implications

1. The pro-social behaviour scale (PSBS) was constructed and standardized by the investigator by following all the procedures of tool construction. It will help in measuring the level of pro-social behaviour of the higher secondary students. This implies that the tool can be used to collect information about pro-social behaviour of students studying in higher secondary students of any school.
2. Many of the higher secondary students in East Khasi Hills District have average and above average level of social intelligence. This implies that most of the students are very friendly and sociable to one another which need to be applauded and appreciated. However, nearly one third of the students have below average social intelligence which implies that social intelligence still have plenty of room for improvement.
3. Many of the students have average and high levels of pro-social behaviour which implies that students in general have high pro-social behaviour. This is good for the future society where citizen would love and respect one another, avoid anti-social activities and think more for the welfare of other members of the society. At the same time about one-third students have low and very low levels of pro-social behaviour which implies that pro-social behaviour needs to be improved.

4. The finding that female students scored significantly higher than the male students in social intelligence implies that female students can adjust better in the society than their counterparts. Male students will have to make conscious efforts to adjust themselves in the society. It also implies that teachers and parents will have to concentrate more on male students to enable them to adjust better in society.
5. The finding that urban and rural students do not differ significantly in social intelligence implies that both urban and rural students can equally adjust themselves in the society. However, the urban students are slightly better than the rural students but not significantly which implies that social intelligence of higher secondary students does not depend on the area of the school.
6. The finding that students from government schools scored significantly higher in social intelligence than students from government aided and private schools imply that the atmosphere for social interaction and social adjustment is better in government schools in the study area. The atmosphere of freedom has to be improved in all the higher secondary schools and particularly in government aided and private schools.
7. The finding that students whose parent is a government employee, a businessperson or a teacher have significantly higher social intelligence than the students whose parent is a labourer implies that parent's occupation have an influence on social intelligence of the students. The higher the social status of the parent, the higher will be the social intelligence of the children. It also implies that students whose parent is a labourer need more care and motivation in social intelligence than children whose parent is a government employee, a businessperson or a teacher.
8. The finding that female students have significantly higher pro-social behaviour than their counterparts implies that female students are more ready to help and to co-operate than male students. This knowledge will be helpful to teachers and school authorities. It also implies that the male students need

to be encouraged and trained in pro-social acts so that they will be at par with their counterparts.

9. The finding that urban students scored significantly higher in pro-social behaviour than rural students implies that urban students are more willing to help and co-operate with one another as compared to the rural students. This implies that there is great hope for the future society where people in the town and cities would set an example of pro-social acts to people in semi-urban and village areas.
10. The finding that government students have significantly higher pro-social behaviour than government aided and private students implies that students from government schools are more willing and ready to act pro-socially in different social situations. It also implies that the type of school does have an influence on the pro-social behaviour of the students.
11. The finding that students whose parent is a government employee and a businessperson have significantly higher pro-social behaviour than students whose parent is a labourer implies that parent's occupation play a big role in developing pro-social behaviour of the children. This also implies that students whose parents have higher social status also have more pro-social behaviour as compared to students whose parents have lower social status. Further, the findings imply that social status of the parents has a positive influence on the pro-social behaviour of the students.
12. The finding that there is significant relationship between social intelligence and pro-social behaviour implies that social intelligence and pro-social behaviour are positively correlated to each other. If the students have more social intelligence, they will also have more pro-social behaviour and vice versa. This knowledge is important because both these concepts are helpful for creating favourable atmosphere in the schools and also in the society.
13. The significant correlation between social intelligence and academic achievement implies that when the students have higher social intelligence they will automatically improve their academic performance.

14. The finding that significant relationship is not found between social intelligence and academic achievement when pro-social behaviour is partialled out implies that pro-social behaviour facilitates the relationship between social intelligence and academic achievement and the importance of pro-social behaviour in the relationship between social intelligence and academic achievement is established. Hence, it implies that pro-social behaviour has to be encouraged in the higher secondary students of East Khasi Hills District.
15. The finding that there is significant relationship between pro-social behaviour and academic achievement even when social intelligence is partialled out implies that pro-social behaviour is strongly correlated to academic achievement which implies that when there is an increase in pro-social behaviour, there is also an increase in academic performance even without the influence of social intelligence.
16. Since there is significant multiple regressions of social intelligence and pro-social behaviour on academic performance, it implies that when social intelligence and pro-social behaviour are increased, there will be a corresponding increase in academic achievement too. And since it is only pro-social behaviour that has significant prediction on academic achievement, it implies that pro-social behaviour has a very great influence on academic performance of the higher secondary students.

6.2. Recommendations

1. Since social intelligence and pro-social behaviour is good for the welfare of individual as well as the society, it is recommended that teachers, school authorities along with government and non-government organizations (NGOs) should conduct workshops, seminars, short plays and awareness programmes on the importance of both the concepts. More priority should be given to male students and also students from poor and rural background.

2. It is recommended that higher secondary schools should give due importance to group works, cleaning drives and other social responsibilities so that both urban and rural students will develop patience, cooperativeness, sensitivity, etc., which ultimately improve social intelligence.
3. Since socio-economic status is influencing both social intelligence and pro-social behaviour, it is recommended that the government through its various departments should improve the social and economic status of the people in the study area by creating more job opportunities and better livelihood with the help of various developmental programmes.
4. It is recommended that teachers and school authorities should make sure that effective and sensitive social environment in the school campuses is created and maintained so that it triggers social intelligence and pro-social behaviour among the students.
5. It is recommended that schools should give more priority to co-curricular activities such as games and sports, inter-school athletic meets, cultural activities and essay writings, debates and extempore speeches on contemporary social issues which will help in improving social intelligence and pro-social behaviour among higher secondary students.
6. It is also recommended that teachers should identify the students who have low social intelligence and low pro-social behaviour and provide proper guidance and motivation and create more opportunities to improve the same.
7. It is recommended that teachers should link the classroom teaching with various contemporary social issues with appropriate examples, so that students can understand better and improve their academic achievement and also apply that knowledge to the real life situations.
8. Since pro-social behaviour significantly predicted academic achievement it is recommended that pro-social behaviour should be improved by encouraging

the students to be more socially responsible by co-operating, helping and sharing with one another.

9. Sincere effort should be made for enhancing social intelligence and pro-social behaviour and this can be achieved only through co-operation and co-ordination among all the stakeholders, i.e., teachers, school authorities, government and non-governmental agencies, community members, parents and guardians of the students.

6.3. Suggestions for Further Research

1. The study on social intelligence, pro-social behaviour and academic achievement can be conducted in secondary schools and in higher levels like colleges and universities
2. The same study can be conducted in other districts of Meghalaya and in other states of India.
3. Comparative studies with regard to social intelligence, pro-social behaviour and academic achievement can be carried out between the different streams i.e., science, commerce, arts and vocational streams at higher secondary levels.
4. Comparative studies can be conducted between colleges and universities and inter-state levels.
5. Qualitative studies can be conducted on social intelligence and pro-social behaviour in relation to academic achievement, job satisfaction, teacher effectiveness, leadership effectiveness and other variables.
6. Social intelligence can be studied in relation to other variables like social competence, emotional intelligence and achievement motivation.

7. Pro-social behaviour too can be conducted in relation to other variables such as gratitude, life satisfaction, environmental awareness and emotional intelligence.

BIBLIOGRAPHY

- Abdullahi, I. A., & Kumar, P. (2016). Gender differences in prosocial behaviour. *The International Journal of Indian Psychology*, 3(4), 170-175. Retrieved from https://www.researchgate.net/publication/305195572_Gender_Differences_in_Prosocial_Behaviour
- Abuhashim, M. (2008). The components of social, emotional intelligences and their relationship among Saudi and Egyptian University students: A comparative study. *College of Education Journal*, 18(76), 71-95.
- Afolabi, O. A. (2014). Psychosocial predictors of prosocial behaviour among a sample of Nigerian undergraduates. *European Scientific Journal*, 10(2), 241-266. doi: <http://dx.doi.org/10.19044/esj.2014.v10n2p%25p>
- Agrawal, R. (2003). *Social intelligence and teacher effectiveness*. (Doctoral Dissertation, Bundelkhand University, Jhansi). Retrieved from <http://shodhganga.inflibnet.ac.in/handle/10603/10782>
- Ahmad, M. (2008). *Comprehensive dictionary of education*. New Delhi: Atlantic Publishers & Distributors (P) Ltd.

- Ajzen, I. (2002). Residual effects of past on later behavior: Habituation and reasoned action perspectives. *Personality and Social Psychology Review*, 6(2), 107–122.
- Aknin, L. B., Van de Vondervoort, J. W. & Hamlin, J. K. (2018). Positive feelings reward and promote prosocial behavior. *Current Opinion in Psychology*, 20, 55–59. doi: 10.1016/j.copsyc.2017.08.017
- Alan, S. L. (1983). Social competence as a developmental construct, *Developmental Review*, 3, 79-97. Retrieved from http://www.psychology.sunysb.edu/attachment/online/online_2/competencedevelopmental_construct.pdf.
- Albert, A. P., & Thilagavathy, T. (2013). A study on pro-social behaviour and parental behaviour of higher secondary students. *International Journal of Science and Research (IJSR)*, 2(11), 2319-7064. Retrieved from <https://www.ijsr.net/archive/v2i11/MDIwMTM0Njk=.pdf>
- Anderlini, L., Gerardi, D. & Lagunoff, R. (2009). Social memory, evidence, and conflict. Retrieved from <https://core.ac.uk/download/pdf/6398449.pdf>
- Anderson, K., & Costello, P., (2009). Relationships between prosocial behavior, spirituality, narcissism and satisfaction with life. Retrieved from <https://gustavus.edu/psychology/documents/KellyAndersonSpr09.pdf>
- Archer, D. (1980). *How to expand your social intelligence quotient*. New York: M. Evans & Co.
- Aronson, E., Wilson, T., & Akert, R. (2004). *Social psychology, media and research update* (4th ed.). Upper Saddle River, N.J.: Pearson Education.
- Asadi, M. (2016). The impact of social intelligence of the management on the mental health in the supreme audit court. *International Academic Journal of Accounting and Financial Management*, 3(4), 34-40. Retrieved from <http://iaiest.com/dl/journals/5-%20IAJ%20of%20Accounting%20and%20Financial%20Management/v3-i4-Apr2016/paper4.pdf>.
- Baron-Cohen, S., Ring, H. A., Wheelwright, S., Bullmore, E. T., Brammer, M. J., Simmons, A., & Williams, S. C. (1999). Social intelligence in the normal and autistic brain: an fMRI study. *European Journal of Neuroscience*, 11, 1891-1898.

- Bartlett, M. Y., & DeSteno, D. (2006). Gratitude and prosocial behavior: helping when it costs you. *Association for Psychological Science*, 17(4), 319-25. doi: 10.1111/j.1467-9280.2006.01705.x.
- Batson, C. D., Lishner, D. A., Carpenter, A., Dulin, L., Harjusoloa-Webb, S., Stocks, E.L., & Sampat, B. (2003). As you would have them do unto you: Does imagining yourself in the other's place stimulate moral action. *Personality and Social Psychology Bulletin*, 29, 1190–1201. doi: 10.1177/0146167203254600
- Beheshtifar, M., & Roasaei, F. (2012). Role of social intelligence in organizational leadership. *European Journal of Social Sciences*, 28(2), 197-203. Retrieved from http://flexmanager.ir/downloads/EJSS_28_2_03.pdf
- Bhatia, S., & Daga, M. (2017). Study of social intelligence of liberal studies and engineering students. *International Journal of Indian Psychology*, 4(3), doi: 10.25215/0403.222
- Birknerova, Z. (2011). Social and emotional intelligence in school environment. *Asian Social Science*, 7(10), 241-248. Retrieved from www.ccsenet.org/journal/index.php/ass/article/download/12466/8754.
- Boncheva, I., & Tomcheva, S. (2012). Social competence in 18-years-old students who had performed an aggressive act at school. *Journal of IMAB - Annual Proceeding (Scientific Papers)*, 18(3), 323-326. doi: 10.5272/jimab.2012183.323.
- Boxer, P., Tisak, M. S., & Goldstein, S. E. (2004). Is it bad to be good? An exploration of aggressive and pro-social behaviour subtypes in adolescence. *Journal of Youth and Adolescence*, 33(2), 91-100. Retrieved from <http://link.springer.com/article/10.1023%2FB%3AJJOYO.0000013421.02015.ef>
- Braet, C., Meerschaert, T., Merlevede, E., Bosmans, G., Leeuwen, K. V., & Mey, W. (2009). Prevention of antisocial behaviour: Evaluation of an early intervention programme. *European Journal of Developmental Psychology*, 6(2), 223-240. Retrieved from <http://dx.doi.org/10.1080/17405620601033194>
- Buzan, T. (2002). *The power of social intelligence*. London: Thorsons

- Cantor, N., & Kihlstrom, J. F. (1987). *Personality and social intelligence*. Englewood Cliffs, N. J: Prentice-Hall.
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for late adolescents. *Faculty Publications, Department of Psychology*, 70, 30-44. Retrieved from <http://digitalcommons.unl.edu/psychfacpub/70>
- Carlo, G., Fabes, R. A., Laible, D., & Kupanoff, K. (1999). Early adolescence and pro-social/ moral behaviour II: The role of social and contextual influences. *The Journal of Early Adolescence*, 19(2), 133-147. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1043&context=psychfacpub>.
- Chadha, N. K., & Ganesan, U. (2015). *Manual for social intelligence scale (SIS-CG)*. Agra: National Psychological Corporation.
- Chadha, N., & Misra, G. (2006). Prosocial reasoning and behaviour among Indian children: A naturalistic study. *Psychology and Developing Societies*, 18(2), 167-199. doi: 10.1177/097133360601800202.
- Chan, S., & Harris, J. (2011). Moral enhancement and pro-social behaviour. *Journal of Medical Ethics*, 37, 130-1.
- Chan, Y. M. (2000). Self-esteem: A cross-cultural comparison of British-Chinese, white British and Hong Kong Chinese children. *Educational Psychology*, 20(1), 59-74.
- Chapin, F. S. (1939). Social participation and social intelligence. *American Sociological Review*, 4(2), 157-166. Retrieved from <http://www.jstor.org/stable/pdf/2084201>
- Cigala, A., Mori A., & Fangareggi, F. (2015). Learning others' point of view: Perspective taking and pro-social behaviour in preschoolers. *Early Child Development and Care*, 185(8), 1199–1215. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/03004430.2014.987272>
- D'haene, I. (2015). The influence of social intelligence on imitation. (Master's Thesis, Universiteit Gent. Faculteit Psychologie en Pedagogische Wetenschappen. Vakgroep PP02). Retrieved from

- De Caroli, M. E., Falanga, R., & Sagone, E. (2014). Prosocial behavior and moral reasoning in Italian adolescents and young adults. *Research in Psychology and Behavioral Sciences*, 2(2), 48-53. doi: 10.12691/rpbs-2-2-3
- Dhingra, K., & Tiakala, (2016). Social intelligence of higher secondary school students in Nagaland. *Researchpaedia*, 3(1), 46-54. Retrieved from <http://researchpaedia.in/issuepdf/14572847657.1Tia.pdf>
- Ebrahimpoor, H., Zahed, A., & Elyasi, A. (2013). The study of relationship between social intelligence and organizational performance (Case study: Ardabil Regional water company's managers). *International Journal of Organizational Leadership*, 2(1), 1-10.
- Eisenberg, N., & Fabes, R. A. (1998). Prosocial development. *Faculty Publications, Department of Psychology*, 70, 30-44. Retrieved from <http://digitalcommons.unl.edu/psychfacpub/70>.
- Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. **Psychological Bulletin**, 94(1), 100-131. doi: 10.1037/0033-2909.94.1.100
- Eisenberg, N., & Miller, P. A. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin*, 101(1), 91
- Eisenberg, N., & Mussen, P. H. (1989). *The Roots of prosocial behavior in children*. Cambridge: Cambridge University Press.
- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In Afolabi, O. A. (2014). Psychosocial predictors of prosocial behaviour among a sample of Nigerian undergraduates. *European Scientific Journal*, 10(2), 241-266. doi: <http://dx.doi.org/10.19044/esj.2014.v10n2p%25p>
- Eisenberg, N., Fabes, R. A., Karbon, M., Murphy, B. C., Wosinski, M., Polazzi, L., ...Juhnke, C. (1996). The relations of children's dispositional prosocial behavior to emotionality, regulation, and social functioning. *Child Development*, 67, 974-992.

- Eisenberg-Berg, N., Cameron, E., Tryon, K., & Dodez, R. (1981). Socialization of prosocial behavior in the preschool classroom. **Developmental Psychology**, 17(6), 773-782. Retrieved from <https://psycnet.apa.org/record/1982-06444-001>
- Erdley, C. A., & Asher, S. R. (1998). Linkages between children's beliefs about the legitimacy of aggression and their behavior. **Social Development**, 7(3), 321-339. Retrieved from <https://psycnet.apa.org/record/1998-11141-003>
- Eshghi, P., Arofzad, S., & Hosaini, T. A. (2013). Relationship between social intelligence with effective influence among physical education expertise in Isfahan education organizations. *European Journal of Experimental Biology*, 3(3), 168-172. Retrieved from www.pelagiaresearchlibrary.com
- Fedakova, D., & Jelenova, I. (2004). Correlates of social and emotional intelligence, *Studia Psychologica*, 46(4), 291-295. Retrieved from https://www.researchgate.net/publication/290038262_Correlates_of_social_and_emotional_intelligence
- Fischman, M. B. (2015). *Methods of teaching social intelligence and its impact on service quality*. (M.Sc dissertation, University of Nevada, Las Vegas). Retrieved from <http://digitalscholarship.unlv.edu/thesesdissertations/2615>
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Boston: Addison-Wesley Publishing Co, Inc.
- Ford, M. E., & Tisak, M. S. (1983). A further search for social intelligence. **Journal of Educational Psychology**, 75(2), 196-206. Retrieved from <http://dx.doi.org/10.1037/0022-0663.75.2.196>
- Gadre, S. (2004). Effect of school climate on social intelligence. *IFE Psychologia, An International Journal of Psychology in Africa*, 12(1), 103-111. Retrieved from <https://www.ajol.info/index.php/ifep/article/view/23511>.
- Ganaie, M. Y., & Mudasar, H. (2015). A study of social intelligence & academic achievement of college students of District Srinagar, J&K, India. *Journal of*

American Science, 11(3), 22-27. Retrieved from <http://www.jofamerican-science.org>.

Gilbert, J. A. (1995). *Leadership, social intelligence, and perceptions of environmental opportunities: A comparison across levels of leadership*. (Doctoral dissertation, George Mason University, Fairfax, VA). Retrieved from <https://elibrary.ru/item.asp?id=5606288>

Gkonou, C., & Mercer, S. (2017). Understanding emotional and social intelligence among English language teachers. *ELT Research Papers*, 17(03), 4-50. London: British Council. Retrieved from https://englishagenda.britishcouncil.org/sites/default/files/attachments/g211_eltra_gkonou_and_mercer_paper_final_web.pdf

Goel, M., & Aggarwal, P. (2012). A comparative study of social intelligence of single child and child with siblings. *International Journal of Physical and Social Science*, 2(6), 262-288. https://www.ijmra.us/project%20doc/IJPSS_JUNE2012/IJMRA-PSS1174.pdf

Goldenson, R. M. (1984). *Longman dictionary of psychology and psychiatry*. New York: Longman.

Goleman, D. (1998). What makes a leader? *Harvard business Review*, 77, 93-102.

Goleman, D. (2006). *Social intelligence: The new science of human relationships*. New York, NY: Bantam Books.

Goleman, D., & Boyatzis, R. (2008). Social intelligence and the biology of leadership. *Harvard Business Review*, 86(9), 74-81. Retrieved from <http://files-au.clickdimensions.com/aisnsweduau-akudz/files/inteligencia-social-y-biologia-de-un-lider.pdf>

Greenway, C. (2000). Autism and asperger syndrome: Strategies to promote pro-social behaviours. *Educational Psychology in Practice*, 16(3), 469-485. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/713666112>

- Gupta, D., &Thapliyal, G. (2015).Study of prosocial behaviour and self concept of adolescents. *i-manager's Journal on Educational Psychology*, 9(1), 38-45. doi: <https://doi.org/10.26634/jpsy.9.1.3524>
- Habib, S., Saleem S., &Mahmood, Z. (2013). Development and validation of social intelligence scale for university students. *Pakistan Journal of Psychological Research*, 28(1), 65-83. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?>
- Hackworth, C. A., & Brannon, L. A. (2006). Understandings and managing others: The impact of social intelligence upon social influence. *Communication Research Reports*, 23(3), 171-78.
- Haider, Z. (2012). *Achievement motivation, emotional and social intelligence of hockey players at different levels of participation*. (Doctoral Dissertation, Aligarh Muslim University, Aligarh). Retrieved from <http://shodhganga.inflibnet.ac.in/handle/10603/11393>
- Hooda, D., Sharma, N. R., &Yadava, A. (2009).Social intelligence as a predictor of positive psychological health. *Journal of the Indian Academy of Applied Psychology*, 35(1), 143-150.
- Hunt, T. (1928). The measurement of social intelligence.*Journal of Applied Psychology*, 12(3), 317-334. doi: 10.1037/h0075832
- Ingles, C., Benavides, G., Redondo, J., Garcia-Fernandez, J. M., Ruiz-Esteban, C., Estevez, C. &Huescar, E. (2009).Prosocial behaviour and academic achievement in Spanish students of compulsory secondary education.*Annals of Psychology*, 25(1), 93-101. Retrieved from <https://revistas.um.es/analesps/article/view/71541>
- Iqbal, F. (2013).Prosocial behavior in different situations among men and women.*IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 8(6), 31-40. Retrieved from <https://pdfs.semanticscholar.org/bb49/d9ae1d1e3911b66088a320ccd1456804234f.pdf>

- Jena, L. K., Bhattacharya, P., Hati, L., Ghosh, D., & Panda, M. (2014). Emotional intelligence & pro-social behaviour: Multidimensional trait analysis of technical students. *Journal of Strategic Human Resource Management*, 3(2), 38-47. Retrieved from https://www.academia.edu/32501444/Emotional_Intelligence_and_Prosocial_Behaviour_Multidimensional_Trait_Analysis_of_Technical_Students.pdf
- Jevtic, B. S. (2017). The attitude of teachers towards prosocial behaviour and academic achievement in Serbia. *Problems of Education in the 21st Century*, 75(1), 34-53. Retrieved from <http://oaji.net/articles/2017/457-1488299574.pdf>
- Johnston, M., & Krettenauer, T. (2011). Moral self and moral emotion expectancies as predictors of anti- and pro-social behaviour in adolescence: A case for mediation?. *European Journal of Developmental Psychology*, 8(2), 228-243. doi:10.1080/17405621003619945
- Jones, K., & Day, J. (1997). Discrimination of two aspects of cognitive-social intelligence from academic intelligence. *Journal of Educational Psychology*, 89, 486-497. <https://doi.org/10.1037/0022-0663.89.3.486>
- Jones, K., & Day, J. D. (1996). Cognitive similarities between academically and socially gifted students. *Roeper Review*, 18(4), 270-274.
- Juchniewicz, J. (2010). The influence of social intelligence on effective music teaching. *Journal of Research in Music Education*, 58(3), 276-293. Retrieved from <http://www.jstor.org/stable/pdf/40961670>.
- Kakavoulis, A. (1998). Aggressive and pro-social behaviour in young Greek children. *International Journal of Early Years Education*, 6(3), 343-351. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/0966976980060308>.
- Karanam, M., & Vardhini, S. V. (2016). Social intelligence of secondary school teachers with respect to their gender and age. *The International Journal of Indian Psychology*, 3(2), 147-154. Retrieved from <http://oaji.net/articles/2016/1170-1452599750.pdf>.
- Kasture, P. B., & Bhalerao, R. P. (2014). Social intelligence of pupil teachers. *An International Peer Review & Referred Scholarly Research Journal for Interdisciplinary Studies (SJIF)*, 2(14), 1912-1923.

- Kaukiainen, A, Bjorkqvist, K., Lagerspetz, K., Osterman, K., Salmivalli, C., Rothberg, S., & Ahlbom, A. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior*, 25, 81–89. doi: 10.1002/(SICI)1098-2337(1999)25:2<81::AID-AB1>3.0.CO;2-M.
- Kaur, H., & Ashu, K. (2004). Study of interrelationship between home environment social intelligence and socio-economic status among males and females. *Journal of Human Ecology*, 16(2), 137-140.
- Kaur, J. (2005). *A study of self-concept and pro-social behaviour of early adolescents*. (Doctoral Dissertation, Bundelkhan University, Jhansi). Retrieved from <http://shodhganga.inflibnet.ac.in/handle/10603/15591>
- Kavussanu, M. (2006). Motivational predictors of prosocial and antisocial behaviour in football. *Journal of Sports Sciences*, 24(06), 575-588, doi: 10.1080/02640410500190825
- Kavussanu, M., Stamp, R., Slade, G., & Ring, C. (2009). Observed pro-social and antisocial behaviours in male and female soccer players. *Journal of Applied Sport Psychology*, 21(1), 62–76. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/10413200802624292>
- Khan, Z., Khan, N. A., & Haider, Z. (2011). A study on social intelligence of the students of physical education. *International Journal of Sports Sciences and Physical education (IJSSPE)*, 2(1), 56-59. Retrieved from https://www.researchgate.net/publication/222713257_a_study_on_social_intelligence_of_the_students_of_physical_education/download
- Khanna, V., Sharma, E., Chauhan, S., & Pragyendu, (2017). Effects of pro-social behavior on happiness and well-being. *International Journal of Indian Psychology*, 4(2), 76-86. Retrieved from https://pdfs.semanticscholar.org/b83e/dc4d9232432c2ba0896c3d18bb7dbae53c64.pdf?_ga=2.144865652.1917726196.1560098074-485331422.1560098074.
- King, G., McDougall, J., DeWit, D., Hong, S., Miller, L., Offord, D., ... LaPorta, J. (2005). Pathways to children's academic performance and pro-social

- behaviour: Roles of physical health status, environmental, family, and child factors. *International Journal of Disability, Development and Education*, 52(4), 313–344. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/10349120500348680>.
- Klemola, A., (2013). *Motivations behind prosocial behaviour: Why plan Finland's long-term volunteers participate in the work and how they communicate about it to others*. (Bachelor's Thesis, Metropolia University of Applied Sciences). Retrieved from <https://www.theseus.fi/bitstream/handle/10024/64454/KlemolaArto.pdf?sequence=1>
- Kobe, L. M., Reiter-Palmon, R., & Rickers, J. D. (2001). Self-reported leadership experiences in relation to inventoried social and emotional intelligence. *Current Psychology*, 20, 154-163. Retrieved from <https://digitalcommons.unomaha.edu/cgi/viewcontent.cgi?article=1063&context=psychfacpub>
- Koul, L. (2012). *Methodology of educational research*, New Delhi: Vikas Publishing House, Pvt, Ltd.
- Kriemeen, H., & Hajaia, S. (2017). Social intelligence of principals and its relationship with creative behavior. *World Journal of Education*, 7(3). 84-91. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1157651.pdf>.
- Kumru, A., & Carlo, G., Mestre, M. V., & Samper, P. (2012). Prosocial moral reasoning and prosocial behavior among Turkish and Spanish adolescents. *Social Behavior and Personality: An International Journal*, 40(2), 205-214. doi: 10.2224/sbp.2012.40.2.205
- Lai, F. H. Y., Siu, A. M. H., & Shek, D. T. L. (2015). Individual and social predictors of prosocial behavior among Chinese adolescents in Hong Kong. *Frontier in Pediatrics*, 3(39), 1-8. doi: 10.3389/fped.2015.00039
- Lathesh, K. R., & Vidya D. A. (2018). A study on social intelligence and its impact on employee performance of insurance sectors in Mysuru city. *International Journal of Mechanical Engineering and Technology (IJMET)*, 9(1), 530–537. <http://www.iaeme.com/IJMET/issues.asp?JType=IJMET&VType=9&IType=1>

- Lay, J. C. & Hoppmann, C. A. (2015). Altruism and Prosocial Behavior. *Encyclopedia of Geropsychology*, (1), 1-9. doi 10.1007/978-981-287-080-3_69-1
- Lee, J. E., Wong, C. M. T., Day, J. D., Maxwell, S. E., & Thorpe, P. (2000). Social and academic intelligences: A multitrait-multimethod study of their crystallized and fluid characteristics. *Personality and Individual Differences*, 29(3), 539-553.
- Lekshmi, S. (2012). *Developing a package for enhancing social intelligence of students at primary level*. (Doctoral Dissertation, Mahatma Gandhi University, Kottayam). Retrieved from <http://shodhganga.inflibnet.ac.in/handle/10603/19650>.
- Lukacikova, M. (2011). Pro-social behaviour of adolescent in school and after-school environment. *Education and Health Care*. 211-215. Retrieved from http://www.ped.muni.cz/z21/knihy/2011/40/texty/eng/18_lukacikova_eng.pdf.
- Luthar, S. S. (1995). Social competence in the school setting: Prospective cross-domain associations among inner-city teens. *Child Development*, 66(2), 416-429. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4235606/>
- Lynch, S. A., & Simpson, C. G. (2010). Social skills: Laying the foundation for success. *Dimensions of Early Childhood*, 38(2), 3-12. Retrieved from http://southernearlychildhood.org/upload/pdf/Social_Skills_Laying_the_Foundation_for_Success_Sharon_A_Lynch_and_Cynthia_G_Simpson_Volume_38_Issue_2_1.pdf
- Mahejabin, (2015). Social harmony and prosocial behavior: Two aspects of one coin. *Shaikshik Parisamvad (An International Journal of Education) SPIJE*, 5(1), 67-74.
- Mallick, M. K., & Cour, S. (2015). Prosocial behaviour among senior secondary school students in relation to their home environment. *Educational Quest: An International Journal of Education and Applied Social Sciences*, 6(2). doi: 10.5958/2230-7311.2015.00014.8.

- Marecki, J. (2014). *The importance of social intelligence for entrepreneurial leaders*. (Bachelor Thesis Conference, University of Twente, Enschede). Retrieved from https://essay.utwente.nl/65265/1/Marecki_BA_MB.pdf
- Marlowe, H. A. (1986). Social intelligence: Evidence for multidimensionality and construct independence. *Journal of Educational Psychology*, 78(1), 52-58. <http://dx.doi.org/10.1037/0022-0663.78.1.52>
- Martela, F., & Ryan, R. M. (2016). Prosocial behavior increases well-being and vitality even without contact with the beneficiary: Causal and behavioral evidence. *Motivation and Emotion*, 40(3), 351–357. doi 10.1007/s11031-016-9552-z.
- Martin, D., Martin, M., Gibson, S. S., & Wilkins, J. (2007). Increasing prosocial behavior and academic achievement among adolescent African American males. *Adolescence*, 42(168), 689-98. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/18229505>
- McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: A conceptual and empirical topography. **Journal of Personality and Social Psychology**, 82(1), 112-127. doi: 10.1037//0022-3514.82.1.112
- McDougall, W. (1908). *Social psychology*. London: Methuen.
- Meijs, N., Cillessen, A. H. N., Scholte, R. H. J., Segers E., & Spijkerman R. (2010). Social intelligence and academic achievement as predictors of adolescent popularity. *Journal of Youth and Adolescence*, 39, 62–72. doi 10.1007/s10964-008-9373-9
- Milgram, S., & Hollandar, P. (1964). Paralyzed witnesses: The murder they heard. *Nation*, 198, 602-604. Retrieved from http://lisafitzgerald.weebly.com/uploads/1/2/0/7/12076805/paralyzed_witnesses.pdf.
- Misra, N. & Yadav, A. (2015). Gender differences in prosocial behaviour in Indian youth. *The International Journal Of Humanities & Social Studies*, 3(8), 154-161. www.theijhss.com
- Molm, L. D., Schaefer, D. R., & Collett, J. L. (2007). The value of reciprocity. **Social Psychology Quarterly**, 70(2), 199-217.

- Mooij, T. (1999). Preventing antisocial behaviour of young children at risk, *Risk Management: An International Journal*, 1(2), 49-61. doi: 10.1057/palgrave.rm.8240022.
- Moss, F. A., & Hunt, T. (1927). Are you socially intelligent?. *Scientific American*, 137, 108-110.
- Nagra, V. (2014). Social intelligence and adjustment of secondary school students. *Paripex - Indian Journal of Research*, 3(4), 86-87. Retrieved from <http://www.sciepub.com/reference/84042>.
- Nazir, A., Tasleema, & Ganai, M. Y. (2015). Social intelligence and academic achievement of college students – A study of District Srinagar. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 20(2), 74-76.
- Njoroge, C. N., & Yazdanifard, R. (2014). The impact of social and emotional intelligence on employee motivation in a multigenerational workplace. *Global Journal of Management and Business Research*, 14(3), 31-36. Retrieved from https://globaljournals.org/GJMBR_Volume14/5-The-Impact-of-Social-and-Emotional-Intelligence.pdf
- Olthof, T. (2012). Anticipated feelings of guilt and shame as predictors of early adolescents' antisocial and prosocial interpersonal behaviour. *European Journal of Developmental Psychology*, 9(3), 371-388. doi: 10.1080/17405629.2012.680300
- Onyencho, V. C., & Afolabi, O. A. (2018). Influence of subjective well being and gender differences on pro-social behaviour among a sample of Nigerian police personnel. *The International Journal of Humanities & Social Studies*, 6(4), 179-185. Retrieved from <http://internationaljournalcorner.com/index.php/theijhss/article/download/129736/90030>
- Pal, S. K., & Mishra, K. S. (1991). A study of the cognitive processes, academic motivation, social behaviour patterns and moral judgement of adolescents from deprived ecologies, (NCERT), *Fifth Survey of Educational Research* (1988-92). New Delhi: NCERT

- Paul, T. M., &Arjunan N. K. (2016).Demographic factors in social intelligence of secondary school teachers. *International Journal of Education and Psychological Research (IJEPR)*, 5(3), 11-15.
- Penner, L. A. (2002) The Causes of Sustained Volunteerism : An Interactionist Perspective. *Journal of Social Issues*, 58, 447-468. Retrieved from <https://www.med.wayne.edu/fam/faculty/pdfs/30itempsbkey.pdf>
- Penner, L. A., Dovidi, J. F., Piliavin, J. A., & Schroeder, D. A. (2005), Prosocial behavior: Multilevel perspectives. *Annual Reviews of Psychology*, 56(14), 1–14. Retrieved from https://pdfs.semanticscholar.org/9ab8/57d6b00e2c951c6fb09df51d7a5e10f791fb.pdf?_ga=2.65807342.1185407772.1566963915-1865987371.1566963915
- Penner, L. A., Fritzsche, B. A., Craiger, J. P., &Freifeld, T. S. (1995). Measuring the prosocial personality.*Advances in Personality Assessment*, 10, 147-163.
- Pinky, (2010).*Emotional and social intelligence as predictors of happiness in adolescents*.(Master Degree Thesis, MaharshiDayanand University, Rohtak).Retrieved from<http://shodhganga.inflibnet.ac.in/handle/10603/41863>
- Prabu, P. S. (2015). A study on social intelligence among arts and science college students.*An International Peer Reviewed and Referred Scholarly Research Journal for Humanity Science & English Language*, 2(7), 1050-1056.Retrieved from <https://www.scribd.com/document/255524485/a-study-on-social-intelligence-among-arts-and-science-college-students#>
- Praditsang, M., Hanafi, Z., & Walters, T. (2015). The relationship among emotional intelligence, social intelligence and learning behaviour.*Asian Social Science*, 11(13), 98-107. doi:10.5539/ass.v11n13p98. f
- Raboteg-Saric, Z. (1997). The role of empathy and moral reasoning in adolescents' prosocialbehaviour.*Journal for General Social Issues*, 6(30-31), 493-512. Retrieved from <https://hrcak.srce.hr/31610>

- Rahim, M. A., Civelek, I., & Liang, F. H. (2016). A model of leaders' social intelligence and followers' satisfaction with annual evaluation. *Current Topics in Management*, 18, 1-16.
- Rai, R., & Singh, M. A. (2014). Study of social intelligence among college students in relation to their subject stream in Bijnor District. *International Journal of Languages, Education and Social Sciences (IJLESS)*, 8(1), 1-7.
- Raskauskas, J. L., Gregory, J., Harvey, S. T., Rifshana, F., & Evans I. M. (2010). Bullying among primary school children in New Zealand: Relationships with prosocial behaviour and classroom climate. *Educational Research*, 52(1), 1-13. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/00131881003588097>
- Reber, A. S., & Reber, E. S. (2001). *The penguin dictionary of psychology*. London: Penguin Books.
- Reykowski, J. (1982). Development of prosocial motivation: A dialectic process. *The Development of Prosocial Behavior*, New York: Academic Press, INC.
- Romney, D. M., & Pyryt, M. C. (1999). Guilford's concept of social intelligence revisited. *High Ability Studies*, 10(2), 137-142. doi: 10.1080/1359813990100202
- Rosen, J. A., Glennie, E. J., Dalton, B. W., Lennon, J. M. & Bozick, R. N. (2010). *Noncognitive skills in the classroom: New perspectives on educational research*. Research Triangle Park, NC: RTI Press publication. doi:10.3768/rtipress.2010.bk.0004.1009
- Ruisel, I. (1999). Inteligenciaaosobnos. *Asian Social Science*, 7(10), 241-248. doi: 10.5539/ass.v7n10p241.
- Rutten, E. A., Biesta, G. J. J., Deković, M., Stams, G. J. J. M., Schuengel, C., & Verweel, P. (2010). Using forum theatre in organized youth soccer to positively influence antisocial and prosocial behaviour: A pilot study. *Journal of Moral Education*, 39(1), 65-78.

- Saffarinia, M., Abbaspour, P., & Dehestani, M. (2015). Comparison of social intelligence and prosocial personality in medical students with and without internet addiction. *Journal of Fundamentals of Mental Health*, 17(5), 229-33.
- Sage, L. D., & Kavussanu, M. (2008). Goal orientations, motivational climate, and prosocial and antisocial behaviour in youth football: Exploring their temporal stability and reciprocal relationships. *Journal of Sports Sciences*, 26(7), 717-732. doi: 10.1080/02640410701769716
- Saxena, S., & Jain, R. K. (2013). Social intelligence of undergraduate students in relation to their gender and subject stream. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 1(1), 01-04. Retrieved from <https://pdfs.semanticscholar.org/04a6/9654bfff284faa32eadd3dacc73814ec24a9.pdf>
- Sembiyan, R., & Visvanathan, G. (2012). A study on social intelligence of college students. *International Journal of Current Research*, 4(1), 231-232. Retrieved from <http://researchpaedia.in/issuepdf/14572847657.1Tia.pdf>.
- Serrieh, R. S. (2017). *The impact of social intelligence on organizational conflict Management strategies: A field study on Jordanian telecommunication companies*. (Master Degree Thesis, Middle East University, Amman). Retrieved from https://meu.edu.jo/libraryTheses/59fdb5ed1aa40_1.pdf
- Sigmar, L., Hynes, G., & Hill, K. (2012). Strategies for teaching social and emotional intelligence in business communication. *Business Communication Quarterly*, 75(3), 301-317. doi: 10.1177/1080569912450312
- Singh, D. (2006). *Emotional intelligence at work: A professional guide* (3rd Edition). New Delhi: Response Books.
- Spivak, A. L., Lipsey, M. W., Farran, D. C., & Polanin, J. R. (2014). Instructional strategies for enhancing prosocial behavior in children and youth: A systematic review and meta-analysis. Retrieved from https://campbellcollaboration.org/media/k2/attachments/SteenebergenHu_Executive_Functions_Title.pdf
- Sprecher, S., & Fehr, B. (2005). Compassionate love for close others and humanity. *Journal of Social and Personal Relationships*, 22(5), 629-51.
- Sreeja, P., & Nalinilatha, M. (2017). A study on relationship between social intelligence and academic achievement of higher secondary students. *International Journal of*

Research - Granthaalayah, 5(6), 476-488. Retrieved from <http://oaji.net/articles/2017/1330-1500459420.pdf>

Staub, E. (2003). *The psychology of good and evil: Why children, adults, and groups help and harm others*. New York: Cambridge University Press

Strang, R. (1930). Measures of social intelligence. *American Journal of Sociology*, 36(2), 264. Retrieved from <http://www.jstor.org/stable/pdf/2766381?acceptTC=true>

Tanakinci, O. &Yildirim, O. (2010).The impact of social intelligence on academic achievement of students studying media. *10th International Multidisciplinary Scientific Geo Conference*, 2, 1127-1132.

Thomas, D. P., &Rathina, K. V. J. (2017). Interactional effect of social intelligence and emotional intelligence on mental health status of secondary school students. *International Journal of Education and Psychological Research (IJEPR)*, 6(3), 27-30.

Thompson, E. R. (2008). Development and validation of an international english big-five mini-markers. *Personality and Individual Differences*, 45(6), 542–548. doi:10.1016/j.paid.2008.06.013.

Thompson, G., &Aarset, M. V. (2012). Examining the impact of social intelligence, demographics, and context for implementing the dynamics of the situational leadership model. *Journal of International Doctoral Research (JIDR)*, 1(1), 122-142. Retrieved from https://brage.bibsys.no/xmlui/bitstream/handle/11250/93920/Thompson_JIDR_2012.pdf?sequence=1&isAllowed=y

Thorndike, E. L. (1920). Intelligence and its uses. *Harper's Monthly Magazine*, 140, 227-235. Retrieved from <http://www.unz.org/Pub/Harpers-1920jan-00227>.

Thorndike, E. L. (1927). *The measurement of intelligence*. New York: Teachers College, Columbia University.

- Tsang, J. (2006). Brief report gratitude and pro-social behaviour: An experimental test of gratitude. *Cognition and Emotion*, 20(1), 138-148. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/02699930500172341>
- Twenge J. M., Baumeister R. F., DeWall C. N., Ciarocco N. J., & Bartels J. M (2007). Social exclusion decreases pro-social behaviour. *Journal of Personality and Social Psychology*, 92(1), 56-66. doi: 10.1037/0022-3514.92.1.56
- Unified District Information System for Education (U-DISE) 2014-15.National University for Educational Planning and Administration (NUEPA).
- Vaculik, M., Prochazka, J., &Kveton P. (2007).The relation between prosocial behaviour and demanding prosocial behaviour.*Studia psychological*, 49(2), 157-166. Retrieved from <https://www.researchgate.net/publication/246548955/download>.
- Verma, S. (1997).*Pro-social behaviour development in relation to family structure and value of parents*.(Doctoral Thesis, Pt. RavishankarShuklaUniversity, Raipur).Retrieved from <http://shodhganga.inflibnet.ac.in/handle/10603/30566>.
- Vernon, P. E. (1933). Some characteristics of the good judge of personality.*Journal of Social Psychology*, 4, 42-57.
- Vinodhkumar, D., &Pankajam, R. (2017).Social intelligence and achievement in science among higher secondary school students.*International Journal of Research - Granthaalayah*, 5(1), 9-13. Retrieved from <http://oaji.net/articles/2017/1330-1490796531.pdf>
- Walker, H. M., Stieber, S., &Eisert, D. (1991). Teacher ratings of adolescent social skills: Psychometric characteristics and factorial replicability across age-grade ranges. *School Psychology Review*, 20(2), 301-314.
- Wawra, D. (2009). Social intelligence. *European Journal of English Studies*, 13(2), 163-177.

- Weis, S., & Sub, H. (2006). Reviving the search for social intelligence – A multi-trait multi-method study of its structure and construct validity. *Personality and Individual Differences*, 42(1), 3-14. doi:10.1016/j.paid.2006.04.027.
- Weymans, V. (2010). Psychological predictors for prosocial behavior. A large-scale survey in Flanders. Retrieved from http://lib.ugent.be/fulltxt/RUG01/001/459/596/RUG01-001459596_2011_0001_AC.pdf
- Whiten, A., & Van Schaik, C.P. (2007). The evolution of animal 'cultures' and social intelligence. *Philosophical Transactions: Biological Sciences*, 362(1480), 603-620. doi: 10.1098/rstb.2006.1998.
- Willmann, E., Feldt, K., & Amelang, M. (1997). Prototypical behaviour patterns of social intelligence: An intercultural comparison between Chinese and German subjects. *International Journal of Psychology*, 32(5), 329-346. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/002075997400692>
- Yeh, Z. (2013). Role of theory of mind and executive function in explaining social intelligence: A structural equation modeling approach. *Aging & Mental Health*, 17(5), 5–54. Retrieved from <http://dx.doi.org/10.1080/27313607863.2012.758235>
- Young, P. V. (1938). Defective social intelligence as a factor in crime. *American Sociological Review*, 3(2), 213-217. Retrieved from <http://www.jstor.org/stable/pdf/2084254>
- Zaccaro, S. J., Gilbert, J. A., Thor, K. K., & Mumford, M. D. (1991). Leadership and social intelligence: Linking social perspectiveness and behavioural flexibility to leader effectiveness. *Leadership Quarterly*, 2, 317-342.

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https://en.wikipedia.org/wiki/Prosocial_behavior
<https://www.learningtogive.org/resources/prosocial-behavior>
<https://codemint.net/psychology/influence-of-emotional-intelligence-and-assertiveness-on-pro-social-behaviours-among-students-of-university-of-uyo/index.html>
<https://blablalawriting.com/psychology-pro-social-behaviour-essay>
<https://iiste.org/Journals/index.php/JEP/article/download/29617/30410>
<http://www.casopispedagogika.sk/rocnik-9/cislo-4/studia-kar.pdf>
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ANNEXURE II – DETAILS OF TOOL CONSTRUCTION

Table 1: t value of component 1 – Social Responsibility (SR)

		Upper Group (N=54)		Lower Group (N=54)		t	Selected item
Serial No.	Item No.	M	SD	M	SD		
1	122	3.89	.718	2.54	1.059	8.750	
2	109	4.67	.514	3.19	1.319	7.791*	Selected (-)
3	133	4.46	.818	3.13	1.150	7.437*	Selected
4	36	4.22	.664	2.98	1.141	7.427*	Selected (-)
5	120	4.54	.905	3.19	1.275	6.486*	Selected
6	145	4.57	.536	3.44	1.160	6.230	
7	73	4.04	.823	2.98	1.189	6.131	
8	132	4.39	.656	3.35	1.084	6.129*	Selected
9	71	4.20	.810	3.24	.989	5.762	
10	1	4.33	.614	3.48	.947	5.415	Selected
11	121	4.00	.801	3.02	1.266	5.030	
12	72	4.07	1.179	3.00	1.082	4.969*	Selected (-)
13	92	4.02	.901	3.09	1.170	4.818*	
14	34	4.30	.882	3.43	1.109	4.479*	Selected
15	110	4.33	.911	3.43	1.143	4.217	
16	134	4.07	.908	3.22	1.239	4.216*	
17	108	3.28	1.250	2.35	1.049	4.132	
18	4	3.94	1.017	3.28	1.204	3.256	
19	91	3.35	1.389	2.74	1.119	2.231	
20	93	3.39	.856	3.04	1.063	1.918	
21	35	3.02	1.473	2.78	.984	.950	
Total number of selected Items							8

Table 2: t value of component 2 – Empathy (EM)

		Upper Group (N=54)		Lower Group (N=54)		t	Selected Item
Serial No.	Item No.	M	SD	M	SD		
1	33	4.44	.664	2.89	1.127	8.708*	Selected
2	70	4.48	.606	3.19	1.167	7.181*	Selected
3	124	4.22	.861	3.04	1.181	6.996*	Selected
4	95	3.87	.754	2.59	1.174	6.876*	Selected
5	38	4.28	.878	3.07	1.242	6.064*	Selected (-)
6	69	4.41	.880	3.22	1.192	5.935	
7	123	3.96	.990	2.74	1.277	5.663	
8	136	4.06	.899	3.11	1.160	5.188*	Selected (-)
9	31	4.37	.784	3.41	1.221	5.103	
10	135	3.89	.945	2.89	1.176	5.011*	Selected
11	94	3.94	.656	3.02	1.189	4.912*	
12	107	4.11	.945	3.07	1.242	4.830	
13	111	4.02	.981	3.20	1.122	4.492*	
14	112	3.57	1.039	2.65	1.184	4.316*	Selected (-)
15	2	3.94	.685	3.43	.882	3.281	
16	37	3.20	.979	2.78	1.208	2.087	
17	32	2.65	1.348	2.52	1.240	.566	
Total number of selected Items							8

Table 3: t value of Component 3 - Perspective Taking (PT)

Serial No.	Item No.	Upper Group(N=54)		Lower Group(N=54)		t	Selected Item
		M	SD	M	SD		
1	29	4.33	.777	3.35	1.049	6.616	
2	75	4.52	.693	3.35	1.067	6.525*	Selected
3	40	4.41	.765	3.22	1.076	6.336	
4	67	4.24	.799	3.17	1.077	6.207*	Selected
5	74	4.15	.737	3.26	1.152	5.479*	Selected
6	30	4.00	.824	2.94	1.172	5.413*	Selected
7	5	3.81	.953	2.80	1.088	5.038*	Selected
8	114	3.63	.896	2.70	1.093	4.687*	Selected (-)
9	66	3.61	1.071	2.65	1.119	4.628	
10	28	3.74	1.013	2.83	1.042	4.497	
11	96	4.04	.751	3.37	1.069	4.038*	
12	125	3.22	1.040	2.56	1.076	3.256*	Selected (-)
13	39	3.24	1.132	2.61	1.054	2.882*	Selected (-)
14	3	3.87	.778	3.30	1.223	2.790	
15	68	3.19	1.375	2.70	1.085	2.114	
16	113	3.19	1.100	2.83	1.077	1.688	
Total number of selected Items							8

Table 4: t value of component 4 - Moral Obligation (MO)

Serial No.	Item No.	Upper Group(N=54)		Lower Group(N=54)		t	Selected Item
		M	SD	M	SD		
1	76	4.48	1.023	2.54	1.239	9.542*	Selected (-)
2	79	4.56	1.040	2.65	1.291	9.452	
3	97	4.61	.738	2.94	1.485	7.430*	Selected (-)
4	27	4.57	.536	3.50	1.095	6.436*	Selected
5	99	4.02	.835	2.85	1.053	6.321*	Selected (-)
6	63	4.54	.539	3.46	1.255	6.207	
7	77	3.98	.961	2.96	1.098	5.982*	Selected
8	64	4.61	.492	3.61	1.309	5.703*	Selected
9	115	3.56	1.327	2.44	1.313	4.595*	Selected (-)
10	138	4.24	1.098	3.24	1.258	4.397*	
11	26	3.54	1.284	2.59	1.141	4.228	
12	126	3.43	.944	2.54	1.224	4.181	
13	43	4.19	.933	3.31	1.398	4.082	
14	137	3.76	.823	3.04	1.181	3.458*	Selected
15	98	3.37	.977	2.69	1.146	3.244*	
16	78	3.41	1.125	2.80	1.406	2.473	
17	6	3.28	1.280	2.87	1.198	1.629	
18	7	3.26	1.085	2.94	1.220	1.415	
19	42	3.54	1.111	3.37	1.263	.734	
20	41	2.41	.942	2.46	1.094	.288	
21	65	2.17	1.145	2.52	.885	1.898	
Total number of selected Items							8

Table 5: t value of component 5 - Altruism (AL)

Serial No.	Item No.	Upper Group (N=54)		Lower Group (N=54)		t	Selected Item
		M	SD	M	SD		
1	23	4.41	.740	2.98	1.141	8.572	
2	8	4.50	.637	3.30	1.192	7.166*	Selected
3	60	4.26	.975	2.89	1.160	7.035*	Selected
4	81	4.24	1.008	2.96	1.132	6.271	
5	62	4.41	.659	3.35	1.184	6.205*	Selected
6	139	4.02	.835	2.80	1.172	6.142*	Selected
7	140	4.57	.662	3.43	1.283	5.835	
8	80	4.24	.823	3.11	1.127	5.760	
9	9	4.09	.853	3.04	1.181	5.413*	Selected
10	24	3.96	.990	2.80	1.323	5.402*	Selected (-)
11	100	3.98	.901	2.94	1.338	5.340	
12	11	4.11	1.144	3.02	1.173	5.077*	Selected (-)
13	61	4.26	.851	3.28	1.172	4.855*	
14	44	3.80	1.155	2.83	1.194	4.355*	Selected (-)
15	10	4.02	1.107	3.04	1.258	4.016	
16	25	3.81	1.150	2.91	1.069	3.931	
17	45	2.94	1.510	2.72	1.172	.855	
Total number of selected Items							8

Table 6: t value of component 6 - Reciprocity (RE)

Serial No.	Item No.	Upper Group (N=54)		Lower Group (N=54)		t	Selected Item
		M	SD	M	SD		
1	82	4.63	.653	2.93	1.163	9.871	
2	47	4.48	.746	2.83	1.240	8.551*	Selected (-)
3	17	4.33	.727	2.96	1.273	7.310	
4	83	4.26	.757	3.02	1.055	7.248*	Selected (-)
5	141	4.37	.734	3.07	1.358	6.825	
6	20	4.48	.606	3.30	1.127	6.678*	Selected
7	16	4.61	.738	3.15	1.280	6.676	
8	21	4.37	.623	3.24	1.148	6.439*	Selected
9	48	4.24	.751	3.13	1.214	5.848	
10	46	4.26	.620	3.22	1.254	5.724*	Selected
11	12	4.69	.696	3.72	1.156	5.316*	Selected
12	116	4.28	.834	3.26	1.136	4.835*	Selected
13	58	3.87	1.047	2.85	1.365	4.073	
14	101	4.04	.776	3.24	1.258	3.977*	
15	127	3.93	.749	3.11	1.355	3.977	
16	56	3.59	.901	2.93	1.130	3.311*	
17	57	3.76	1.181	3.13	1.198	3.203*	Selected (-)
18	59	3.41	1.073	2.96	1.345	1.806	
19	22	2.67	1.133	2.69	1.146	-.082	
Total number of selected Items							8

Table 7: t value of component 7 - Equity (EQ)

Serial No.	Item No.	Upper Group(N=54)		Lower Group (N=54)		t	Selected Item(*)
		M	SD	M	SD		
1	85	4.61	.738	2.80	1.234	9.606*	Selected
2	103	4.50	.637	3.17	1.077	7.975*	Selected
3	13	4.44	.861	2.94	1.309	6.945*	Selected (-)
4	102	4.28	1.204	2.93	1.163	6.105*	Selected
5	51	4.28	.899	3.11	1.254	6.077*	Selected
6	142	4.17	.841	3.17	1.060	5.769	
7	18	4.04	1.165	2.69	1.286	5.642	
8	50	4.02	1.523	2.59	1.125	5.636*	Selected (-)
9	128	4.41	.858	3.52	.986	5.273*	Selected
10	49	4.30	.882	3.24	1.164	5.270*	
11	84	4.17	.795	3.20	1.122	5.206	
12	86	3.78	1.176	2.63	1.154	5.140*	Selected (-)
13	143	3.69	1.315	2.56	1.058	5.000	
14	19	3.87	1.150	2.93	1.257	4.596	
15	52	4.09	1.033	3.11	1.192	4.588	
16	129	3.41	1.141	2.59	1.174	3.534*	
17	104	4.06	.960	3.33	1.197	3.378	
18	117	3.30	1.127	2.78	1.160	2.316	
Total number of selected Items							8

Table 8: t value of component 8 - Self-sacrifice (SS)

Serial No.	Item No.	Upper Group(N=54)		Lower Group (N=54)		t	Selected Item(*)
		M	SD	M	SD		
1	131	4.57	.690	3.07	1.163	9.000	
2	87	4.33	.727	3.02	1.090	7.882*	Selected
3	53	4.35	.731	3.02	1.037	7.604*	Selected
4	105	4.50	.575	3.43	1.075	7.315*	Selected
5	119	4.41	.714	2.89	1.160	7.311*	Selected
6	130	3.89	.769	2.78	1.003	7.244*	Selected
7	146	4.39	.920	3.19	1.150	6.546*	Selected (-)
8	118	4.44	.769	3.28	1.172	5.911	
9	90	4.59	.740	3.54	1.145	5.680*	Selected
10	14	3.52	1.005	2.44	1.144	5.537	
11	144	3.98	.901	2.94	1.188	5.066	
12	106	3.80	1.105	2.78	1.223	4.464*	Selected (-)
13	88	4.15	.763	3.46	1.059	4.160*	
14	89	3.72	1.089	2.87	1.150	3.787	
15	54	3.43	1.449	2.74	1.119	2.901*	
16	55	3.67	1.360	3.06	1.220	2.273	
17	15	3.74	1.306	3.30	1.143	1.796	
Total number of selected Items							8

Annexure – IV – Pro-Social Behaviour Scale

Pro-social Behaviour Scale (PSBS)

Please fill up the following information:

Name: _____

Age: _____

Sex: Male (___) Female (___)

Father's Occupation: _____

Mother's Occupation _____

Type of School: Govt (___) Govt. Aided (___) Private (___)

Locality : Urban (___) Rural (___)

Read the instruction carefully before you fill the scale.

In these booklets you will find some statements regarding the ways you think, behave, feel and act. Your first hand response is required. Please read and understand each item carefully and try to answer them to the best of what it applies to you. Put tick mark in the space allotted for the purpose. The options are Strongly Agree (SA), Agree (A), Uncertain (U), Disagree (D) and Strongly Disagree (SD). Attempt all items

SL	Items	SA	A	U	D	SD
1	Volunteering to work for a charity is what I like.					
2	There is nothing wrong in blackmailing others for my personal gain.					
3	Throwing rubbish in a dirty footpath is alright.					
4	I actively take part in the cleaning drive organized by my school					
5	I encourage children in the locality to respect the elders					
6	I convince people to take part in social work of the community					
7	I do not offer help to my Juniors in the school					
8	I participate in social awareness programmes.					
9	When players get injured, I have no pity on them					
10	I do not want to hurt anyone's sentiments.					
11	I console my friends who are not successful in their exam					
12	Weak students do not deserve extra classes/instructions					
13	I am sad when others are not shown kindness.					
14	I do not feel disturbed at others' bad luck.					
15	I have compassion for the orphans					

16	When people get injure badly, I feel hurt					
17	People who meet hardship do not require my kindness.					
18	I pretend to care about others more than I really do					
19	I can understand the problems of others					
20	I offer my seat to someone old because I know he/she needs it.					
21	People belonging to other religions are respected by me.					
22	I do not see things from the “other person’s” point of view.					
23	I know that my parents need my assistance					
24	I stand up for my friends when they are mistreated.					
25	I ask my friends to forgive those who do wrong to them					
26	I encourage my friend to fight for their rights					
27	I encourage my friends to be absent from classes					
28	I lend my notes to a fellow student					
29	Cheating during exam is ok.					
30	I do not care about the moral needs of other people					
31	I help only those who had helped me.					
32	My decisions are based on concern for the welfare of others					
33	When an elderly person crosses the street, I am ready to help him/her.					
34	When it comes to financial mater, I am honest					
35	Volunteering works have no value					
36	I do not want to sacrifice my time and energy for others					
37	I am not willing to lend my books to anyone					
38	I have helped a classmate with his project work.					
39	Donating my pocket money to the poor without being publicly known is what I like.					
40	I lend my helping hand to someone in need in any circumstance.					
41	I am happy when others praise me for my good works.					
42	I am concern for my friends because they care for me.					
43	Giving something to someone has its own reward					
44	Although my friends care for me, I do not care for them					
45	I feel like serving more when others recognize my service.					
46	I only help someone when there is a benefit to me					
47	I am not ready to help generous people					
48	I share my lunch packet with my classmates when they share with me.					
49	I am not ready to help the blind					
50	Differently able children need special care and concern					
51	Backward areas of the country need to be given more opportunities in studies.					
52	I refuse to offer my service to people who are sick					
53	I am angry when the rich take advantage of the poor.					
54	I appreciate the physician who takes less money from patients with low income					

55	I encourage students who are weak to study hard					
56	Students from rural areas need not be encouraged to study					
57	Working for my community is of great interest to me					
58	I volunteer to work after school hours for school programme.					
59	When a friend gets injured I stop whatever I am doing.					
60	I volunteer to clean the classroom.					
61	I do not want to donate my pocket money					
62	I spend my pocket money to buy a pen for a poor friend					
63	I sacrifice my personal desires for the sake of the community					
64	I do not give time for the social work.					

BIO DATA

Name : Laurence Kharluni
Father's Name : (Late) Anthony Behphat
Mother's Name : Rosina Kharluni
Sex : Male
Category : Schedule Tribe (ST)
Registration No.& Date : 2486 of 20/11/2014
Email ID : lkharluni@gmail.com

Educational Qualification

Examination	Year	Board/University	Percentage/Grade
SSLC/HSLC	1993	MBOSE	62%/First
HSSLC/Pre-University	1995	NEHU	64.1%/First
BA (English Honours)	2000	NEHU	49.75%/Second
MA (English)	2009	Madurai Kamaraj University	52.75/Second
B.Ed	2011	NEHU	61.8%/First
M.Ed	2013	NEHU	71%/ 'A'
NET (Education)	2014	UGC	
Ph. D Coursework	2015	NEHU	'A'
M.A. (Education)	2017	IGNOU	64%/First