# The Relationship between Parenting Styles, Peer Influence, Religiosity, Self-Esteem and Prosocial Behavior among Senior Secondary School Students of South West Shewa Zone

(Doctoral Dissertation)

Addis Ababa University

College of Education and Language Studies

School of Psychology

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Addis Ababa, Ethiopia

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(Doctoral Dissertation)

This Dissertation is submitted to the School of Psychology as part of the requirement for the Degree of Philosophy in Applied Social Psychology

## Declaration

I, the undersigned, declare that this dissertation is my original work and has not been previously presented at this or any other university. I also confirm that I have fully acknowledged all the resources and materials used in this dissertation.

**Candidate's Name:** Milki Lemesa Fura

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**Date:** _____

## Certificate

I, Professor Habtamu Wondimu, as the supervisor, hereby testify that this dissertation is the candidate's original work. It is submitted for final evaluation to the School of Psychology with my knowledge and approval.

**Supervisor's Name:** Professor Habtamu Wondimu

**Signature:** _____

**Date:** _____

# Approval Sheet

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College of Education and Language Studies

School of Psychology

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(Doctoral Dissertation)

Approved by the Board of Examiners

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## Dedication

This dissertation is dedicated to my entire families, particularly to the blessed memory of my grandmother, Bullukko Regassa. Her unwavering support and trust in me from my early childhood laid the foundation for my academic journey. Though she is no longer with us to see this dream realized, her wisdom and legacy of resilience continues to guide my path.

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ACRONYMS AND ABBREVIATIONS

SPSS- Statistical Packages for Social Sciences

PI- Peer influence

RI –Religious Influence

SE- Self –esteem

PSBT- Prosocial Behavior Tendencies

SWSZ- South West Shewa Zone

AMOS- Analysis of Moment Structures

EFA- Exploratory Factor Analysis

KMO-Kaiser-Meyer- Olkin

MSA- Measure of Sampling Adequacy

VIF-Variance Inflation Factor

## Abstract

This study examined the relationship that parenting styles, peer influence, religiosity and self-esteem have with students' prosocial behavior among senior secondary students of South West Shewa zone using a correlational design. Data were collected utilizing self-reported questionnaires and analyzed using both descriptive and inferential statistics. Through two-stage stratified random sampling, 353 participants completed the questionnaires. Prosocial behavior was moderate among the participants ($M$=3.36, $SD$=1.04). Participants scored higher on compliant prosocial behavior and lower on public dimension ($M$= 4.08, $SD$=1.06; $M$= 2.35, $SD$=.86) respectively. The evidence generated shows that students from permissive and authoritative parenting styles were better in their prosocial behavior. Acceptance parenting, peers, religiosity and self-esteem significantly correlated with and predicted prosocial behavior of the participants. Concerning variation in prosocial behavior by gender, the findings revealed that there was no statistically significant difference between male and female students in both overall and specific dimensions of prosociality. On the other hand, the results suggest that there was no significant variation by gender in all independent variables (e.g., parenting styles/dimensions, religiosity, peer influence and self-esteem). Regarding mediation, the indirect effect between acceptance parenting dimension and prosociality through self-esteem, religiosity and peer influence was significant (ab = 0.14, 95% CI [0.033, 0.102]), showing that peer influence mediates the relationship between acceptance parenting dimension and prosocial behavior. The findings underscore that acceptance parenting dimension, parenting styles (e.g., authoritative and permissive), positive peers, religiosity and self-esteem were important determinants in promoting participants prosociality.


*Keywords:* prosocial behavior, parenting dimensions/style, peer influence, self-esteem, religiosity

# Chapter One

# Introduction

## 1.1. Background of the Study

The word prosocial behavior is originally introduced into social sciences and used as an antonym of antisocial (Batson, 2012). While McDougall (1908) initially traced helping behaviors to an innate instinct, the modern definition has expanded beyond evolutionary mechanisms. For instance, (Batson, 2012; Olsson et al., 2021) conceptualized prosocial behavior as a broad spectrum of actions such as helping, comforting, donating, understanding, cooperating, and community services. In many literature, prosocial behavior is frequently defined as a behavior deliberately performed individually or in groups to serve others (e.g., Carlo, Crockett, Randall, & Roesch, 2007; Junaedah et al., 2020; Manesi et al., 2017; Schmitz et al., 2013). Individual's tendencies to help can broadly manifest across different situational type including altruistic, anonymous, compliant, emotional, dire and public (Carlo & Randall, 2002).

Extensive studies demonstrate that prosociality yields many positive effects including moral, psychological and social well-beings of the helpers, and the individuals being helped, resulting in lessening the tendencies of anti-social and aggressive behaviors (Eisenberg et al., 2013; Carlo & Padilla-Walker, 2020; Memmott-Elison et al., 2020; PadillaWalker & Carlo, 2014; Van der Graaff et al., 2018). According to Baumeister and Vohs (2007, as cited in UKEssays, 2018), prosocial behavior is important for the quality of close relationships and harmonious interactions with others. The harmonious relationship formed between individuals and groups further results in formation of social responsibility, moral behavior and collective helping behavior (Guo, 2017; Knickerbocker, 2003; Snyder & Dwyer, 2013).

Further, prosocial behavior is noted as a mechanism of maintaining social connectedness and reducing aggressive behaviors in the community (Paulus, 2018; Walsh, 2019). The tendency to help is prominent during adolescence because the period is characterized by distinctive developmental maturation shifts such as physical, mental, emotional and social skills, which can strengthen the intention to involve in prosocial activities (Padilla-Walker et al., 2018; Van der Graaff et al., 2018). However, studies show that antisocial behaviors (e.g., crime, violence, hate speech, bullying) continue to pose a social challenge among adolescents (Calvete & Orue, 2010; Farrington, 2005; López & Rodríguez-Arias, 2012; Martinez & Gras, 2007; Pahlavan & Andreu, 2009; Peña, 2010). This social challenge underscores the importance of fostering prosocial behavior and its driving forces. Promoting adolescents prosociality also directly reinforces the United Sustainable Development Goals for Good Health and Well-being (SDG 3) and Peace, Justice and Strong Institutions (SDG 16). Empirical evidence concerning SDG 3 suggests that participating in prosocial actions actively enhances mental health outcomes and builds collective emotional resilience among adolescents (Ahlawat & Garg, 2025; WHO, 2023). Prosociality also acts as a critical behavioral mechanism by prioritizing altruism over hostility for achieving SDG 16 (Zeeshan &Khan, 2024).

Regarding motivating forces of adolescents prosociality, various internal and external factors can be considered. For instance, empirical evidence suggests internal empathy, moral values and interpersonal responsibility for others rather than a desire for external rewards are driving factors (Liu, 2017; Llorca et al., 2017; Vairami et al., 2025). Parenting approaches as distal adolescent social environment is also critical to shape their behaviors including prosociality. According to Shyny (2017), parenting style is a global climate in which a family functions. It involves standard strategies and practices used by the parents including how they

respond and demand from their children in child-rearing process (Dike et al., 2023; Kuppens & Ceulemans, 2019).

In most studies, the role of parents in the socialization of children has been studied using a western popular approach proposed by Baumrind 1967. This model originally has three parenting styles including authoritative, authoritarian and permissive parenting styles. However, in 1971, Baumrind added neglectful parenting style as a fourth dimension, grouping parents into four parenting styles based on their child-rearing patterns (Shyny, 2017). Later, Maccoby and Martin (1983) devised a conceptual structure viewing parenting styles as combinations of two parental dimensions: responsiveness/warmth and demandingness/control. The styles are therefore created determined by measuring parental dimensions (as acceptance and control), and categorizing into the four groups. Given that parenting dimensions and styles serve as a critical determinant of human behavior, the present study investigates their direct relationship with adolescent prosocial behavior and indirect relationship though self-esteem, religiosity and peer influence.

Several studies reported that parents are capable of setting models and they directly influence the prosocial norms of adolescents. For instance, previous studies showed that parenting practices influence the way children respond to prosociality, and parents who practice volunteering behavior have children who volunteer (McLellan & Youniss, 2003; Michalik, 2005). This phenomena demonstrates that the parenting environment serve as a critical mechanism to transfer prosocial behavior to individuals (Knafo & Plomin, 2006; Malti et al., 2009). The importance of parenting styles in adolescents' prosocial behavior appears to be in line with the concept of Bandura's social learning theory, which underscores the significance of observing, modeling and imitating social behaviors, and emotional reactions that result in behavioral change (Astray-Caneda, Busbee & Fanning, 2011; Bandura, 1977). Literature shows

that the authoritative parenting style is the most effective in influencing prosociality over other styles (Carlo et al., 2018; Dawood & Munir, 2020; Taferi, 2023; Padilla-Walker & Thompson, 2015; Temtmie & Tefera, 2020). This overlooks the importance of permissive parenting style, which is also characterize by high warmth, love and care with little strictness, especially in cultures like Ethiopia  that highly value close and affectionate family bonds.

The behavior of adolescents in the adolescence period is not only influenced by the parental environment, but is also extended to other social environments (e.g., peer influence). Both within and beyond the educational setting, interactions with friends or peers are important social environment for adolescents. In a situation of this nature, friendships, which in turn, influence their behaviors and beliefs, are formed.

Existing literature shows that peers play a crucial role in adolescent behavioral outcomes, especially during adolescence period as this stage is greatly influenced by peer interaction (Brown & Bakken, 2011). Studies show that adolescents who are connected to supportive peers engage in positive behavior more often than less supportive peers (Lee et al., 2017; Van Hoorn et al., 2016). As individuals in adolescence stage strive for new identities and share similar values, interests and behaviors, those who identify with positive friends have better psychological connection and see themselves as connected to and develop a sense of feel right (Liable & Carlo, 2004). Such positive peer connection could create opportunities for healthy behavioral functioning including prosocial behavior in adolescents.

Empirical evidence supports that the higher adolescents are in positive social connection and preferences, the lower they choose aggressive peers as their friends (Shin, 2017). In similar way, another study reported that emotional quality of a friendship and its regularity in interaction had relationship with a prosocial behavior (Barry & Wentzel, 2006). This signifies that a quality

of peer relationship is essential in determining adolescents' behaviors including prosocial behavior. Studies in the area reported a positive linkage between adolescents' developmental outcomes (e.g., mental well-being, self-esteem and positive peer interactions), and their prosocial engagement during the adolescence period (Barry & Wentzel, 2006; Do, Guassi Moreira & Telzer, 2017; Padilla-Walker, Fraser, Black & Bean, 2015). Therefore, it can be said that the constructive interaction between peers, and getting along with positive peers appear powerful social motives in influencing adolescents prosociality.

In addition to discovering self-identity, exploring new things, behaving within the standards of the society, meeting to a positive prenatal and peer prospects, self-esteem appears to be one of the most essential aspects of adolescents' developmental outcome (Karacic & Oreskovic, 2017). In literature, self-esteem is a concept used to explain the overall sense of value of a person toward oneself, affecting adolescents' behavioral activities. It refers to individuals' sense of worth or value for themselves (Chen & Ma, 2023). According to Dike, Owoh, Aondoakaa and Okechukwu (2023), self-esteem is an individual's subjective evaluation of their worth, encompassing combinations of beliefs about oneself as well as emotional states such as success, despair, pride, and shame. Self-esteem can be positive or negative evaluations toward oneself (Smith & Mackie, 2007).

Studies reported that elevated self-esteem and positive self-evaluation in adolescents yield positive behavioral outcomes including prosocial behavior (Almansour, 2023; McLeod & Uemura, 2012). As a psychological construct that reflects an individual's sense of self-worth, self-esteem serves as a critical determinant of adolescent behavior, exerting substantial and lasting impact on adaptive functioning within personal spaces and wider social environments

(Chen &Ma, 2023; Orth & Robins, 2022). Therefore, as one of the mental elements regulating human behavior, it is believed to be related with adolescents' prosocial behavior in this study.

Religion is also a common phenomenon evident in every culture regardless of variation in religious categories. Level of religiosity of the adolescents seems to play a vital role in their behavioral development and practices. It is believed that when a person is committed to one's own religious beliefs and practices, he/she more become kind, accommodating and generous. Scholars have suggested several reasons why religiosity might have an impact on adolescent positive behavior, particularly on prosocial behavior. On this point, studies indicate that frequent religious attendance and deeply held personal beliefs open opportunities and reinforce prosocial habits (Hardy & Carlo, 2005; Stolz et al., 2013). As also Hardy and Carlo (2005) stated, religiosity elements such as commitment, identification and involvement in religious activities have a potential to positively influence adolescents' positive behaviors, resulting moral order and competency in the community. Based on this ground, the importance of religiosity in adolescents' prosocial behavior is considered in this study.

Strengthening prosocial behavior in adolescents requires favorable social and personal environments. This could be achieved through understanding the effects of socialization agents (e.g., as defined in this study parenting style, peer influence) and personal values such as self-esteem and religiosity level of the adolescents in their prosocial behavior. Although some previous studies in the area investigated some factors that are related to prosocial behavior in children and adolescents, they didn't inadequately address the above mentioned variables. So far how adolescents perceive prosocial involvement and develop positive prosocial behavior is examined by some studies (e.g., Van der Graaff et al., 2018; Do et al., 2017; Shek et al., 2012); responsible factors including social and personal environments are yet researchable. According

to Furman and Sibthorp (2013), prosocial behavior is determined by both internal and external factors. However, the context might be different whether internal or external factors are more determining adolescents prosociality. For example, Liu (2017) stated that as prosocial behaviors are more acted in the public context rather than in private setting, the interactive and communicative environments of adolescents are important over internal factors.

Individuals' experiences with religion can also play a significant role in their lives and development. According to Afolabi (2014), religiosity is defined as a system of beliefs with certain rituals, practices, which are learned and demonstrated in places of worship. It reflects how much individuals actually believe and participate in religious system. Religiosity differs from spirituality, which refers to how individuals respond to life experiences, showing one needs not engage in any formal religious activities to be spiritual, whereas religiosity may be an expression of spirituality, but not guaranteed it (Zullig, Ward & Horn, 2006).

Scholars have long considered religiosity to be an important determinant of individual, social, economic and political phenomena, suggesting its linkage with positive behaviors (Ahmed, 2008; Ahmed & Salas, 2008). Adherence to religious norms and principles mostly promote positive behaviors (Gervais, 2014). As one of the positive behaviors, prosociality is believed to be associated with individuals' religiosity level (Tamir et al., 2020). In literature, there are ample evidences supporting that people who are better in conveying their religious beliefs are also better in their self-control, moral values, compliance to social norms, and prosociality (Baumeister et al., 2010; McCullough &Willoughby, 2009; Hall et al., 2015; Putnam, 2000). Therefore, as already indicated in literature, religiosity is important in individuals' prosocial behavior, which suggests investigation in the current setting.

Complementing these drivers, gender, which is a social construct is also believed to be an influential factor to determine adolescents' prosociality. It is a socially constructed variable, appearing to influence human behavior (APA, 2012; Dittman, Sprajcer & Turley, 2022; Manandhar et al., 2018). Literature is inconsistent in establishing whether males or females are better in prosociality. Some studies (e.g., Carlo & Randall, 2002; Jaffee & Hyde, 2000; Nielson et al., 2017; Tsehay et al., 2014; Xiao, Hashi, Korous & Eisenberg, 2019) reported females are better in prosocial behavior, whereas studies (e.g., Abdullahi & Kumar, 2016; Barry, Lui & Anderson, 2017; Chadha & Misra, 2006; Solomon, 2015) have reported non-significant difference in prosocial behavior by gender. Therefore, the discrepancies in findings regarding gender warrant further empirical investigation.

Given that humans are social being that cannot live alone without getting help from, and giving help to one another, establishing social interaction that builds such tendency is essential (Faturochman, 2006). However, several studies showed that there has been increasing loss of prosocial behavior, particularly when it is not well managed (Green, 2013; Hamid, Ahmad & Mahzan, 2016). Albeit, some studies (e.g., Demesse, 2021; Emagnaw & Hong, 2018; Mohamed, 2022; Taferi, 2023; Tesfaye, 2022; Winchiro, 2017) are available concerning civic engagement, volunteering behavior, altruism etc in Ethiopia, they focused on direct associations of variables and didn't address the mediating roles of peer influence, self-esteem and religiosity between parenting dimensions and prosocial behavior. This shows a notable research gap regarding the contributions of the aforementioned variables to prosociality. Therefore, as the contextual empirical evidence is very important to comprehend how adolescents' prosocial behavior is influenced, this work investigated the relationships parenting dimensions; positive peer influence, self-esteem and religiosity have with the prosocial behavior of adolescents.

## 1.2. Statement of the Problem

Prosocial behavior has generally been documented as a multidimensional construct involving an intention of doing good for others (Padilla-Walker & Carlo, 2014). When effectively leveraged, it has several positive impacts on the wellbeing of individuals and the society (Putnam, 2000; FeldmanHall et al., 2015; Flynn, 2015; Hui et al. 2020; Nelson Coffey et al., 2017). It also lessens deficit behaviors (Dovidio et al., 2006). As an energetic age group, adolescents are more expected to be part of this behavior (Eisenberg et al., 2015; Padilla-Walker &Carlo, 2023).

While studies indicate that adolescents report participating in prosocial behaviors, currently the situation is different in the society both in the world and Ethiopian contexts, reflecting the opposite tendencies over prosociality (Beharu, 2024; Demelash et al., 2024; Girma, 2017; Mbuthia et al.,2023; Ogunwale, 2021; Seid, Fentahun & Arba 2022; Snyder et al., 2012). Over the years, adolescent literature overemphasized deficit behaviors across global, continental and domestic (Álvarez-García et al., 2019; Cook et al., 2015; Gardner et al., 2015; Greenberg & Lippold 2013; Ojo, 2015; Sawyer et al., 2015; Sijtsema & Lindenberg, 2018). Particularly, in Ethiopia, several studies highlighted antisocial behaviors (e.g., Anteaneh et al., 2012; Dargie, 2001; Getachew & Mekonnin, 2007, as cited in Girma et al., 2019; Girma, 2017; Sitota & Tefera, 2024) by frequently overlooking prosocial side. This situation remains a critical imbalance in how researchers investigate the social and personal forces that shape adolescent positive development, leaving prosocial behaviors under-studied.

In Ethiopian context, prosociality is deeply rooted in communal practice and cultural collectivism, where traditional social networks and cooperative frameworks naturally dictate

helping behaviors during requests, economic pressures and social crisis in the society. For instance, indigenous structures such as Equb, Iddir and Debo serve as vital informal social protection mechanisms that change empathetic feelings and moral values into everyday communal practices across generations. Study in this context supports that the traditional and structural institutional vehicle of helping behavior is religious values that manifest practically through traditional, faith-tied community self-help organizations (Woubishet, 2005). While individual actions are the building block of prosocial behavior, they do not act in the vacuum and the cultural context channels those ations into sustained collective good, coopration and harmony, which define prosocial behavior.

According to Yayeh & Demissie (2025), Equb is a rotating saving; protective and cooperative prosocial action that uses a cooperative framework built on mutual trust and shared economic goals. Iddir on the other hand, represents a response to crisis or emotional distress and is a form of compliant prosocial action during bereavement in the community (Pankhurst &Mariam, 2000). Debo is also a high cost physical labor altruistically exchanged among the group members to ensure tangible assistance to solve a practical problem in the farm field (CGIAR, 2023).

In literature, these indigenous practices are connected to the nature of Ethiopian collective culture characterized by cooperation, hospitality, friendship, interdependence, respect for hierarchy, conforming to authorities, and respect that are cultured in the family system (Abesha, 2012; Baker & Campbell, 2016; Hofstede, 1983; Poluha, 2007; Ringness & Gander, 1974; Teferra et al., 1996; Triandis & Gelfand, 1998). According to Winchiro (2017), such interdependence promotes a strong orientation toward collective welfare over individualistic gain by directly reinforcing cooperative values and prosocial tendencies in individuals.

Despite all these good social phenomena in our context, it is common to see deficit behaviors in adolescents than prosocial behaviors. In Ethiopia, studies focusing on prosocial behavior are also scarce, and only a few of educational researches have looked at the prosocial side (e.g., Habtegiorgis, 1994; Solomon, 2015; Temtmie & Tefera, 2020; Tsehay et al., 2014) than antisocial behavior. Regarding existing literature on adolescents prosociality in Ethiopia, the current researcher searched in credible journals, websites and reputable libraries including the J. F. Kennedy Library of Addis Ababa University, and Abrehot public Library in Addis Ababa, but the area is overlooked and has not been adequately emphasized compared to antisocial behaviors.

The contributions of social and psychological factors (e.g., defined in this study: parenting approach, positive peer influences, religiosity and self-esteem) to prosocial behavior have not been thoroughly explored. Moreover, in the local studies, whether the effect of parenting dimensions to prosocial behavior is mediated by self-esteem, peer influence and religiosity of adolescents has not been sufficiently considered. Consequently, a significant gap exists regarding how social forces like parenting dimension and peer influence, and personal forces like self-esteem and religiosity interact to promote adolescent prosocial behavior. Therefore, the primary purpose of this study is to examine the contributions of parenting style, positive peer influence, religiosity and self-esteem to the prosocial thoughts, feelings and actions of Ethiopian adolescents, particularly in South West Shewa Zone. The study specifically tried to answer the following basic research questions.

## 1.3. Research Questions

- What is the level of prosocial behavior in adolescents?
- What are the major prosocial behaviors salient to adolescents in South West Shewa Zone?

- Are there statistically significant relationships between parenting styles, peer influence, religiosity, self-esteem and prosocial behavior?
- To what extent do parenting styles, peer influence, religiosity and self-esteem influence the existence of prosocial behavior?
- Are there statistically significant variations in parenting styles, peer influence, religiosity, self-esteem and prosocial behavior due to gender?
- Is the relationship between parenting dimensions and prosocial behavior significantly mediated by adolescents' self-esteem, peer influence and religiosity?

## 1.4. Objective of the Study

### 1.4.1. General Objective

The main objective of this study was to examine the relationship parenting style, peer influence, religiosity and self-esteem have with prosocial behavior in the case of senior secondary school students in South West Shewa Zone.

### 1.4.2. Specific Objectives

More specifically, the study intended:

- To describe students' level of prosocial behavior.
- To identify the major prosocial behaviors practiced in students in South West Shewa Zone.
- To examine the relationships between parenting dimensions/styles, peer influence, religiosity and prosocial behavior.
- To identify which of the independent variables (parenting styles, peer influence, religiosity and self-esteem) is the strongest predictor of prosocial behavior among the students.

- To examine variations in parenting dimensions/styles, peer influence, religiosity, self-esteem and prosocial behavior by gender.
- To examine whether the relationship between parenting dimensions/ styles and prosocial behavior is mediated by students' peer influence, religiosity, and self-esteem.

## 1.5. Scope of the Study

The study focused on senior secondary school students because they possess cognitive maturation, communication skills, social skills and stable identity than junior students. Conceptually, the study focused on the linkage that prosocial behavior of the students has with some selected factors such as parenting style, positive peer influence, religiosity and self-esteem. With regards to geographical scope, this research was delimited to South West Shewa Zone.

## 1.6. Significance of the study

This study intended to address the level of prosociality, and its relationship with parenting style, positive peer influence, religiosity and self-esteem in senior secondary school students in South West Shewa Zone. This study has a contextual relevance, and adds knowledge to the scarce literature about the influence of parenting approaches (e.g., authoritative, permissive, authoritarian, neglectful), religiosity, peers and self-esteem on students' prosociality. The findings from this study will also contribute to the policy and practical strategies to be used in promoting prosocial behavior, and reducing antisocial behaviors in adolescents. The findings from this study will also be relevant in defining links of prosocial tendencies, and used for further methodological and theoretical considerations in the future social psychological researches.

### 1.7.Operational Definitions of the Study Variables

In this study, the following basic terms are defined based on their function and/or as used in the context of this research.

**Prosocial behavior:** refers to behavior including anonymous, dire, altruism, emotional, public and compliant as measured by Prosocial Tendencies Measure-PTM-R (Carlo & Rondall, 2002; Carlo et al., 2003).

**Parental dimensions/ parenting style:** it is adolescents' thought and feeling toward their parents' concerning their parenting, and how this influences their behavior (s). It is defined as measured by the Parenting Styles Scale consisting two parenting dimensions Acceptance/involvement and strictness/supervision/control (Lamborn, Mounts, Steinbberg & Dornbusch, 1991). The data obtained on these two parenting dimensions is further categorized into four parenting styles such as authoritative, authoritarian, permissive and neglectful.

**Peer Influence**: it is about positive socialization of peers, how positive peers' thoughts, feelings and behaviors contributed to adolescents 'prosocial behavior. It is defined as measured by the Peer Influence Scale which is a sub-scale of Learner's Aggressive Questionnaire (Gasa, 2005). This subscale consists 14 items that measure positive peer socialization.

**Religiosity Influence:** the contribution of adolescents 'religiosity to prosocial behavior as measured by religiosity scale used by Hardy and Carlo (2005). Religiosity is an internal psychological state consisting of religious commitment, involvement and identity.

**Self-Esteem*:*** It is about adolescents 'self-worth and evaluation as measured by Rosenberg's Self-esteem Scale that was developed in 1965. The scale is used to assess global self-esteem, and it is one of the most widely used self-esteem tests among psychologists.

# Chapter Two

# Review of Related Literature

In this part of the study, the theoretical perspective of prosociality in general and empirical findings on this variable is presented from the literature. First, the concept of prosocial behavior with its components is presented. Second, theoretical models of prosocial behavior, parenting style, peer influence, religiosity and self-esteem are presented. Third, empirical findings on the prosocial behavior and its links including parenting, peer influence, religiosity and self-esteem are presented. It is to be noted that three articles, emanating from this study are already published and hence the literature review and the size of the manuscript are reduced to avoid redundancy.

## 2.1. Literature Search Strategy

Relevant literatures associated to the objectives of this study are identified through the means of online electronic search. Articles in the well-known data basis such as African Journal Online (AJOL), PsychINFO, PubMed, ScienceDirect, SCOPUS, Web of Science, Google Scholar and ResearchGate are used. Additionally, print copies of books and articles are used. While selecting the articles, the researcher read the abstract and conclusion of the studies first, and if he found the article is relevant to the current study, entire article is carefully red. The researcher also cited some literature from 1960's to 1990's. This is to acknowledge the original works and definitions of the concepts that are actually in use.

## 2.2. The Concept of Prosocial Behavior

It is important to first understand what prosocial behavior is in general and in adolescents' context in particular in order to understand how major factors could contribute to the enhancement of prosocial behavior. In its original meaning, it is regarded as antonym of antisocial behavior. However, in academic and research concern, a number of scholars have agreed that prosocial behaviors are behaviors that benefit others. It is believed that these prosocial behaviors can be found and become strong when children start to think and behave in accordance with a moral conscience. Prosocial behavior is thus, a central part of morality in which much of our interactive morality involves giving attention and weight to the interests and desires of others. Scholars defined these behaviors including different dimensions. For instance, according to Weinstein and Ryan (2014), prosocial behaviors are those that are meant to protect or further the welfare of others (Schwartz & Bilsky, 1990), helpful acts (Batson, 1998), formal volunteering (Foster, Mourato, Pearce & Ozdemiroglu, 2001), and generous giving of resources, including money (Frey & Meier, 2004; Piliavin & Callero, 1991). Others like Penner, Dovidio, Piliavin and Schroeder (2005) also defined prosocial behaviors as acts that are generally beneficial to other people resulting from tender emotions instigated from a variety of sources, such as biological, motivational, cognitive, or social processes.

In terms of its components, prosocial behavior refers to actions that benefit others, encompassing cooperation, sharing, helping, and caring (Penner et al., 2005 as cited in Dou, Li Wang, Li, Liang & Nie, 2019). Therefore, these definitions are important in leading the current researcher to review both theoretical and empirical evidences that explain the concept of prosocial behavior among adolescents as presented below.

## 2.3. Theoretical Review

Based on the framework designed in this study to show how factors such as parenting, peer influence, religiosity and self-esteem are related to the promotion of prosocial behavior, some theories are reviewed to explain these factors. In addition to theories in the mainstream psychology about human behavior, some relevant theories of social psychology are also connected to give insight on the concept of prosocial behavior.

### 2.3.1. Theoretical Models of Prosocial Behavior

A wide range of theories have been discussed in the context of prosocial behavior especially from the perspectives of developmental psychology. The earlier well-established developmental theories for example include psychoanalytic theory, cognitive theory, psychosocial theory, moral theory and social cognitive theory. These are major influential theories in the development and functioning of human behavior. For instance, Sigmund Freud's Psychoanalytic Theory has an explanation to human behaviors in which this theory enlightens the development of prosocial dispositions. According to psychoanalytic theory, among the three major structures of personality (id, ego, and superego), the most relevant to an understanding of prosocial involvement is the superego. It reflects the norms, values and standards of society and sets one's moral principles. The role of superego in the process of personality development is of substantial significance as this is the process for individuals to internalize humanistic values and patterns of prosocial participation (Freud, 1961 as cited in Lam, 2012).

Piaget also contributed to the understanding of children's cognitive development. The cognitive developmental theory states that positive behavior become strong with an increase in

age of the children. According to Piaget (1948 cited in Baudinet, 2013) prosocial development follows a strict developmental sequence, with a gradual transition from one stage to the other resulting in the second phase succeeding the first. Other scholars in this area suggested that the increase of generosity with age is mainly due to children's growing capacities of decentration and perspective taking (Bar-Tal, Raviv, & Leiser, 1980; Eisenberg & Miller, 1987 as cited in Lourenço, 2004). Research indicates that forms of prosociality such as civic engagement and volunteering emerge as adolescents become more socially independent. For instance, participating in church groups, playing or coaching sports, and involvement in school clubs are part of prosocial activity (Sokol, Hammond, Kuebli, & Sweetman, 2015).

On the other hand, Kohlberg's (1964) theory of moral development is based on the earlier work of Piaget's cognitive development. This theory explains how cognitive development and relevant social experiences underlie the growth of moral or prosocial reasoning through three levels and six stages. For Kohlberg, moral reasoning is defined as the process of judging right and wrong and is regarded as the force behind moral action (Kohlberg, 1984). This reasoning is developed with age. That is, as children progress to adolescence, their moral reasoning changes from the self- focused or self-centered status/mentality (what feels good to me is right) to a stance in which social approval guides both reasoning about justice and about doing good. Moral reasoning becomes more sophisticated as a child reaches adolescence, an empathic orientation stage in which they often express sympathetic concerns for others. The empathic orientation could further develop into the internalized value orientation stage in late adolescence or early adulthood, which is defined as an orientation to an internalized responsibility, duty, or need to

uphold the laws and accepted norms or values (Eisenberg, 1986 & Krebs, 1970; as cited in Frank, Andrew, Chewtyn & Daniel, 2012).

Erikson's Psychosocial Theory can also be used to explain human behaviors. The concept of identity is proposed by Erikson (1968). He defined identity as a fundamental organizing principle which develops constantly throughout the lifespan. This identity provides a sense of continuity within the self and in interaction with others (self-sameness), as well as a frame to differentiate between self and others (uniqueness) which allows the individual to function autonomously from others. Erikson's concept of identity was particularly focused on adolescents' development. The main and most important developmental tasks for adolescents are to solve the identity versus role confusion crisis, construct their own unique sense of identity, and find the social environment where they can belong to and create meaningful relationships with other people (Chen, Lay, Wu, & Yao, 2007; Erikson, 1968 as cited in Ragelienė, 2016).

Moreover, social psychology theories including the need to belong theory, self-categorization theory (SCT) and social-cognitive theory are presented in view of prosocial behavior and related factors. As the need to belong theory asserts, people have a fundamental need for belonging (Baumeister and Leary 1995 as cited in Yang, Guo, Kou & Liu, 2019). The need of belonging in human beings is the intrinsic desire to develop and maintain a positive, durable, and noteworthy interpersonal relationship with another human being. In order to fulfill this intrinsic desire, a subject needs periodic and constant pleasant interactions with a particular individual or groups of people. These interactions are frequent, stable, and continuously care for each other's welfare. It claims that humans 'minimum need for forming and maintaining social relationships causes human behavior, emotion and cognition. The need to belong to groups

makes people follow social norms and to act accordingly to social standards, in order to feel accepted and integrated into the community. According to the need-to belong theory thus, parents would teach social norms and skills of prosocial behavior in order to feel part of the community (Baumeister, 2012). Therefore, in this concept, belongingness is the human motivational and emotional need to be an accepted member of a group whether it is family, friends, co-workers, religion, or something else, people tend to have an 'inherent desire to belong and be an important part of something greater than themselves. This implies a relationship that is greater than simple acquaintance or familiarity. In this sense, it becomes the need to belong is the need to give and receive attention to and from others.

Self-categorization theory in social psychology that has had and having, a significant impact in areas such as political behavior and political psychology such as political values, partisan identity, leadership, collective action, discrimination, social cohesion, intergroup political conflict and co-operation, negotiation (Sindic & Condor, 2014). Turner and Reynolds (2011) clarify that the self-categorization theory explains in what circumstances people perceive themselves as individuals and as members of groups, and its repercussions. Groups change people ‘s behaviors and attitudes in accordance to expected behaviors in order to maintain their membership in the group. The group impact on member ‘s attitudes and behavior depends on the level of internalization of belonging to a group. Social categorization theory postulates that people perceive themselves as unique individuals and as members of groups, and that these two selves are equally valid expressions of the self. Self-categorization theory begins with the assumption that individuals self-identify with a particular group and this identification is highly

influenced by peers, such that identifying peer group characteristics, activities, and behaviors are critical to understanding the individual adolescent (Turner, 1985 as cited in Scales, 2007).

Social-cognitive learning theory which is used in this study as guiding lens, states that norms, attitudes, expectations, actions and beliefs arise from an interaction with the cultural or social environment around an individual. Albert Bandura, the leading theorist in social learning theory, proposed that people learn from their observations of individuals or models. He believed on the idea of reciprocal determinism, meaning the environment, cognitive and one ‘s behaviors cause each other (Bandura, 1977). In addition, this theory explains that an individual ‘s functioning and behaviors are the outcome of a dynamic interaction of three important factors. These are: (i) A person’s behavior; (ii) Personal factors (e.g., thoughts, beliefs, feelings etc.); and (iii) environmental conditions. These three factors together exert mutual influences on one another that Bandura calls this reciprocal interaction as *reciprocal determinism* and according to him, it is triadic in form. Therefore, it is possible to explain human thoughts and behaviors using several theories. The need to belong theory states that people has need for establishing and sustaining social relationships, actions, behavior and cognition has conception to explain that adolescents have need to participate in social behaviors. In addition, self-categorization theory is also believed that people’s behaviors and attitudes are presented in accordance to expected behaviors in order to conserve their membership in the group while social learning theory deals with norms, attitudes, expectations, actions and beliefs arise from an interaction of people with the cultural or social environment around them.

More specifically, the current researcher motivated to use social cognitive learning theory for explanations of social and personal environments to the adolescents’ engagement in the

positive behaviors like prosocial behavior. In social learning theory, modeling is important to learn and behave in that way. Social learning theory also suggests that if you want to know why people act prosocial way, you should consider their learning history and observational learning or modeling that comes from watching the actions of others. This assumption thus, reflects the importance of self- rewards than external rewards. Considerable research has supported a social learning explanation of prosocial behavior (e.g., Bandura, 1977; Rushton, 1980, as cited in Millon, Lerner & Weiner, 2003). So, parents, peers, and religiosity principles and practices can be models for adolescents, and prosocial behavior could be enhanced among adolescents when these factors positively contributed to prosociality and adolescents developed concern for the needs of others through such activities as engaging in volunteer work or being caring and helpful toward others without any expected returns for personal satisfactions. In addition, as already stated by need to belong theory and self-categorization theory, adolescents can participate in positive behaviors because they want to practice and continue social relationships in the community, think as they are members of the group, perceive themselves as individuals and as members of groups, and believe in its repercussions on the community.

### 2.3.2. Theoretical Conceptualization of Parenting Styles, Peer Influence, Self-Esteem and Religiosity

#### 2.3.2.1. Parenting Styles/Dimensions

Although many theories are available on parenting styles, basically the initial theoretical model of parenting style was postulated by Baumrind (1966, 1971, & 1991). She divided parenting styles into three main categories such as authoritarian- firm but not warm; permissive- warm but not firm; and authoritative- warm and firm. These dimensions' focus on four important

features of family functioning, namely, nurturance or warmth, firmness and clarity of control, level of maturity demands, and degree of communication between parent and the child. Later, building up on Baumrind's conceptualization of parenting styles, Maccoby & Martin (1983) revised her typologies and proposed a variation of Baumrind's categorization in which parents are classified based on two dimensions. These are the degree of demand and control and the degree of acceptance/rejection. According to these authors, these two dimensions together create four types of parenting styles, three of which are quite similar to Baumrind's original classification and conceptualization of parenting styles. Thus, their conceptualization adds the fourth type, the neglecting or uninvolved parenting style (i.e., neither warm nor firm). According to Baumrind (1966, 1971) and Maccoby & Martin (1983), the four types of parenting styles are therefore, authoritative, authoritarian, permissive (indulgent) and neglecting or uninvolved.

Another theory linked to parenting style is an attachment theory. Attachment is a concept that has been traditionally studied regarding parent-child relationships (Nickerson & Nagle, 2005). According to attachment theory, it is an emotional bond that is developed in early childhood based on how the primary caregiver (parent) responds to the needs of the baby. The early bonding experiences established with the parents can thus, influence adolescents' emotional development and their relationship skills with other social group including their peer group (Oldfield, Humphrey & Hebron, 2016). Thus, from this conceptualization, it is possible to say the early patterns of interactions and secure attachment with their parents is important guide for adolescents' attitudes, behaviors, and even expectations about others. With this line of thought, Gorrese and Ruggieri (2012) state that individuals who developed a secure attachment to their parents are more likely to establish a secure attachment bond with their peers and social environments. Therefore, the secure relationship between adolescents and parents, and the

positive ways of parenting their children can contribute directly or indirectly to the prosocial behaviors which need further studies.

#### 2.3.2.2.Theoretical Conceptualization of Self-esteem

To have better understanding of self-esteem is to conceptualize how different scholars defined it. One way of understanding is through Rosenberg's concept. For Rosenberg, self-esteem is the negative or positive attitude that individuals have of themselves and people's overall feelings of acceptance and respect (Rosenberg, 1979 as cited in Stets & Burke, 2014). Others on the other hand describe that self-esteem is to refer most commonly to an individual's overall positive evaluation of the self (Gecas 1982; Rosenberg 1990; Rosenberg et al. 1995 cited in Cast & Burke, 2002). It has been also conceptualized as an outcome, motive, and buffer, but there is no overall theory of self-esteem, and most of the time it is found in theory of self-concept (Cast & Burke, 2002). It is hypothesized as a part of the self-concept and self-esteem is one of the most important parts of the self-concept. According to Hewitt (2002) for instance, self-esteem is a social construction and in part relates to how people perceive themselves in reference to the standards of their group, family, friends, and self. In addition, within the context of identity theory, we can also have better understanding on self-esteem. In identity theory, the verification of different bases of identities is linked to different self-esteem outcomes (Burke & Stets, 2009).

The verification of social/group identities provides a general sense of being found worthy and valuable, the verification of role identities provides a sense of efficacy or competency, and the verification of person identities generates the feeling that one is being one 's true self. The sociometer theory of esteem where esteem acts as an interpersonal monitor (sociometer) that

warns individuals when they are at risk of being excluded by others is also one concept through which we can understand self-esteem (Leary & Baumeister, 2000). With regards to self-esteem establishment, research generally supports the view that secure attachments with parents in infancy, childhood, and adolescence are linked with positive representations of the self, including high levels of self-esteem and self-efficacy (Arbona & Power, 2003; Thompson, 1999 as cited in Laible, Carlo, and Roesch, 2004). From the above views, self-esteem has important contribution to the development of positive social behaviors (e.g., prosocial behavior).

#### 2.3.2.3.Theoretical Conceptualization of Peer influence

According to Little (2020), peers are a group of people who have similar interests, age, background, or social status, serve as an important source of information, feedback, and support to individuals as they develop a sense of self. This group helps to socialize an individual by reinforcing or punishing behaviors or interpersonal interactions. Throughout the transition from childhood to adolescence, children become more independent from their parents and turn to their peers for different social supports (Lee & Park, 2017). Thus, peers are essential during one's social development, particularly during adolescence period. In fact, it is not concluded that peer influence is unidirectional (e.g., positive behaviors), because peers can encourage both harmful and healthy behaviors (Brown, Bakken, Ameringer & Mahon, 2008).

Attachment theory suggested that adolescence stage is a critical time in which peer relationships become more important as a predictor of different positive social, emotional and behavioral outcomes. Healthy functioning and positive peer relationships are directly linked to adolescents' ability to rationally empathize with others and have concern for others (Schoeps,

Mo´naco, Cotolı´& Montoya-Castilla, 2020). In addition to adolescent peers' attachment theoretical perspective, social learning theory is another looking lens of how adolescents are influenced by their peers. According to social learning theory, adolescents learn social behaviors from valued peers and their peers 'reinforcement of displayed behavior (Bandura, 1986 cited in Hoorn, Dijk, Meuwese, Rieffe & Crone, 2014). These behavioral display and reinforcement are processes through which adolescents acquire social norms from the peer group (Brown et al., 2008). In this sense, it is believable that peers are considered as a source of psychosocial development and social model for adolescents 'way of behaving including prosocial behaviors.

#### 2.3.2.4. Theoretical Conceptualization of Religiosity

The concepts of religiosity and spirituality seem to be overlapping and are often used interchangeably. They can be considered as closely related constructs, but the two concepts are different. Some authors assert that spirituality involves a personal journey for meaning in life, while religiosity involves commitment, involvement and identification with religion which is organized entity with rituals and practices focusing on a higher power (Arrey, Bilsen, Lacor & Deschepper, 2016; Tanyi, 2002). In spirituality, religiosity is not a precondition, and one can be strong in spirituality without being involved and identified with religious groups.

In its essence, religiosity is associated with institutional organization and affiliation, adherence to moral beliefs, dogma, or creed, and ritualistic participation in organized or individual worship or holy practices (Boswell & Boswell-Ford, 2010; Hardy & Carlo, 2005). Religiosity can also include different factors such as individual religious beliefs and practices (Barry, Nelson, Davarya & Urry, 2010; Miller & Thoresen, 2003). Scholars in this area have recognized religiosity as a commitment to, belongingness to and involvement in a system of

religious belief, or individual's relationship with a particular faith tradition or doctrine about a divine other or supernatural power. On the other hand, spirituality is more of an individual practice, and has to do with having a sense of peace and purpose, and also related to the process of developing beliefs around the meaning of life and connection with others, even without any set of religious values. According to Benson, Roehlkepartain and Rude (2003) spirituality is known as the intrinsic human capacity for self-transcendence-transcending (or rising above) the self and relating to that which is greater than the self; and which the self is rooted in something greater than the self, including the sacred and which motivates the search for connectedness, meaning, purpose, and contribution. Joseph et al., (2017) also described spirituality as a more general, unstructured, personalized, and naturally occurring phenomenon, where a person seeks connectedness between him/herself and a higher power or purpose.

The concept of religiosity is also found in the system of beliefs. According to Afolabi (2014), it can be defined as a system of beliefs with certain rituals, practices, which are learned and demonstrated in places of worship. Religiosity differs from spirituality in that spirituality is considered as a way of living which predetermines how individuals respond to life experiences. One need not engage in any formal religious activities to be spiritual, and spirituality can be used as a flexible and more general term. Additionally, while religiosity may be an expression of spirituality, it is not guaranteed that all religious people are spiritual (Zullig, Ward & Horn, 2006). Other scholars also conceptualized the two constructs in different ways, in which religiosity is viewed as a social phenomenon while spirituality placed on an individual level of religious experience (Miller & Thoresen, 2003). Thus, adolescents' religious orientations and degrees of involvement or commitment to their religion's principles and practices along their belief system can contribute the adolescents 'prosocial behavior. Therefore, it is clear to

understand from the above conceptualization of the two concepts that although all religions emphasize spiritualism as being part of faith, people can be ‘spiritual’ without being religious or a member of an organized religion.

Generally, as depicted in the above paragraphs, some theoretical lens on personal and social environments have described. Particularly, theoretical conceptualization on parenting styles, self-esteem, peer influence and religiosity as predictors of prosocial behavior have discussed.

## 2.4. Prior Studies on Prosocial Behavior, Parenting Styles, Peer Influence, Self-Esteem and Religiosity

This part contains existing findings related to the association between prosocial behaviors and related factors including parenting style, peer influence, self-esteem and religiosity.

### 2.4.1. Prosocial Behavior and Parenting Styles

Prosocial behavior is central to human social functioning. People are motivated to go beyond their own self-interest and act in a manner that benefits others for different reasons. Personal factors and social factors would be taken as responsible factors among others in producing people's behavior. For example, a social cognitive approach that emphasizing the manner in which relationship cognitions guide person’s behavior like prosocial activity can be cited (Rusbult & Agnew, 2010). The beginning of such healthy behavioral development is undeniably at home, where much time of the child is consumed with the parents. At this level, much is expected from the parents although later transition from childhood to adolescents comes with new additional social interactions like peers, schools, churches/mosques and various

responsibilities. In particular, the role of positive parenting styles (including parental warmth and involvement) in adolescents' behavioral outcomes and engagement in positive behaviors is then importantly considered.

Since the time when the study of prosocial behavior augmented in the 1960's, there have been several enquiries as to the factors that install prosocial behavior in children and adults. Although different scholars have their own view and debate, it should be noted that several factors including biological, psychological and social environments are responsible for socialization and development of the adolescents. However, for this specific study, literature on prosocial behavior in view of parenting style, peers and self-esteem was looked in the next section. Although less is known whether parents played their role in instilling positive behaviors in adolescents as they are primary socialization agents at early stage during childhood, parents should support their children and adolescents in a constructive way. If they have weak relationship, do not strengthen positive behavior and do not effectively control antisocial behavior, adolescents are more likely to experience inappropriate behaviors.

For the long time, the dominant paradigm for studying parental socialization in child's behavior has been through the examination of parenting styles, or the usual patterns of control, responsiveness, warmth, and punishment that parents use most often across contexts and over time in managing their children's behavior (Grusec & Hastings, 2007). However, research linking prosocial behaviors and parenting style is scarce, particularly during adolescence stage. There is less study on parental perceptions and behavioral practices in fostering prosocial behaviors. Therefore, much of the reviews of the empirical literature in this study were focusing on different aspects of these concepts.

The way parents oriented their adolescents whether in a constructive or unconstructive manners seems to influence adolescents 'behavior, perception and emotion. According to Darling and Steinberg (1993), parenting styles are to mean the emotional atmospheres shaped by parental attitudes during the process of children socialization. Instilling prosocial behaviors in adolescents is therefore, a constructive way by which parents play a vital role in promoting these behaviors. Studies found that adolescents 'perceptions of their parents 'close and warm involvement in their lives has predicted higher levels of engaging in voluntary work in early adulthood (Zaff et al., 2003), and such pro-social behavior is a positive action that is used to benefit others (Carlo & Randall, 2002). In fact, it is not expected all parenting styles equally contributed to prosocial behavior the same way. Different parenting styles cannot produce equivalent outcomes in the cultivation of prosocial behavior. Among authoritative, authoritarian and permissive parentings, finding in different studies recommend that authoritative childrearing is the most effective in promoting prosociality (Penner et al., 2005).

Authoritative parenting is typically thought to be the best parenting style, because parents provide both support and strictness and this style is positively associated with positive social behavior in children and adolescents (Carlo et al., 2007; Eisenberg & Murphy, 1995; Hoffman, 2000). Authoritative parenting provides pro-social behavior by modeling other-oriented behavior that child may emulate, encouraging children to be more caring and make children more receptive, foster altruistic behavior for others (Hastings et al., 2000). In the study by Pratt, Hunsberger, Pancer and Alisat (2003) which analyzed the contribution of parenting styles to adolescent's prosocial development, the result indicated when adolescents perceived their parents more as authoritative, the prosocial behavior become strong.

On the other hand, authoritarian parents may undermine children's pro-social behavior by modeling a lack of concern for the needs of others (Hastings, 2000). Authoritarian parenting is characterized by a lack of concern for the children's needs, using hostility, parental rejection, and that may hinder in fostering pro-social and altruism in adolescents' life.

Previous studies found that the punitive and authoritarian parenting styles has been unrelated for mothers (Iannotti, Cummings, Pierrehumbert, Milano & Zahn-Waxler, 1992; Russell et al., 2003); and negatively related for fathers (Dekovic & Janssens, 1992; Hastings et al., 2000; Russell et al., 2003) to children's pro-social behavior and sympathy and this negative relation with sympathy may increase with age (Hastings et al., 2000).

Schaffer (1996) also found 5 types of parenting behavior that assists to cultivate prosocial behaviors. These are giving specific guidelines around the prosocial behavior desired; transmitting their belief in the guidelines by providing emotional cues; perceiving the child as being prosocial; modeling the desired behavior and lastly empathic and warm disposition displayed by the parent.

Researchers have examined the relationship among prosocial behaviors, parenting style and practices and sympathy. The study by Carlo et al., (2007) indicated the relation between parenting styles, parental practices, sympathy and prosocial behaviors in adolescents. The participants were 233 adolescents from public high schools of the United States. The authors found evidence that parenting practices were associated with adolescents 'prosocial behavior. Another study by Carlo, Mestre, Samper, Tur and Armenta (2011), asserts that parents are important in fostering pro-social behaviors in adolescents. In this study, 372 boys and 358 girls with a mean age of 10.84 years (*SD* = 1.57) at middle class community in Spain were participated. Across three successive years, participants completed measures of fathers 'and

mothers ‘warmth and strict control, sympathy, pro-social moral reasoning, and self- and peer reported pro-social behaviors. Results showed that parental warmth, sympathy, and pro-social moral reasoning were predictive of pro-social behaviors. There was also evidence for the direct association between parenting practices and sympathy and prosocial behaviors (Carlo, Hausmann, Christiansen & Randall, 2003; Eisenberg, Zhou & Koller, 2001).

There is a strong significant association between responsiveness, supportive and demanding, controlling nature of parents and adolescents’ pro-social behavior (Barber, Stolz & Olsen, 2005; Baumrind, 1991; Maccoby & Martin, 1983). Supportive parenting is characterized by high levels of parental warmth, positive affect and child centered orientation (Biringen & Robinson, 1991). In the correlational study by Clark and Ladd (2000); Liable et al., (2004) suggested that there is a linkage between parental warmth or affection with children’s prosocial characteristics.

Studies are available that parents serve as children’s primary socialization agents, particularly for moral development and prosocial behavior. According to Padilla-Walker et al, (2008), less is known regarding parental influences on prosocial outcomes during the transition to adolescence period. These authors examined how parent-child relationship quality was related to prosocial tendencies via emerging adults’ regulation of prosocial values. In this study, 228 undergraduate students (ranging from 18 to 25 years; 90% European American) and their mothers (ranging from 38 to 59 years) from four locations across the United States were included. Path analyses using structural equation modeling revealed that mother-child relationship quality was related to emerging adults’ regulation of prosocial values, which was, in turn, related to emerging adults’ prosocial tendencies. Specifically, emerging adults who reported higher levels of internal regulation of prosocial values were more likely to report prosocial

tendencies that de-emphasized themselves, and were less likely to report prosocial tendencies for the approval of others.

The socialization theorists (Bandura, 1986; Hoffman, 2000) stated that parents play a key role in promoting social adjustment and prosocial behavior in their children. Along this, studies also showed that parental warmth and support have been positively associated with children prosocial behavior (Eisenberg et al., 2015; Llorca et al., 2017b; Yarmurly & Sanson, 2009). A study intended to determine the associations among peer attachment, warmth from the mother and father, strict control by the mother and father, prosocial behavior, and physical and verbal aggression in adolescence including 192 boys and 255 girls from 11 schools found that for three successive years, participants reported on their fathers 'and mothers 'warmth and strict control, peer attachment, prosocial behavior, and aggression. A structural equation modeling was employed to explore two longitudinal models. Results show the influence of the mother and father on prosocial and aggression during adolescence. A strong peer attachment predicted prosocial behavior in subsequent years. The findings thus, indicated that despite the increasingly important role of friends during the transition from childhood to adolescence, parenting styles play a key role in the personal and social development of their children (Malonda, Llorca, Mesurado, Samper & Mestre, 2019).

Scholars confirmed that parenting styles have been linked to youth prosocial behaviors. Moral socialization theorists postulate that parenting high on responsiveness and demandingness (i.e., authoritative) facilitates an orientation towards the needs of others and is associated with good self-regulation skills, moral values, sympathy, and moral reasoning (Eisenberg, Fabes, & Spinrad, 2006; Grusec & Sherman, 2011) presumably because such parenting provides models for good self-regulation and prosocial actions, sensitivity to prosocial and moral values

(including the consideration of and respect for others), and fosters responsivity to others‘ needs. Furthermore, parents who exhibit relatively high levels of demandingness alongside lower responsiveness (i.e., authoritarian) foster a focus on the self rather than on others and often model emotional and behavioral dysregulation, thereby mitigating prosociality and fostering negative outcomes in children and youth (Barber et al., 2005; Grusec, Chaparro, Johnston & Sherman, 2014). When attentive parenting exists, adolescents ‘tend to have more prosocial tendencies and they are more inclined to enter into voluntary helping activities and this may be an effective way of promoting their prosocial development (Grusec & Hastings, 2007).

A study conducted by Habtegiorgis (1994) aiming to explore the helping motives or self-attribution of preferences for altruistic behaviors of Ethiopian college students-adolescents using the Prosocial Motivation Questionnaire (PSMQ) containing six motive categories like hedonism, self-interest, conformity, task-orientation, others-orientation, and empathy found out that motives of hedonism, self-interest and conformity were rated low by all participants. Female subjects have shown more preference to empathy and task-orientation than male subjects. Urban female subjects have endorsed more task-orientation, others-orientation and empathy than rural and male urban subjects. Induction or explanation and preference to empathy are found correlating. Family size and socio-economic status and altruistic motives are found related. Rural origin subjects have shown preferences to hedonistic and self-interest motives. Subjects of the humanities, arts, and medicine are found preferring more to motives of task-orientation, conformism and hedonism. Further, with regards to parenting style, this study found that subjects who reported that power assertion was practiced by their parents when they or their siblings misbehaved endorsed more hedonism and less empathy while subjects who reported that

induction or explanation was practiced by their parents when they misbehaved entertained empathic motives.

Many studies in Ethiopia revealed different results concerning the kind of parenting style practiced in Ethiopia. For example, Gelan (2016), revealed that Ethiopian parents appear to prefer the authoritarian parenting style believing that frequent use of supervision, punishment, and control increases children's respect for cultural and familiar values, facilitates harmony between family and community, and improves children's ability to play adult roles as early as possible, and children's opportunities to achieve educational and career success. Another studies also found that the more Ethiopian adolescents experienced an authoritarian parenting style and felt supervised and monitored, the less they showed risky sexual behaviors (Cherie & Berhanie, 2015 as cited in Spinelli et al., 2023).

### 2.4.2. Prosocial Behavior and Self-esteem

An individual characteristic is important in addition to other social environments in cultivating prosocial behavior among adolescents. In examining the role of social environment like parents, it is reasonable to check the mediating factor of self-esteem as individual characteristics. This is because; self-esteem is a personal distinctive that can influence the way people evaluating themselves and behave in certain way like prosociality. Self-esteem involves overall sense of self-worth or personal value involving a variety of beliefs, emotions, and behaviors. The way adolescents evaluate and view themselves therefore, would be reinforced and shaped by the parental environments. Thus, carrying such nature, self-esteem is to be a central construct in social psychology.

Self-esteem is an important individual characteristic to be considered for the encouragement efforts of adolescent prosocial behaviors, along with the parenting styles and behaviors in promoting these behaviors. Positive self-esteem itself is installed by positive parent -child relationships. Ample of studies suggest that close and positive parent- child relationships are important and foster child's healthy feelings of overall self-worth or global self-esteem (Harris et al., 2015). From this conceptualization, it is clear that the role of parents in the development of individuals' self-esteem that helps them to develop sense of connectedness and ability to practice positive behavior like prosocial behavior. For instance, a study intended to measure an adolescent's perception of their parents way of parenting, the influence of parenting style on adolescents' prosocial behavior and self-esteem, the influence of self-esteem on the prosocial behavior of Filipino adolescents and the role of self-esteem as a mediator on the relationship between parenting style and prosocial behavior indicated that self-esteem significantly and partially mediated the relationship of parenting style and adolescent prosocial behavior. Permissive and authoritative parenting and self-esteem predicted prosocial behavior of adolescents, whereas authoritarian parenting did not predict their prosocial behavior (Enriquez, Queano, Testa & Umali 2016). A research investigated the relationship between self-esteem and adolescents' prosocial behavior in china also revealed that self-esteem positively predicted adolescents' prosocial behavior (Li et al., 2022).

Rosenberg (1965), one of the pioneers in this area, stated that self-esteem denotes an individual overall positive evaluation to the self-including an individual respecting himself and considering himself worthy. Others also stated that self-esteem refers to individual's perception or subjective appraisal of one's own self-worth, one's feelings of self-respect and self-confidence and the extent to which the individual holds positive or negative views about self (Sedikides & Gress,

2003). Self-esteem is an integrity understanding of an individual's capacity and self-value (Pyszczynski et al., 2004). Self-esteem is the value we place on what we believe to be true about ourselves; hence, it would be the potential for self enhancement and may motivate an individual to be involved in positive behaviors like prosocial behavior. It is a crucial factor to determine our life, such as our relationships with others, our emotional well-being, school achievement, vocational aspirations, our acting out behavior, the quality of our communication, the quality of our problem solving and our striving behaviors. According to Weymans (2010) for instance, people can feel themselves more appreciated or recognized as a result of giving to charity. In previous studies, it has noted that individuals with high self-esteem are better than with low self-esteem in effective self-regulation, quality of life and goal-directed behavior (Di Paula & Campbell, 2002); and self-esteem provides the energy to mobilize human behavior as well as contributing to its direction (Mackinnon, 2015). That is, positive self-evaluation gives motive and direction to the thought and behavior in which an individual want to participate.

Studies in family relation areas in view of prosocial behavior suggested that family environments predict prosocial behaviors. For example, according to Huebner and Mancini (2003), adolescents, especially in two-parent families volunteer more than those in one-parent homes and that children in a large family volunteer more (Zaff, Moore, Papillo & Willams, 2003). On the other hand, prosocial behavior itself plays central role in promoting positive developmental outcomes reflected in empirical evidences. For example, the prosocial adolescents and/or those who actively engaged in positive behaviors show better peer relationships compared with their less prosocial peers (Eisenberg et al. 2007), higher levels of self-esteem (Zuffiano` et al. 2014), a sense of belonging to the community context (e.g., Young and Glasgow 1998 cited in Caprara et al. 2015), and civic engagement during the transition from

adolescence to young adulthood (e.g., Luengo Kanacri et al., 2014b). Here, from several outcomes of the sense of prosociality, studies found self-esteem as the one that can be considered as both outcome and predicting factor of prosocial behavior among adolescents. A recent study investigated the extent to which self-esteem and family relations influence the prosocial behavior and social adjustment of newly admitted undergraduates of two Nigerian Universities found that newly admitted students with high self-esteem and good family relations were high on prosocial behavior. The study also further indicated that self-esteem and family relations have jointly predicted prosocial behavior among the participants (Afolabi, 2014).

Mediation studies conducted on factors like gratitude, moral identity and empathy in terms of prosocial behavior and revealed significant outcomes. Gratitude is a kind of moral affect and behavior which trigger helping others. Experiencing gratitude, a person is motivated to carry out prosocial behavior (McCullough et al., 2001). For example, as study by Wu1, Tseng, Wu & Chen (2016) revealed that gratitude completely mediated the relationship between parent–child interaction and prosocial behavior in addition to father–child or mother–child interaction separately significant relationship with prosocial behavior. Moral identity is also the significant mediating role between parenting styles and prosocial behaviors, showing that parenting styles fosters the development of moral identity which in turn results in the development of prosocial behaviors (Fatima, Dawood & Munir, 2020). A study indicated that the promotion of positive expressivity in the home was associated with increased cognitive empathy, and in turn, empathy significantly mediated prosocial behavior in children (Kim, You & Knox, 2020). Regardless of these finding self-esteem has got less attention to mediate the relationship between parenting style and prosocial behavior, and even attentions have been given to negative behaviors. So, the

following literature is presented to show the mediation of self-esteem in determining prosocial behavior.

Self-esteem is important part of an adolescent's evolution, and parents play a very important role in shaping their adolescents' feelings of self-worth (Zabihi Hesari & Hejazi, 2011). Studies on the mediating role of self-esteem in the relationship between parenting style and prosocial behavior are however, scarce than its counterparts like antisocial, aggression, bullying etc. Previous studies (e.g., Baumrind,1971, 1983; Chen & Dornbusch, 1998; Herz & Gullon, 1999 as cited in Zabihi Hesari & Hejazi, 2011) found that excessively high parental monitoring leads to lower adolescent self-esteem, a lowered sense of autonomy in adolescents contributes to low self-esteem which then leads the adolescents to identify with peer groups that violate social norms, increasing the likelihood that they shall endorse norm-violating attitudes and behavior, and people who report not having had affectionate, nurturing interactions with their parents may have lower implicit as well as explicit self-esteem. On the other hand, a study conducted by Zabihi Hesari and Hejazi (2011) on the mediating role of self-esteem in the relationship between specific authoritative parenting style and aggression using 300 female college students in the social and basic sciences from Payame-Noor University hosen through multistage sampling, completed a questionnaire on parenting style, self-esteem, and an aggression scale revealed that the causal effect of an authoritative parenting style on self-esteem was positive while the effect on aggression was negative as determined by a structural equation model. The causal effect of self-esteem on aggression was also negative. Thus, the researchers concluded that self-esteem has a mediating role in the relationship between an authoritative child-rearing style and aggression.

According to Steinberg and Morris (2001), authoritative parenting has been consistently related to higher degrees of adolescent adjustment and psychosocial maturity than those produced

by authoritarian and permissive parenting. Thus, from these studies, it is realistic that parents play vital roles in determining self-esteem of their children though the outcome depends on the dimensions of parenting.

### 2.4.3. Prosocial Behavior and Friends/Peer Influence

Adolescence period is a time when peers play an increasingly important role in the lives of adolescents. The peer-adolescent relationship is inevitable to make behavior. Peers are everywhere aspect of our social life. They comprise of a great variety of people that we met throughout our life including classmates, colleagues, volunteers, sports mates or even the community establish significant and outstanding peer group contexts. Thus, due to the pervasive nature of peers in our lives, there is no doubt that they can shape our behaviors.

Scholars have described peer and peer groups contexts. Peer group is defined as a small group of similarly aged; fairly close friends, sharing same activities (Castrogiovanni, 2000), and it is networks of interacting individuals who spend time together and share activities (Brown & Klute, 2003). Other author also described peers are those who are found at the same age or maturity level (Santrock, 2010).

As one of social environments, peer relationship produces behavior of individuals in the group. Of course, it depends on the nature of the group. As one important social agent, peers influence the behavior of adolescents. A peer relationship is important as a predictor of positive social, emotional and behavioral outcomes. Schoeps, Mónaco, Cotolí, Montoya-Castilla (2020) revealed that peer attachment was positively related to prosocial behavior. According to Brendtro and Mitchell (2010), it is when positive behavior is a feature of the group, the members and/or individuals in the group motivated to display more positive behavior. For adolescents with

positive behavior peers, the acts, feelings and thoughts of their peers become learned and pro-social character is established. Prosocial behavior depends on the status of social relations. Previous study indicates that qualities of adolescents' social interactions with parents and peers have been linked to displays of prosocial behaviors (Wentzel, Filisetti & Looney, 2007).

Relationships with peers are very significant aspects of the social environment in teenagers. They have strong needs to be liked and accepted by friends and the larger peer group, which can result in pleasurable feelings when they are accepted or extreme stress and anxiety when they are excluded and disparaged by peers (Santrock, 2011).

Of course, peers can contribute to adolescents' behavior in both positive and negative way. But peers have a great function in adolescent life in making positive behavior for the reason that as children grow up, their attachment and closeness, sharing of thought and behavior; understanding of values, beliefs and norms becomes stronger. These learning could be from peers in school or college, in the neighborhood, in the social gatherings, special events and so on. Thus, adolescents' behavior, attitude, thinking and perception about their life and others seem to relay on how these peer groups affect their life. Prosocial behavior of adolescent is one of the behavioral, social and cognitive aspect that peer influences. Transitional period from childhood to adolescence brings new interactions. These new and modified relationships with peers and adult figures can also impact adolescents' prosocial behaviors by providing new targets of helping and exposure to new values, belief systems, or behaviors (Fletcher, Elder & Mekos, 2000). Warmth relationships with peers within the school and extracurricular activities environments contain acceptance, affection, caring for and respecting each other, spending time

together and talking and listening to each other (Furrer, 2010; Oberle, Schonert-Reichl, & Thomson, 2010 as cited in Carrizales, 2018).

A number of studies show that positive peer influence ensures a positive sense of self, promote positive involvement in social developmental tasks and improves mental health (Maxwell, 2002; Mounts & Steinberg, 1995; Newman et al., 2007; Ramirez et al., 2012; Tarrant, 2002). Newman & Colleagues (2007) suggests that, peers' attachment, involvement and successful negotiation plays an important role in the healthy psycho-social development of adolescents. In a study by Wentzel et al., (2004), demonstrated that students who have a reciprocated friendship in middle school show increased level of prosocial behavior. A socially competent behavior like prosocial behavior and negotiation skill appear to be associated with positive peer relationships that in turn are related to successful socio-emotional adjustment among adolescents (Rubin, Bukowsky & Parker, 2006). The prosocial adolescents also show better peer relationships compared with their less prosocial peers (Eisenberg et al. 2006).

Being prosocial and the influence of peers or friends on prosocial seem to affect each other reciprocally. In the study conducted in this area, the causal modeling analyses indicated that being more prosocial facilitates children's greater popularity and/or liked by others (Dekovic & Gerris, 1994). Study on children 's friendships and peer relationships also show that more prosocial children and youths are more popular and well liked, and are more likely to have close friends (Clark & Ladd, 2000; Gest, Graham-Bermann & Hartup, 2001).

Across the development stages, being a more prosocial child appears to elicit positive responses and acceptance from peers. Adolescents who saw their high school peers as positive influences were more likely to engage in community volunteer work during adulthood (Zaff et

al., 2003). In this sense, adolescents' peer relationships and friendships appear to be influential in the continuing development of prosocial motivations and behaviors.

A study by Cheun and Shek (2007) on the relation of prosocial orientation to peer interactions, family social environment and personality of Chinese adolescents, showed prosocial orientation was associated negatively with peer negative influence and peer delinquent behavior, and positively with peer positive influence. The finding suggested that positive peer interactions, good family social environment and positive personality tended to increase the prosocial orientation of adolescents.

One study in China, built on the human ecological model using survey design and a sample of high school students who engaged in volunteering activities regularly (N=580), indicated that social influence factors including peer, school, and parent influence, are strong predictors of helping intention and prosocial behavior than individual competence factors like empathy and prosocial moral reasoning. The authors suggested that social influence is strongly linked to prosocial behavior, and socialization and social support for prosocial norms and behavior can exert a powerful influence on the behavior of young people in a Chinese population (Lai, Siu & Shek, 2015).

### 2.4.4. Prosocial Behavior and Religiosity

Religiosity can play a significant role in human lives and development of human behavior. Social scientists have long considered religiosity to be an important determinant of individual behavior, societies, and economic and political phenomena (Ahmed, 2008). It has played an important role in the life of human beings from ancient times. Most of all, many social scientists have suggested that religiosity has an important influence on prosocial behavior (Ahmed & Salas,

2008). According to Afolabi (2014), religiosity is defined as a system of beliefs with certain rituals, practices, which are learned and demonstrated in places of worship. Religiosity differs from spirituality in that spirituality is considered as a way of living which predetermines how individuals respond to life experiences, and one need not engage in any formal religious activities to be spiritual, and spirituality can be used as a flexible and more general term. Religiosity may be an expression of spirituality, it is not guaranteed that all religious people are spiritual (Zullig, Ward & Horn, 2006).

Religiosity thought to have connection with prosociality, and religious people is believed to be more prosocial than nonreligious people. Several reasons explain why religiosity has an influence on youth prosocial behavior. The increasing abstract thought and probing for an identity of young people draw them to religiosity and spiritual matters (Santrock, 1996). With regards to religion, scholars described that religiosity is a form of social capital, acts as a source of social control, provides reinforcement for prosocial behavior, and punishment in case of lack of altruism (e.g., Furrow, King & White, 2004; Hardy & Carlo, 2005). It is also recommended that encouraging adolescents to take part in religious activities to ensure that they develop awareness of the importance of religious beliefs, participations, practices and prosocial behavior (Mahaarcha & Kittisuksathit, 2013).

Numerous studies have disagreed on the assertion that religious individuals behave in more prosocial ways than nonreligious ones (Galen, 2012). Grossman and Parrett (2011) examined the relationship between religiosity and prosocial behavior using data from a context rich, naturally occurring field experiment that closely resembles the dictator game – tipping in restaurants. Customers were surveyed as they left a set of restaurants in Richmond, Virginia, in the summers of 2002 and 2003. Their findings revealed no evidence of religious prosociality. On

the other hand, a cross-cultural study that examined economic behavior across eight societies (Purzycki et al. 2016) found that people's particular views about the personality of their gods was a significant predictor of their behavior towards other people. Specifically, individuals who saw their gods as moralizing and punitive were more willing to favor distant members of their group over themselves or local coreligionists.

A study intended to examine how the daily religious experiences related to prosocial behaviors, using a large, nationally representative U.S. data set found that daily religious experiences are statistically and substantively significant predictors of volunteering, charitable giving, and helping individuals (Einolf, 2013). Previous researchers found that religiosity is associated with prosociality in adolescence. As study among Turkish adolescents indicated, a positive relationship between religiosity and prosociality have found in which significant difference between the types of schools (religious and general schools) in terms of prosocial characteristics was not revealed (Arslantürk & Harput, 2021). More particularly, study found that religiosity significantly and positively predicted kindness, as well as compliant, anonymous and altruistic prosocial behavior, but not public, dire and emotional categories of prosocial behavior (Hardy & Carlo, 2005).

## 2.5. Variations in Prosocial Behavior, Parenting Styles, Peer Influence, Self-Esteem and Religiosity by Gender

It is obvious that once the biological sex of a child is identified, everything has been changed and this identity begun to be gendered. In this sense, gender is defined as a socially constructed role, behaviors, activities and any attributes that a given society considers appropriate for men and women (WHO, 2015). Gender is also referred to the set of beliefs,

feelings, and actions that a particular society identifies with a person's biological sex (APA, 2012). These definitions show gender is conceptualized based on what a culture deems proper for individuals based on their biological sex assigned at birth. Consequently, these socially constructed characteristics including norms, behaviours and roles of women, men, girls and boys perceived to be varied from society to society and bring the concept of variations by gender in different areas of functioning. The behaviors, attitude and feelings of individuals are thus, determined by the ways they viewed in the society and developed their gender roles. By this implication, any activity of any age of a person is influenced. The following reviewed studies would provide gender implications in the area, as the current researcher's focus is limited to understanding variations in the prosocial tendencies, parenting styles, peer influence, self-esteem, and religiosity of the adolescents.

Although there have been variations in data obtaining methodology (e.g., self-reported versus observed), study design characteristics (e.g., survey or correlational versus experimental design) and participant of the studies, several studies reported variations in aforementioned variables by gender. For example, prior study indicated that girls are more prosocial than boys, and demonstrate a stronger prosocial moral orientation (Jaffee & Hyde, 2000). Carlo and Randall (2002) found the evidence of gender differences in prosocial behavior in late adolescents in which adolescent girls had scored higher than adolescent boys on altruistic, anonymous, compliant, and emotional types of prosocial behaviors. In another study, there was also a report that confirms females had higher levels of altruistic, compliant, and emotional prosocial behavior, whereas males present higher levels of public prosocial behavior (Xiao et al., 2019). Similarly, another authors noticed that, on prosocial behaviors oriented to peers, females presented higher emotional support, inclusion, and sharing (Nielson et al., 2017).

Although specific types of prosocial behavior may vary between genders, several research findings suggest that females generally exhibit higher levels of prosocial behavior compared to males. Females are more likely to engage in prosocial behaviors that are communal and relational, while males are more likely to engage in behaviors that are agentic, collectively oriented, and strength intensive (Eagly, 2009). It was also noted that females tend to engage in more prosocial behavior, such as helping, sharing, and comforting others, compared to males (Espinosa & Kovářík, 2015). According to Einolf (2001) it was also suggested that females are more prosocially motivated than males. Unlike the above studies, a study in India among university students revealed that males and females are both almost equal on most of the prosocial behaviour dimensions except in case of perspective taking and mutual concern moral reasoning in which females are on higher side (Abdullahi & Kumar, 2016). A study conducted by Chadha and Misra (2006) found no significant influence of gender on prosocial behaviour. According to Carlo, Basilio and Knight (2016), altruistic, emotional, compliant, and dire dimensions of prosocial were higher for girls than boys, whereas Hardy and Carlo (2005) only found one gender difference in public prosocial behavior dimension favoring boys. However, other study reported no gender differences across all types of prosocial behavior dimensions (Barry, Lui, & Anderson, 2017). These mixed empirical findings regarding gender differences in prosocial tendencies may imply variations of the gender-typed nature of each prosocial behavior. In Ethiopian context, some studies revealed gender variation in prosocial behavior while others were not. According to Tsehay et al. (2014), female students had higher overall prosocial behaviors as well as in most types of prosocial behaviors as compared to male students. However, as Solomon (2015), reported there was no significant gender difference in overall prosocial behavior.

As a fundamental aspect of human behavior, gender also significantly impacts parenting strategies, with mothers typically inclined to embrace authoritative parenting disciplinary way, whereas fathers are more likely to prefer authoritarian or permissive approaches. Research indicates that mothers and fathers typically adopt different parenting styles. Mothers usually take a nurturing and emotionally responsive approach, prioritizing empathy, communication, and the development of strong emotional connections with their children. Conversely, fathers often lean towards a more authoritative parenting style, emphasizing independence, problem-solving, and fostering resilience (Golombok & Tasker, 2015). According to Zhu et al. (2023), fathers and mothers vary in parenting styles, with fathers tending to use more direct and physical forms of communication and conduct more physical play with their children. Mothers tend to use more indirect and verbal communication during the interaction with their children. These variations in parenting styles can significantly affect child development, including cognitive, social, and emotional outcomes.

The way peer influence occurs varies between males and females. Studies indicate that males tend to connect with larger groups of peers, whereas females are inclined to develop closer friendships. According to Han and Li (2009), a study on residential peer effects in higher education revealed that females are more inclined to peer influences compared to males that signify alignment with social psychology theories suggesting that women are particularly influenced by friends and close peers.

One way of self-understanding in adolescents can be through self-esteem. This construct is likely to be a fluctuating and susceptible to internal and external influences during adolescence (Moksnes & Espnes, 2013). Differences in gender among adolescents have been observed in

their interactions with peers (Agam, Tamir & Golan, 2015). Boys appear to score higher than girls on self-esteem during adolescence (Frost & McKelvie, 2004). A study conducted among adolescents of Karachi, Pakistan also revealed that revealed that there is a significant gender difference on self-esteem of adolescents with female adolescents have scored higher on the variable of self-esteem than the boys (Bhamani, Jamil & Mohsin, 2014). Similarly, a study by Singh and Manju (2023) also found a significant gender differences in relation self-esteem in which female adolescents were found significantly higher in self-esteem than male adolescents.

As noted by previous researcher, religiosity is highly important in today's time, because religious practices shape our thinking, perception towards the world and behaviors. However, there is a variation in religiosity by gender due to our cultural beliefs and practice (Gobind, Pinki, Sony & Behmani, 2023). This implies a gender difference in religiosity is important area in understanding how it influences human behavior. Studies also suggested that females are highly religious than male depends on the culture although these disparities were in religious practices, but not a belief in religion (Loewenthal et al., 2002). According to Yusuf and Eliasa (2018), female students are also higher than the average religiosity of male students. In general, the literature reviewed indicates that gender affects the variables considered in the above paragraphs, including prosocial behavior, parenting styles, peer influence, self-esteem, and religiosity.

## 2.6. The mediating roles of Self-esteem, Religiosity, and Peer influence

The social psychological logic behind choosing self-esteem, religiosity and peer influence as mediating variables is that they represent the three pillars of adolescent socialization; the psychological self, the moral self and the socio-emotional system. While parenting dimensions provide the foundational environment, they do not immediately form prosocial behavior; rather,

they must first shape these three distinct mediators, which then serve as the direct drivers of adolescent prosocial behavior. Unlike western culture, which views adolescent autonomy as an individualistic separation from parents, African context including Ethiopia views adolescent behaviors as an interconnected process. Scholars assert that the primary parental socialization needs to be aligned with community norms, spiritual institutions, and contextual peer environment to effectively cultivate adolescent's internal and social behaviors (Emagnaw & Hong, 2018; Tsehay et al., 2014). This reflection supports the idea that parenting dimensions, religiosity, self-esteem and peer influence are connected and guided by unique collectivist cultural system, communal family structures, and institutional religious orientation.

A meta-analysis across African countries such as Nigeria, South Africa, Kenya and Ghana indicated that the western model that emphasizes on individual autonomy adapted to the African context verified authoritative parenting style consistently drives adolescents' self-esteem and prosocial behaviors (Mohammed, 2026).

In Indonesian context, literature shows that highly responsive and involving parental practices considerably increase an adolescent's receptivity to spiritual values, and religiosity functions as a predictor of positive behavioral outcomes (Adib, 2025). Empirical studies in Ethiopia also demonstrate that control dimension of parenting, which is rigid and punitive psychological control damages self-esteem, while parental acceptance and emotional warmth are the primary drivers of self-esteem (Aynabeba, 2023; Taferi, 2023; Wgerima, 2024). This signifies that the parenting to behavior connection is deeply dependent on indirect path of moral values and spiritual socialization.

Peer influence emerges as a proximal social environment during adolescents' transition to secondary school. This influence may not occur alone but interacts with a dynamic family influence baseline. Literature in Ethiopia and Croatia shows that the quality of parental attachment and specific parenting styles exercised at home dictate how adolescents handle external peer environments (Taferi, 2023; Nasiri Farsi & Pali, 2025). A study also reported that secure and warm parenting situations equipped Dutch's adolescents to seek out supportive and positive peer networks (Crespo-López & Koning, 2026). Therefore, within the immediate social environment, positive peer influence is important to function as a mediator between parenting dimensions and prosocial behavior.

## 2.7. Implications of the theoretical and empirical reviews

This study is guided by the theoretical and empirical evidence reviewed to explain the variables under the study. In social psychological perspective, adolescent prosocial behavior can be explained using various theoretical concepts. For instance, parenting dimensions serve as the primary social environment that initiates both relational and observational learning for adolescents. Explicitly, acceptance parenting dimension builds secure attachment between parents and adolescents, which can be described by parenting dimensions and theory of attachment (Bowlby, 1988; Maccoby & Martin, 1983). Theoretical evidence concerning parenting theory shows that parental responsiveness and secure attachment operate as a foundational mechanism for adolescent's social development, resulting in positive interaction and emotional regulation (Kashmari et al., 2024; Moretti & Peled, 2004; Oldfield et al., 2025; Vegas & roman, 2025). This provides behavioral modeling that directly predicts prosocial behaviors.

Beyond these direct pathways, parenting practices dynamically shape the adolescent's personal and social forces (e.g., self-esteem, religiosity and peer influence) as critical mediators. The theoretical notion of the acceptance parenting is that the warmth, responsiveness, love and care features of this parenting boost adolescents' internal assets such as self-esteem and religiosity, satisfying the psychological security required to focus on the needs of others. At the same time, active parental socialization facilitates the internalization of moral and spiritual values, resulting in better adolescent religiosity that serves as an internal self-regulatory mechanism. This implies that secure attachment between parents and adolescents enables developing internal qualities and modeling adaptive behaviors, which leads to decision to help others.

Furthermore, the positive parenting environment also direct the adolescent's external social selection, steering them toward prosocial peer groups and filtering out deviant peer influences. In line with this, Gorrese and Ruggieri (2012) state that individuals who developed a secure attachment to their parents are more likely to establish a safe attachment bond with their peers and other social environments. Within this this parental and personal assets nexus, peer influence acts as a proximal facilitator when compared with parental influences, which is a distal catalyst. According to Gasa (2005), positive peer groups exert structured social processes and modeled behaviors that can accelerate adolescent's social choices.

These theories embrace important concepts in describing the interactions between the variables of interest in this study. That is, the distal parenting environment, proximal social network (peer influence) and cognitively internalized schemas (self-esteem, religiosity) operate as social and psychological mechanisms that directly dictate and reinforce prosocial behaviors.

This also corresponds with the conceptualization of prosocial behavior by Carlo and Randall (2002) that supports internal traits and external situations trigger adolescent prosocial behaviors.

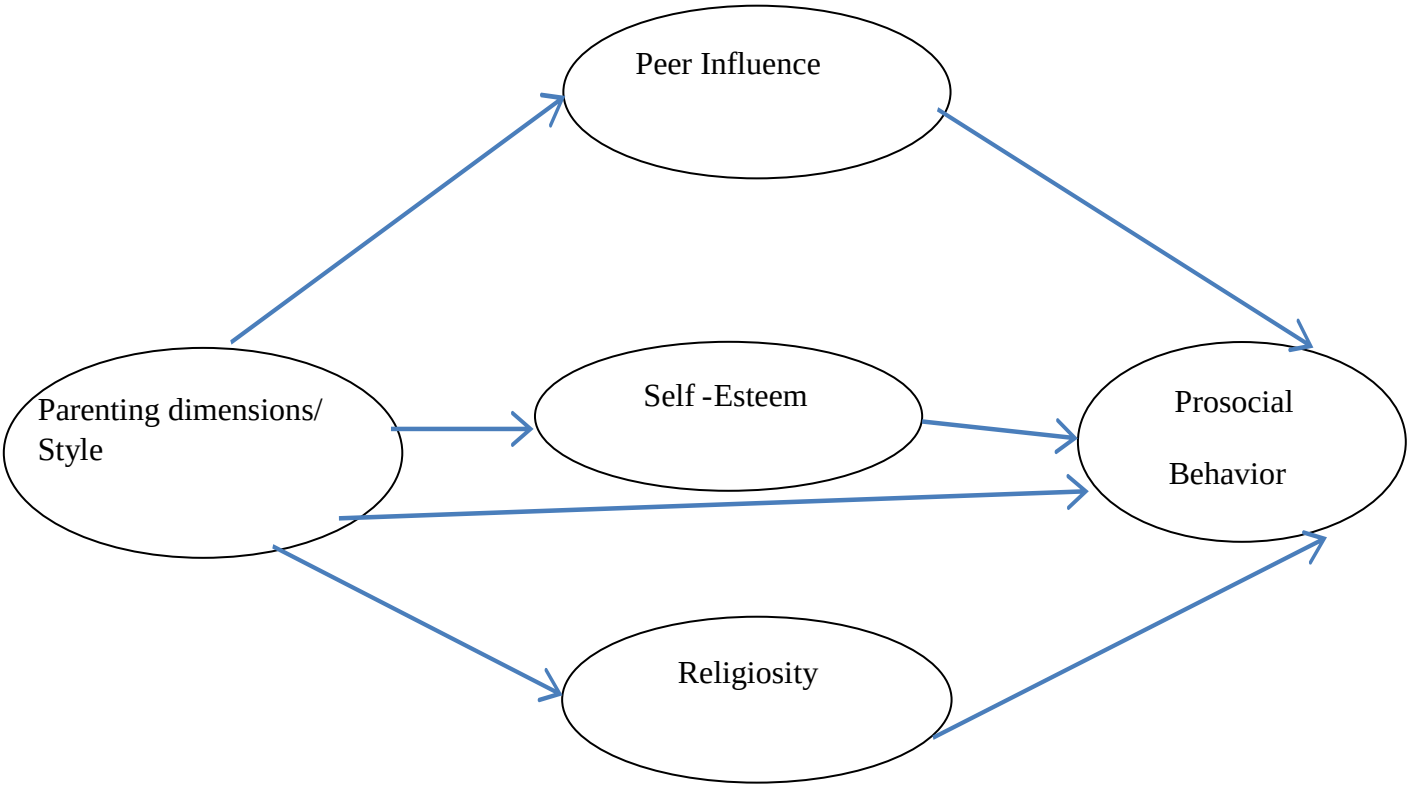
While each of the theory reviewed and stated above are relevant for explaining a single piece of this study, social cognitive theory is chosen and used as a theoretical lens of conceptualizing the variables because it has capability of unifying all variables considered in this study into a single model. The predictive paths of unidirectional model are used to evaluate how social and personal forces shape adolescent's prosocial behavior using a cross-section data. For instance, when arrow goes from parenting dimensions to religiosity, self-esteem and peer influence, it does not mean parenting approaches automatically create these variables. But, it shows that the adolescent observes potential behavior (observational learning), internalizes and values it (cognitive evaluation) and demonstrate the modeled behavior (behavior). Therefore, social cognitive theory is selected because it provides the psychological rules for the unidirectional conversations in cross sectional design.

The existing local and international studies in the context of parents, peer influence, self-esteem, religiosity and prosocial behavior are also discussed in the present study. As be understood from the literature, most previous researchers have focused on children as a target age group of study about parenting and social behaviors including prosocial behavior than adolescence age group. The two dimensions of parenting i.e. demandingness/control and acceptance were not used in most literatures and the focus was basically on the four parenting styles derived from the two dimensions. Mixed or conflicting findings were revealed in the previous studies concerning which parenting approach is determining prosocial behavior. Therefore, in this study, believing that these variables (e.g., parenting dimensions, peer influence, religiosity, self-esteem and prosocial behavior) are to be related as in the following conceptual

framework, the relations of prosocial behavior with adolescents' parenting styles, peer influence, religiosity and self-esteem were investigated as illustrated below. As it observed from the conceptual framework (Figure 1), the intention of this study was to find the relationship between parenting styles, peers, religiosity and self-esteem and their effects on the prosocial behavior of senior secondary school students in south west Shewa zone. Additionally, the mediating role of peer influence, religiosity and self-esteem between the relationships of parenting dimensions and prosocial behavior was assessed. This conceptual framework was developed based on the existing literatures and the assumption of current researcher.

**Figure 1**

*The Integrated Parental, Peer Influence, Religiosity and Self-esteem Model of Prosocial Tendencies*




*Note*: This framework illustrates the relationship between parenting dimensions, self-esteem, peer influence, religiosity and prosocial tendencies.

# Chapter Three

# Methods

This study intended to examine the relationship between the study variables (i.e., prosocial behaviors, parenting style, peer influence, religiosity and self-esteem) among senior secondary school students. Therefore, this chapter presents the research methodological approach employed in attaining the intended purpose.

## 3.1. Research Philosophy, Approach and Design

### 3.1.1. Research Philosophy

The term prosocial behavior is often used in scientific inquiries to represent voluntary actions intended to support another individual, group of individual or society, but motives behind actions, causing factors, and settings may noticeably differ. The motivation behind the actions and type of actions that adolescents demonstrate depend on the context. Among several factors causing prosociality, personal factors (e.g., self-efficacy, moral reasoning, empathy, and social factors (e.g., parents, peers, school) are frequently reported in previous studies (Caprara & Steca, 2005; Ellemers et al., 2019; Lai, Siu & Shek, 2015; Spinrad & Gal, 2018). While attempting to study prosociality and its determinants, a careful measurement guided by theoretical and philosophical foundations is essential.

A wide variety of tools has been used to measure prosocial behaviors in various studies in varied contexts. However, the tool used to measure prosocial behavior in this study is the most commonly used tools in measuring adolescents' prosocial behavior. It is chosen based on the assumption that it is relevant to capture adolescents' prosocial tendencies, and the hypothesized

mechanism of linking the determinants or factors of prosocial behavior (gender, self-esteem, parenting style, peer influence, and religiosity). As this study aims to examine the linkage between prosocial behavior and self-esteem, parenting style, peer influence, and religiosity, including the direction and magnitude of the relationship between these variables, and variation of prosociality by gender, the positivist paradigm of research philosophy is followed.

In scientific investigation, the positivist research paradigm adheres to empirical observation, deductive logic, and the pursuit of objective knowledge, asserting that reality needs empirical evidence, can be observed and described from an objective viewpoint independently from personal interpretation (Neuman, 2014). This could reduce biases and the researcher's subjective interpretations. According to Kerlinger and Lee (2000), this philosophy believes that the only authentic knowledge is scientific knowledge, which develops from the positive confirmation of theory through scientific procedures. This scientific approach also requires the use of quantitative methods to measure and analyze data, leading to the provision of empirical evidence (Creswell & Creswell, 2017). As quantitative methods allow researchers to generate numerical data that can be statistically analyzed to find relationships and infer the findings to the population, guided by the philosophy of positivists, the current researcher quantitatively measured and examined the association between the variables of interest (prosocial behavior, parenting style, self-esteem, peer influence, and religiosity).

### 3.1.2. Research Approach

This study was guided by a quantitative research approach. It comprises the collection and analysis of numerical data and the use of statistical analysis to draw conclusions. According to Gay, Mills and Airasian (2009), quantitative research approach relies on the collection and

analysis of numerical data to describe, explain, predict or control variables. It has purpose of describing current situations, establishing relationships and attempting to explain causal relationship between variables (Creswell, 2005). Most often holding a positivist worldview, quantitative research approach utilizes empirical examinations of variables based on mathematical measurements (Zikmund, Babin, Carr, & Griffin, 2013). Quantitative approach in research benefits researchers to look into and evaluate variables using numerical data. It also allows researchers to quantify measure and analyze data objectively to make inference about the population from which the sample is drawn (Bryman, 2016). Within relatively shorter time and utilization of larger sample in data collection, the researcher can handle larger data efficiently in quantitative approach (Kumar, 2014). Therefore, all variables involved were measured quantitatively, analyzed and examined for relationship using a numerical data in this study.

### 3.1.3. Research Design

Selecting and using an appropriate design for a research work is very important to carry out the research effectively. Research design contains all strategies applied to answer basic research questions in the study. As many scholars defined it, research design is the overall plan, procedures and ways of converting a research problem to empirical evidence (Asenahabi, 2019, Creswell, 2009; Creswell, 2014).

From these scholars' descriptions, it can be noticed that research design is essential to integrate a research philosophical assumptions, required data to achieve the objective and methods to be applied to collect and analyze data for final conclusion drawn from the empirical data. Using the supporting ideas, Jongbo (2014) asserts that if a researcher collects data before thinking about the research design and required information for answering basic research

questions, the conclusions drawn would most likely be weak, resulting in failure to meet the study objective.

Guided by the importance of research design noted, a quantitative approach, correlational research design was selected and used in this study. A correlational design has the potential to examine the relationship between two or more variables in a single group (Wood & Ross-Ker, 2006). This design provides a quantitative test for associations among variables (Creswell & Creswell, 2018). It is used when the researcher wants to establish relationships and test theoretically proposed relationship among variables (Devi et al., 2022). A key function of this design is to investigate correlation that serves to measure, predict and describe the extent of association between two or more variables (Creswell, 2012), and a numerical index that provides information about the strength and direction of the relationship is used also (Johnson & Christensen, 2014).

As the purpose of this study was to determine the relationship between prosocial behavior and independent variables (e.g., parenting style, peer influence, self-esteem and religiosity), a correlational design is suitable to examine the associations among variables using survey data collected at a single point of time. In this study, this design allows to test relationships between variables and make predictions among these variables. Therefore, this study used a correlational research design because it lets a researcher to examine relationships and make appropriate predictions between variables.

## 3.2. Population of the Study

The population for this study was all senior secondary school students (grade 11 and 12) in South West Shewa Zone, Oromia, Ethiopia. South West Shewa Zone is one of the zonal administrations located in Oromia Regional State. The zonal capital town is Wolisso and is located 114km far from the capital city of Ethiopia, Addis Ababa (Bogale & Rikitu, 2020).

According to the report of south west Shewa zone education office on October 22, 2023 GC, there was a total of 9963 senior secondary school students in twelve Woredas. Drawing a representative sample, the study was carried out in selected six Woredas.

### 3.2.1. Sample and Sampling Method ``

Currently in South West Shewa Zone, there are a total of 27,846 students in grade 9, 10, 11 and 12, where 16021 are males and 11825 are females (as of the report on October 22, 2023 from SWSZ). Out of this total, students of grades 11 and 12 share 9963 total number (where 5911 were males and 4052 were females).

Stratified random sampling method was used to select a total sample size of $n$ = 380 participants. In the first stage, six (6) Woredas were randomly selected out of the twelve (12) available Woredas using a simple random lottery technique. These six Woredas have their own available number of schools; Amaya (1), Saden Soddo (2), Soddo Daci (2), Goro (1), Ilu (2) and Wolisso Town (3). The six Woredas had a total of 6313 students (where 3745 were males and 2568 were females). In the second stage, based on the number of schools available in each six Woreda, seven schools (Amaya, Saden Soddo, Soddo Daci, Goro, Ilu and Wolisso) were randomly selected. The three Woredas (i.e., Amaya, Saden Soddo, Soddo Daci) were selected

from rural Woredas that have relatively outlying location to the zonal administrative town while the three Woredas (i.e., Goro, Ilu and Wolisso town) selected were closer to the zonal administrative town and being located on the main road passing from Addis Ababa to Jimma Town.

To ensure equal and fair representation, proportional stratification was applied based on the total student population across the selected Woredas, schools, grades and sections. Within each selected school, simple random sampling, computer system-Microsoft excel was used to choose the three hundred eighty (380) individual participants from the available school rosters.

The sample size was determined using Krejcie and Morgan's (1970) sampling method. Basically, during sample size determination using Morgan's approach, a type I error is assumed to be fewer than five percent. While prospective statistical power analysis such as Cohen's *d*, targets the detection of specific effect sizes, Krejcie and Morgan approach prioritizes a representative population cross-section. By assuming the principle of a maximum population variance (P = 0.50), this technique maximizes the required sample size. This large sample size then provides a highly conservative baseline that naturally minimizes the risk of Type II error, ensuring sufficient overarching statistical power to detect meaningful relationships during subsequent inferential testing. Additionally, this formula follows a fixed confidence level (α) at 0.05 (95% confidence interval, $X^2$ =3.841) and the fixed margin of error threshold (*d)* at 0.05. Unlike formulas that assume infinite population, Krejcie and Morgan integrate the actual finite population size (*N*). This ensures the sample is mathematically optimized to be suffieciently representative of this study's population size withouth wasting resources. Result obtained from calculating via this formula also appears to be equal with that of already determined and indicated using the table. The formula is expressed as follows:

$$s=X^2 .NP (1—P) / d^2 (N—1) +X^2 P(1—P)$$

*Where*,

*s* = required sample size.

$X^2$ = the table value of chi-square for 1 degree of freedom at the desired confidence level (0.05 = 3.841).

*N*= the population size.

*P*= the population proportion (assumed to be 0.50) since this would provide the maximum sample size.

*d*= the degree of accuracy expressed as proportion (0.05).

## 3.3. Instruments

Survey instruments were used as means of data collection in this study. These include 1) demographic variables such as gender and grade level; 2) Prosocial Tendencies Measure (PTM-R); 3) Parenting style scale; 4) Peer Influence questionnaire; 5) Rosenberg's Self-esteem Scale, and 6) Religiosity measuring items. These tools were used to obtain quantitative data.

### Demographic Variables

The demographic variables such as students' grade and gender were used to obtain basic information about the study participants for preliminary analysis.

*Students Grade level:* this refers to students' grade as 11 and 12 which they are attending currently in the school.

*Gender*: this also denotes male or female students as measured by nominal scale. This was used to examine variation in the study variables by gender.

**Prosocial Behavior Measure**

Students' prosocial behavior was measured using the revised prosocial tendencies measure (PTM-R): at first, PTM was developed by Carlo and Rondall (2002) to assess late adolescents self-report of the six types of prosocial behaviors (anonymous, dire, altruism, emotional, public and compliant). Later, Carlo and his colleagues modified it to be used with younger adolescents and added two items based on suggestions they got from young adolescents (Carlo et al., 2003). The revised instrument, Prosocial Tendency Measure - revised (PTM-R), consists of 25 items developed in the form of Likert type scale. The response format of the items was a four point Likert scale. The scales in the prosocial behavior were "Does not describe me at all", "Describes me a little", "Describes me well", and "Describes me greatly" which were scored 1,2,3,4 respectively. It was widely used among researchers from international to national context for adolescents. In Western countries (e.g., the U.S.A), researchers have reported full scale's internal reliability to be $\alpha = 0.80$, and reliabilities of the subscales among middle adolescents', compliant $\alpha = 0.75$, public $\alpha = 0.86$, anonymous $\alpha = 0.84$, dire anonymous $\alpha = 0.75$, emotional $\alpha = 0.82$ and altruism $\alpha = 0.80$ (Carlo, Hausmann, Christiansen, & Randall, 2003).

The prosocial behavioral tendency was also used among Greek's adolescents and youth. It is composed of six subscales and each internal reliability were found to be high to medium as public $\alpha = 0.78$; anonymous $\alpha = 0.84$; dire $\alpha = 0.67$; emotional $\alpha = 0.71$; compliant $\alpha = 0.74$; and

altruism α = 0.68 (Lampridis & Papastylianou, 2014). This scale has also been used among Nigerian adolescents and revealed reliability of Public, α = 0.78, anonymous α = 0.85, dire α = 0.63, emotional α = 0.75, compliant α = 0.80, and altruism α = 0.74 (Ojo, 2015). In the Ethiopian context, researchers (Emagnaw & Hong, 2018) have found separately the Cronbach alpha reliability of the subscales (anonymous, dire, altruism, emotional, public and compliant scales) to be 0.89, 0.71, 0.73, 0.76, 0.91 and 0.74 respectively. However, in the current study the scale was tested, validated and evaluated for clarity and relevance.

During validation of this instrument using exploratory factor analysis, the originally six factors were revealed but an additional seventh factor was also found, splitting anonymous dimension in to two factors. The internal consistency of the extracted factors using EFA was also calculated using Cronbach's alpha. The general assumption on a cut-off value of .70 is recommended for scale reliability level (Field, 2009). As others also assert, a Cronbach's alpha higher than .60 can be tolerable in psychological researches (Aron, & Coups, 2013; Nunnally, 1967). Therefore, in the validation data, the seven factors of prosocial tendencies maintain Cronbach's of α>.70 in which all components revealed high level of reliability indices as follows: Public α =. 895, Altruism α =. 813, Donation creates good feelings-Anonymous1 α =. 938, helping when they do not know-Anonymous2 α =. 840, Emotional α =. 762, Dire α =. 753 and Compliant α =. 812. In the main study, the internal consistency of prosocial tendencies also maintained high level on each factor α =. 904, α =. 928, α =. 776, α =. 780, α =. 770, α =. 750 and α =. 859 respectively. The Cronbach's alpha level for components of prosocial tendencies altogether was .76.

**Parenting Style Measure**

Parenting style was measured by the Parenting Styles Scale. It was originally developed by Lamborn, Mounts, Steinbberg and Dornbusch (1991) based on Maccoby and Martin's (1983) revision of Baumrind's (1966, 1971) parenting style scale. The scale has 25 items in which students were asked to rate their parents in terms of the two parenting dimensions: Acceptance/involvement sub-scale (13 items) and strictness/supervision sub-scale (12 items). The acceptance/involvement sub-scale measures the extent to which the late adolescent and young adult perceive their parents as loving, responsive, and involved, and for this subscale, the responses are made on a four-point Likert-type scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). The strictness/supervision sub-scale on the other hand assesses parental monitoring and supervision of their late adolescent and young adult. This sub-scale is constructed using a three-point Likert-type scale ranging from 1 (Doesn't Try/Know) to 3 (Tries/Knows a Lot). The responses for two items is made using a four-point Likert-type scale ranging from 1 (As Late as I Want) to 4 (Doesn't Allow Me Out). For each student the scores for the items of each sub-scale are summed to create a total score for each sub-scale such that there is one score for the Acceptance/Involvement Sub-Scale (A/ISS) and another for the Strictness/Supervision Sub-Scale (S/SSS). This scale is adapted by different researchers from the world and Ethiopia. For example, in Western countries (e.g., the U.S.A), researchers have reported internal reliabilities of $\alpha = .72$ for the acceptance/involvement sub-scale and $\alpha$ .76 for the strictness/supervision sub-scale (Lamborn et al., 1991; Steinberg et al., 1992b, 1994). Earlier studies in Ethiopian context have also reported high internal consistency reliabilities for the two sub-scales. For instance, Markos (1996) reported reliabilities of $\alpha = .83$, and $\alpha = .81$ for the acceptance/involvement sub-scale and strictness/supervision sub-scale, respectively. In addition, Abesha (1997; 2012) reported reliability indices of $\alpha = .87$, and $\alpha = .90$; $\alpha = .88$, and $\alpha$ .86 for the

acceptance/involvement sub-scale and strictness/supervision sub-scale, respectively. Similarly, Emagnaw and Hong (2018) found the Cronbach alpha reliability of the parenting styles classified in to dimensions (Acceptance/Involvement, Control /demanding) scales to be.93 and.91 respectively, showing high reliability on both western culture and our context.

During the validation of this scale in the current study, both dimensions maintained good internal consistency, where $\alpha = .78$ was revealed for acceptance dimension and $\alpha = .90$ obtained for control dimension. Additionally, in the main study the reliability of acceptance dimension appeared $\alpha = .823$ while a control dimension was found to be $\alpha = .903$. The internal consistency in both during validation and main study was found high level of reliability indicating the items are consistent and well-aligned to measure the intended constructs.

Besides, a substantial convergence existed between students' ratings of their fathers' and mothers' concerning parenting dimensions, the average scores of parenting for the students of two parents were used to further classify in to the four parenting styles. A similar method was applied by previous researchers to categorize the parents into the parenting styles (e.g., Abesha, 2012, 1997; Markos, 1996; Steinberg et al., 1992b). Additionally, guided by theoretical approach of Maccoby and Martin (1983), the two parenting dimensions namely acceptance/involvement and control/strictness were categorized into the four parenting styles such as authoritative, authoritarian, permissive and neglectful. The sample medians of the two parenting dimensions' raw scores of the participants were used to examine and categorize the scores to the four parenting styles. According to Abesha (2012), the specific procedures were as follows:

a. Parents who were rated by their late adolescent and young adult children with a score above or equal to the sample median on the acceptance/involvement and strictness/supervision indices were considered as authoritative parents and assigned a parenting style score of "3".

b. Parents who were rated by their late adolescent and young adult children with a score below the sample median on the acceptance/involvement index but above or equal to the sample median on the strictness/supervision index were considered as authoritarian parents and assigned a parenting style score of "2".

c. Parents who were rated by their late adolescent and young adult children with a score above or equal to the sample median on the acceptance/involvement index but below on the strictness/supervision index were considered as indulgent parents and assigned a parenting style score of "1".

d. Parents who were rated by their late adolescent and young adult children with a score below the sample median on acceptance/involvement and strictness/ supervision indices were considered as neglectful (uninvolved) parents and assigned a parenting style score of "0".

**Peer Influence Scale**

Peer Influence Scale was used to measure the way peers' thought; feeling and behavior influenced the prosocial behavior of the students. The Peer Influence Scale is a sub-scale of Learner's Aggressive Questionnaire (Gasa, 2005). It contains 14 positive peer influence items out of the total 83 items of the original scale. The items are structured in a 3-point Likert format with responses ranging from 1= No, 2= undecided, and 3= yes. It has an original Cronbach alpha coefficient of 0.73. Researchers, (e.g. Agokei & Asuzu, 2012; Ojo, 2015) used this scale to

measure the influence of peer among undergraduate university students and high-school students in Nigeria. The scale retained good reliabilities which were α =. 74 and α = .62 respectively. In the current study during the validation of an instrument, *the reliability of the scale was* α = .717 while in the main study it appeared to be α = .738. In both data, internal consistency of the items was greater than the recommended reliability level α >.70. Therefore, this sub-scale was used because it helps to evaluate peer social context. It is also structurally preferred over alternative western standardized measures because the scale was originally conceptualized within sub-Saharan African secondary school context. It also isolates peer affective and behavioral contributions to socialization while minimizing respondent fatigue.

**Religiosity Measure**

Religiosity of the students was measured using a scale developed by Hardy & Carlo (2005). According to these authors, although numerous religiosity measures are available, and the concept has debating issue regarding the elements of religiosity, researchers attempt to measure one or more of the following aspects: religious salience or commitment; religious activity or involvement; and religious identity. These religiosity measures have seven items that together measure these three areas of religiosity. As noted by these authors, it was used among USA adolescents and a composite was created from seven items. The reliability of the scale was reported to be α =.93. Additionally, this religiosity scale was used in Nigeria among undergraduate students and the scale had similarly consisted three factors/composites which includes religious salience or commitment, religious activity or involvement and religious identity (Afolabi, 2014). Finally, as this author described, a composite was created using 7 items

that seem to together catch these three areas of religiosity. In this study, the internal reliability of the scale was found to be α =.84.

During the validation of instrument and in the main study, the internal consistency of religiosity measuring items was high. In the validation data, exploratory factor analysis was used and the items were grouped in to two factor structures. Factor 1: Practice of religion (comprising 4 items) and Factor 2: Participating on religion activities (consists of 3 items). The Cronbach alpha for each factor was .70 and .62 respectively which were acceptable reliability indices. In the main study, the Cronbach's alpha for 4 practice of religion and 3 participating on religious activities items were .798 and .828, respectively.

**Self-esteem Scale**

The self-esteem scale developed in 1965 by Morris Rosenberg was used to assess a global self-esteem. The Rosenberg Self-esteem Scale is a widely used self-reported instrument (Gray-Little, Williams, & Hancock, 1997). This instrument has been tested for its reliability and validity in many settings including USA and Ethiopia. It showed relatively similar internal consistency in both cultures for 10 items α= .91 and α= .92 respectively (Sinclair, Blais, Gansler, Sandberg, Bistis & LoCicero, 2010; Tadesse, 2015). The scale has ten items that assess individuals' general evaluation of themselves as a human being (Rosenberg, 1965). It measures self-esteem, self-confidence, and self-liking. It is measured on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). In the current study, it was used to gather data regarding students' self-esteem. Internal consistency of this scale was checked both during the instrument validation and the main study. Results indicated that self-esteem scale consisted of 10

items had (α = .701) during the validation of the tool while it maintained Cronbach's alpha of .740 in the main study.

## 3.4. Validation and Translation of Research Instruments

This section presents the validation and translation process of the questionnaire used in this research. The data collection instruments underwent various strategies to improve their psychometric properties.

### 3.4.1. Procedures of instruments translation

Initially, a closed ended questionnaire was prepared in English language. The English language version of the questionnaire was translated to Afan Oromo Language prior to data collection for a pilot study. The prepared instruments were provided to experienced psychology instructors, whose mother tongue is Afan Oromo. Then the translated Afan Oromo version was given to two fellow PhD candidates, one from English language background and Afan Oromo language PhD candidate, and the other from PhD psychology candidate.

After both forward and backward translations, the translators of the questionnaire and the researcher had a panel meeting to discussion on the gap the way the items were translated, and it was done item by item. Looking to each item, design, content, coherence, wording and applicability of the instrument, experts forwarded their feedbacks, particularly issues raised on applicability of the scales to Ethiopian context, lengthy statements and wordings were adjusted by the researcher. Finally, the agreed Afan Oromo version was used for the pilot study first. However, up on observation to the participants' preference to both versions during the pilot

study, the researcher prepared both Afan Oromo and English Languages versions and used for final data collection.

### 3.4.2. Pilot Study

Initially, a pilot study was conducted on fifty (50) senior secondary school students available in a school that was not included for the final data collection. Individuals for the pilot are selected and used as a sample on the logic of their accessibility, but being grades 11 and 12. As Creswell (2003), stated this availability technique is suitable and easy to access participants based on convenience. Available Grade 11 students who were in the school compound after completing their English language test and available grade 12 students during the break time were used for the data collection of the pilot study. Forty-six questionnaires were analyzed while four questionnaires were discarded due to incomplete responses.

Cronbach's alpha was used to determine the internal consistency of the instrument, in which higher Cronbach's alpha coefficient values indicate that the items in the construct have high reliability. Although higher is expected, in principle many studies recommend the minimum adequate level of Cronbach alpha coefficient. For example, as Hair et al. (2010) mentioned, the minimum level that must be fulfilled is .60 for any variable to retain a standard reliability. Therefore, in the pilot study of this research, the Cronbach's alpha for 25 items aggregate prosocial tendencies was .84. For specific parenting dimensions: acceptance and control, the Cronbach's alphas were .79 and .73 respectively. The Cronbach's alpha for peer influence, religiosity and self-esteem appeared to be .76, .81 and .77 respectively. After the internal consistency of instruments was ensured, the second round pilot study for upgrading was conducted.

The second round pilot study was done using 251 participants, where 225 questionnaires were properly completed and used for validation. It was to assess the relevance of instruments designed to collect the data. The reliability and validity of the instruments were checked. The data collection for the main study was done after the tool validation, and the validation report was presented and approved by the board of examiner assigned (for upgrading) from the School of Psychology, AAU. As it is clear that pilot studies are small and trial versions of proposed studies to test their effectiveness, feasibility and make improvements, the psychometric properties of the instruments were checked in this study.

Scholars describe pilot study as a smaller version of a proposed study conducted to refine the instrument using similar setting and participants to test for the internal consistency and validity of instrument or questionnaire (Blumberg et al., 2005; Burns & Grove, 2001; Chakrabartty, 2013; DeVellis , 2006; Mohajan, 2017; Pallant, 2011; Robson, 2011; Thatcher, 2010). Researchers also suggest that validity test has different components such as content validity, face validity, constructs validity and criterion-related validity (Creswell, 2005; Pallant, 2011). As part of pilot study, whether the instruments are valid or not can be checked using the two major suggested validity methods, namely content validity and construct validity (Leary, 2004; Nunnally & Bernstein, 1994). As defined by Newman, Lim and Pineda (2013), content validity denotes logical and definition validity, applied to check if the considered items can represent the content domain of the instrument. To improve the obscure items in the instrument, and remove inappropriate items by the recommendation of the reviewers, content validity usually adheres to the judgements of experts in the area (Thatcher, 2010). On the other hand, construct validity which is especially important for testing a scale to ensure that the measure is actually measuring what it is intended to measure, and does not measure other variables. According to

Pallant (2011), construct validity involves analyzing of a scale on the basis of theoretically derived hypotheses concerning the nature of underlying variables or constructs.

Therefore, in this study, construct validity of the instrument in this study was statistically checked through items correlation in exploratory factor analyses (EFA) to ensure the items that load on certain constructs. That is, item relationships were used to identify the factor loadings for each item. If items loaded highly on their intended factor, it conveys convergent validity evidence while weakly loaded items on other factor indicates discriminant validity evidence.

## 3.5. Instruments Validation Method

### 3.5.1. Instruments

The questionnaire used in this study consists of two parts. The first part established to obtain socio-demographic information of the participants. This includes gender, age and grade level of the students. The second part contains items designed to measure both dependent and independent variables. That is, 25 items to measure prosocial tendencies, 25 items to measure parenting dimensions, 14 items to measure peer influence, 7 items to assess religiosity and 10 items to measure self-esteem of the participants. Afan Oromo language version was used to collect data for validation study from six Woredas of South West Shewa zone's secondary school students. During the data collection process, to ensure ethical issues, verbal consent to participate or not on the study was obtained. In addition to what is written on the questionnaire, the purpose of the study was described to the participants.

### 3.5.2. Data Reduction

The data reduction in this study was processed using Statistical Package for Social sciences (IBM SPSS) version 26. In order to identify the factor structures of Prosocial Tendencies Measure, Exploratory Factor Analysis (EFA) was used. According to Child (2006), EFA is

applied to identify the complex patterns within the dataset, evaluating the predictive capabilities, and detecting various factors that impact the variables. Additionally, EFA was described by Nunnally, Bernstein and Berge (1967) emphasizing on its importance in testing any scale and identifying the core constructs and dimensions of it. Based on this logic, EFA was chosen by the current researcher to examine the factor structure of prosocial tendency measure (PTM-R). The rationale behind exploring the factor structures is that this scale was not validated in previous researches in Ethiopia, though some studies used it just testing its reliability. Therefore, to the best knowledge of the current researcher it was not used by testing factor structures in the context of Ethiopian adolescents.

The parallel analysis using O'Connor (2000) rawpar.sps script was performed. It is available at https://oconnorpsych.ok.ubc.ca/nfactors/nfactors.html. Recently researchers have been using Parallel Analysis. It is a method used to determine the number of factors in addition to the traditional approaches like eigenvalues greater than 1, usually known as the Kaiser- Guttman rule and examining the scree plot. Many studies have underscored on the importance of Parallel Analysis which is effective and contributes good results when applied well (Velicer, Eaton & Fava, 2000; Wang, 2002). Thus, in the current study, EFA was used after the number of factors were determined using a parallel analysis. EFA was performed with Direct Oblimin rotation after Principal Axis Factoring extraction. According to Yong and Pearce (2013), Oblimin rotation can be used if there is theoretical evidence that claims the factors are correlated, which was true in this study.

As indicated in a study, factor loading needs to be at least .32 (Tabachnick & Fidell, 2007), though the choice of cut-off may depend on the simplicity of interpretation and how complex variables are managed. In this study during validation, items that have factor loading greater than

.32 have been retained for PTM-R and Religiosity. Tools for Parenting dimensions, self-esteem and Peer influence were not assessed using EFA given that they have been frequently used in Ethiopian Context.

## 3.6. Results of Validation Study

Out of the sample of 251, a total of 225 students properly completed the questionnaires, indicating 89.64 percent response rate in the validation study. These participants were selected using simple random sampling. Among the selected participants, 117 (52%) were males and 108 (48%) were females. Most students, 119 (52.89%) were from grade 12 while 106 (47.11%) students were from grade 11. The mean age of the participants was found to be 18.58 years.

### 3.6.1. Descriptive Statistics and Reliability Analysis

The mean value of PTM-R of the participants was $M$= 3.48 $SD$ = .76. This shows that the participants reported a moderate level of prosocial tendencies, leaning slightly above the midpoint of 3.00. Concerning item-level descriptive statistics and reliability analysis, as shown in Table 1and Table 2, every individual item in PTM-R scale retained a Cronbach's alpha greater than .70, indicating the entire scale possesses adequate internal consistency even if a specific item is deleted. The reliability indices for PTM-R did not show significant changes even when the individual items were dropped. The Kolmogorov-Smirnov test revealed that the data for the questionnaire was not normally distributed; indicating most of the items in the questionnaire are negatively skewed. This suggests that most participants rated the items higher.

**Table 1**

*The item- level Descriptive Statistics and Reliability Analysis of the PTM-R (n =225)*

| Items | Mean | SD | Skew. | Kurt. | K-S | Cronbach's α if item dropped |
|---|---|---|---|---|---|---|
| Puit1 | 2.61 | .673 | -1.465 | .752 | .435 | .742 |
| Puit3 | 2.61 | .680 | -1.475 | .745 | .437 | .745 |
| Puit5 | 2.62 | .678 | -1.538 | .909 | .445 | .741 |
| Puit13 | 2.63 | .657 | -1.527 | .984 | .440 | .748 |
| Altit4 | 4.31 | .750 | -.891 | .390 | .280 | .753 |
| Altit10 | 4.28 | .747 | -.562 | -.783 | .283 | .747 |
| Altit16 | 4.42 | .741 | -.860 | -.672 | .356 | .751 |
| Altit20 | 4.52 | .701 | -1.113 | -.119 | .391 | .735 |
| Altit23 | 4.49 | .708 | -1.348 | 1.474 | .363 | .738 |
| Altit24 | 4.49 | .655 | -.935 | -.247 | .362 | .747 |
| Emit2 | 2.60 | .626 | -1.338 | .653 | .416 | .751 |
| Emit12 | 2.68 | .556 | -1.514 | 1.348 | .440 | .759 |
| Emlit17 | 2.63 | .544 | -1.124 | .262 | .413 | .756 |
| Emit21 | 2.50 | .676 | -1.000 | -.214 | .371 | .752 |
| Emit25 | 2.50 | .695 | -.716 | .250 | .356 | .748 |
| Dirit6 | 3.44 | 1.076 | .287 | -1.203 | .272 | .753 |
| Dirit9 | 3.32 | .848 | -.310 | -.977 | .287 | .744 |

**Table 2**

*The item- level Descriptive Statistics and Reliability Analysis of the PTM-R (n =225) continued*

| | | | | | | |
|---|---|---|---|---|---|---|
| Dirit14 | 3.57 | 1.208 | -.036 | -1.561 | .223 | .759 |
| Comt7 | 4.16 | .797 | -.830 | .435 | .260 | .761 |
| Comti18 | 4.34 | .887 | -1.337 | 1.033 | .319 | .776 |
| Anait8 | 3.65 | .914 | .047 | -.913 | .237 | .739 |
| Anait11 | 3.73 | .940 | -.029 | -1.053 | .231 | .730 |
| Anait15 | 3.67 | .977 | .016 | -1.101 | .237 | .730 |
| Anait19 | 3.70 | .939 | .214 | -1.203 | .291 | .726 |
| Anait22 | 3.45 | 1.056 | .135 | -1.188 | .217 | .742 |

### 3.6.2. Factor structures of PTM-R

#### 3.6.2.1.Construct Validity

Exploratory Factor Analysis (EFA) was used to check construct validity by identifying the items that group together as theoretically assumed. If items loaded highly on their intended factor, it ensures the convergent validity evidence whereas weakly loaded items on others factor shows a discriminant validity evidence. In this study, in examining factor structures of the PTM-R, the eigenvalues of the real data and the simulative data are compared in order to calculate the number of factors using Parallel Analysis. Regarding this, Ledesma and Mora (2007) stated that the number of factors at the point where the eigenvalue in the simulative data is greater than that of the actual data is considered significant, and factors whose eigenvalue in the raw data is greater than that of eigenvalue of the simulative data are considered. As can be seen in Table 3, the eigenvalues of the actual data for PTM-R are found to be greater than the eigenvalues of the simulative data on seven factors, and these seven factors for PTM-R were retained for further analysis.

**Table 3**

*Parallel Analysis Results of the PTM-R (n =225)*

| PTM-R | | |
|---|---|---|
| Factors | Eigen values of the actual data | Eigen values of the simulative data |
| 1 | 3.654 | 1.798 |
| 2 | 3.598 | 1. 676 |
| 3 | 2.810 | 1. 589 |
| 4 | 2.486 | 1. 515 |
| 5 | 2.045 | 1. 453 |
| 6 | 1.596 | 1. 397 |
| 7 | 1.483 | 1.345 |
| 8 | 1.001 | 1.289 |

From prosocial tendencies measure revised (PTM-R) different from the original scale, seven factors were extracted from 25 items. EFA was performed based on the Parallel Analysis results, using Principal Axis Factoring with Direct Oblimin rotation. Prior to conducting EFA, there are basic assumptions that must be checked. The first assumption to conduct EFA is a precondition related to Bartlett's test of Sphericity (measure of correlation among variables) and Kaiser-Meyer-Olkin's (KMO) measure of sampling adequacy (MSA), which was tested in this study. In order to run EFA, it is generally expected for KMO to be greater than .5 (between 0.5 and 1) and Bartlett's test of Sphericity to be less than .005. In this study, the construct validity of PTM-R was ensured, resulting KMO .705 and Bartlett's test of Sphericity less than .001, which fulfill the assumptions to run EFA. Furthermore, linearity, multicollinearity, normality

and homoscedacity of the measure were examined. Items that have factor loading of .32 or above were retained. Seven factors were extracted from PTM-R with very good sampling adequacy (Kaiser-Meyer-Olkin-KMO =.705) and significant Bartlett's Test of Sphericity ($\chi 2$= 2618.204, $p < .001$), explaining 58.08% of the variance. Next to determination of the number of factors through parallel analysis, factor structure was analyzed by EFA using Principal Axis factoring varimax rotation. Principal Axis factoring appears to be more effective at recovering weak factors. In this validation process thus, the prosocial tendency measure items with factor loading greater than.32 have been retained. Prior studies have suggested on the level of communalities to be accepted. Communalities which range between .25 to .40 are regarded as adequate cutoff values for the items of the scale (Beavers et al., 2019; Eaton et al., 2019) while communalities less than .20 are better discarded (Child, 2006).

**Table 4**

*Factor Structures of the PTM-R, Seven-Factor Solution (n =225)*

| Extracted Factors | Factor Loading | | | | | | | Communalities |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| **Public** | | | | | | | | .930 |
| Puit5 I get the most out of helping others when it is done in front of other people | .96 | | | | | | | |
| Puit3 When other people are around, it is easier for me to help others in need | .87 | | | | | | | .778 |
| Puit13 Helping others when I am being watched is when I work best | .74 | | | | | | | .549 |
| Puit1 I can help others best when people are watching me | .73 | | | | | | | .547 |
| **Altruism** | | | | | | | | |
| Altit20 One of the best things about doing charity work is that it looks good on my future resume | | .78 | | | | | | .629 |
| Altit23 I feel that if I help someone, they should help me in the future | | .71 | | | | | | .527 |
| Altit16 I believe I should receive more rewards for the time and energy I spend on volunteer work/activity | | .68 | | | | | | .473 |
| Altit10 I believe that donating goods or money works best when I get some benefit. | | .65 | | | | | | .443 |
| Altit4 I think that one of the best things about helping others is that it makes me look good. | | .61 | | | | | | .387 |

**Table 5**

*Factor Structures of the PTM-R, Seven-Factor Solution (n =225) continued*

| | | | | | |
|---|---|---|---|---|---|
| Altit24 I often help even if I don't think I will get anything out of helping. | .48 | | | | .281 |
| **Donation Creates good feeling-Anonymous** | | | | | |
| Anait11 I tend to help others in need when they do not know who helped them. | | .92 | | | .909 |
| Anait15 Most of the time, I help others when they do not know who helped them. | | .86 | | | .840 |
| Anait22I often make donations without anyone knowing because they make me feel good. | | .84 | | | .751 |
| **Helping when being helped don't know** | | | | | |
| Anait8 I prefer to donate money without anyone knowing | | | .69 | | .659 |
| Anait19 I think that helping others without them knowing is the best type of situation. | | | .59 | | .673 |
| **Emotional** | | | | | |
| Emit12 I tend to help others especially when they are really emotional. | | | | .74 | .591 |
| Emit2 It makes me feel good when I can comfort someone who is very upset | | | | .65 | .447 |
| Emlit17 I respond to helping others best when the situation is highly emotional | | | | .61 | .386 |

**Table 6**

*Factor Structures of the PTM-R, Seven-Factor Solution (n =225) continued*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Emit25 I usually help others when they are very upset | | | | | .58 | | | .356 |
| Emit21 Emotional situations make me want to help others in need | | | | | .57 | | | .334 |
| **Dire** | | | | | | | | |
| Dirit6 I tend to help people who are in a real crisis or need | | | | | | .79 | | .634 |
| Dirit14 It is easy for me to help others when they are in a bad situation. | | | | | | .71 | | .515 |
| Dirit9 I tend to help people who are hurt badly. | | | | | | .67 | | .468 |
| **Compliant** | | | | | | | | |
| Comt7 When people ask me to help them, I don't hesitate | | | | | | | .83 | .701 |
| Comt18 I never wait to help others when they ask for it. | | | | | | | .82 | .771 |
| Eigenvalue | 3.65 | 3.60 | 2.81 | 2.49 | 2.05 | 1.60 | 1.00 | |
| % of Total Variance | 14.6 | 14.4 | 1.2 | 9.94 | 8.18 | 6.38 | 4.00 | |
| %Total Variance | | | | | | | 58.08% | |
| Kaiser–Meyer–Olkin | | | | | | | .705 | |
| Number of items | 4 | 6 | 3 | 2 | 5 | 3 | 2 | |
| Cronbach α | .89 | .81 | .94 | .84 | .76 | .75 | .81 | |

Bartlett's Test of Sphericity <.001, determinants=.006

As can be seen from Tables 4, 5 & 6, the construct validity was supported by all items demonstrating strong primary factor loadings ranging from .48 to .96 on their respective target

factors (convergent validity), exceeding the standard threshold of .40 and distinct items didn't accidentally measure the wrong factor, revealing less than .30 on other factors. In addition, the extracted factors capture a substantial amount of the underlying construct, showing greater than 50%.

### 3.6.3. Factor Structures of Religiosity

**Table 7**

*Two Factor Structures of Religiosity (n =225)*

| Extracted Factors | Factor Loading | | Communalities |
|---|---|---|---|
| | 1 | 2 | |
| **Religious Practice** | | | |
| Re5 I practice my religion | .841 | | .752 |
| Re4 I am a spiritual person | .741 | | .552 |
| Re7 My faith makes me who I am | .698 | | .606 |
| Re6 My faith never deserts me during hard times | .701 | | .584 |
| **Participating on Religious Activities** | | | |
| Re3 How often do you attend religion center related activities (such as youth activities) other than worship services? | | .905 | .828 |
| Re1 How important is religion in your life | | .635 | .521 |
| Re2 How often do you go to your religion center | | .671 | .546 |
| Eigenvalue | 2.29 | 1.88 | |
| % of Total Variance | 32.66 | 26.92 | |
| %Total Variance | | 46.8% | |
| Kaiser–Meyer–Olkin | | .72 | |
| Number of items | 4 | 3 | |
| Cronbach α | .70 | .62 | |

Bartlett's Test of Sphericity <.001, determinants=.165

Given that religiosity scale of seven items with original three factors is new to our context, the factor structures of this scale were assessed using EFA. Principal components analysis with varimax rotation was used to assess how "religiosity" variable is clustered. There were two factors extracted from religiosity. Factor 1, renamed as 'Religious practice' was found to comprise 4 items, explaining 32.66% of the variances while the factor loadings range from .84 to .69. Factor 2 which are labeled as 'participating in religious activities' consisting 3 items explaining 26.92% of the variance, with item loadings ranging from .64 to .91. No items were removed during extraction. In general, 46.85% of the variance in the religiosity scale is explained by the two factors of the religiosity. The Cronbach alpha coefficients for both factors were .70 and .62 respectively which were acceptable at a pilot level.

## 3.7. Descriptive Statistics of Parenting Dimensions, Peer Influence, Self-esteem during Validation

In the validation study, the parenting dimension scale, self-esteem scale and peer influence were assessed for their internal consistency and contents. The researcher didn't evaluate factor structures of these scales because they are already being used by researchers in many studies in the Ethiopian context (e.g., Abesha, 2012; Emagnaw & Hong, 2018; Markos, 1996). The researcher emphasized on the internal consistency of the items to indicate how consistently the items on a scale measure the same construct using Cronbach's alpha for each item as well as inter- item correlation. Additionally, the normality of data for acceptance/involvement parenting dimension was also checked using Skeweness and Kurtosis values. Normality of the distribution assumption to be satisfied, skewness and kurtosis values should be between -2 and +2, -10 to +10 (Collier, 2020) respectively. Based on this logic, descriptive results were presented in Table 5 below. In this validation study, skewness

values that ranged from -1.739 to .872 and kurtosis values ranged from -1.454 to 1.909, which fall in the criterion ranges and supported normality of the distribution.

**Table 8**

*The item- level Descriptive Statistics and Reliability Analysis of the Involvement Parenting - InPD (n =225)*

| Items | Mean | SD | Skew. | Kurt. | K-S | Cronbach's α if item dropped |
|---|---|---|---|---|---|---|
| In1 | 3.53 | .518 | -.311 | -1.454 | .356 | .788 |
| In2 | 3.47 | .954 | -1.739 | 1.747 | .410 | .783 |
| In3 | 3.19 | .997 | -.991 | -.200 | .302. | .762 |
| In4 | 3.52 | .648 | -1.000 | -.118 | .399 | .776 |
| In5 | 3.59 | .606 | -1.324 | 1.293 | .348 | .759 |
| In6 | 3.51 | .552 | -.509 | -.839 | .283 | .779 |
| In7 | 3.51 | .682 | -1.557 | 1.909 | .352 | .761 |
| In8 | 3.40 | .762 | -1.308 | 1.546 | .318 | .750 |
| In9 | 3.26 | .947 | -1.141 | .289 | .308 | .745 |
| In10 | 3.30 | .717 | -.878 | .739 | .263 | .768 |
| In11 | 3.32 | .670 | -.917 | 1.462 | .272 | .768 |
| In12 | 3.43 | .679 | -1.217 | 1.883 | .315 | .765 |
| In13 | 3.54 | .590 | .872 | .222 | .370 | .771 |

As can be seen in Table 8, the item-level descriptive statistics and reliability analysis results show every individual item in acceptance parenting scale retained a Cronbach's alpha greater than .70, indicating the entire scale possesses adequate internal consistency. The reliability indices for InPD/APD did not show significant changes even when the individual items were

dropped. The mean score of items (*M*=3.43, *SD*=.72) which shows higher acceptance of parents of adolescents' behavior.

**Table 9**

*The item- level Descriptive Statistics and Reliability Analysis of the CPDs (n =225)*

| Items | Mean | SD | Skew. | Kurt. | K-S | Cronbach's α if item dropped |
|---|---|---|---|---|---|---|
| Co14 | 3.71 | .494 | -1.355 | .782 | .448 | .907 |
| Co15 | 3.62 | .514 | -.785 | -.722 | .403 | .904 |
| Co16 | 2.71 | .520 | -1.566 | 1.564 | .451 | .889 |
| Co17 | 2.77 | .470 | -1.944 | 3.038 | .481 | .889 |
| Co18 | 2.77 | .482 | -1.982 | 3.195 | .480 | .890 |
| Co19 | 2.79 | .462 | -1.070 | 3.605 | .487 | .892 |
| Co20 | 2.76 | .480 | -1.791 | 2.394 | .473 | .890 |
| Co21 | 2.82 | .451 | -1.495 | 5.694 | .501 | .887 |
| Co22 | 2.80 | .450 | -1.256 | 4.498 | .495 | .892 |
| Co23 | 2.77 | .517 | -1.199 | 3.969 | .486 | .889 |
| Co24 | 2.79 | .490 | -1.276 | 4.455 | .491 | .888 |
| Co25 | 2.86 | .420 | -1.079 | 6.139 | .517 | .893 |

The item-level descriptive statistics and reliability analysis results show that each individual item in control parenting scale retained a Cronbach's alpha greater than .70, indicating the entire scale possesses adequate internal consistency. The reliability indices for CPD did not show significant changes even when the individual items were dropped. The mean value of control parenting dimension was (*M*= 2.9 *SD* = .48). This shows that the participants reported greater

than mean of the scale. As shown in Table 9, the reliability indices for CPD did not show significant changes even when the individual items were dropped. The Kolmogorov-Smirnov test revealed that the data for the questionnaire was not normally distributed; indicating most of the items in the questionnaire are negatively skewed.

**Table 10**

*The item- level Descriptive Statistics and Reliability Analysis of the Peer Influence (n =225)*

| Items | Mean | SD | Skew. | Kurt. | K-S | Cronbach's α if item dropped |
|---|---|---|---|---|---|---|
| Pe1 | 2.93 | .319 | -1.841 | 3.958 | .535 | .739 |
| Pe2 | 2.94 | .242 | -.649 | 1.416 | .539 | .714 |
| Pe3 | 2.96 | .280 | -1.495 | 4.876 | .536 | .739 |
| Pe4 | 2.93 | .250 | -1.498 | 6.326 | .538 | .714 |
| Pe5 | 2.84 | .489 | -.127 | 4.558 | .523 | .723 |
| Pe6 | 1.21 | .407 | 1.442 | .080 | .487 | .720 |
| Pe7 | 1.78 | .414 | -1.377 | -.106 | .483 | .734 |
| Pe8 | 1.52 | .501 | -.099 | -2.008 | .353 | .754 |
| Pe9 | 1.43 | .496 | .280 | -1.939 | .376 | .742 |
| Pe10 | 1.20 | .404 | 1.476 | .179 | .489 | .762 |
| Pe11 | 1.20 | .404 | 1.476 | .179 | .489 | .762 |
| Pe12 | 1.38 | .486 | .508 | -1.758 | .404 | .788 |
| Pe13 | 1.14 | .345 | 1.116 | 2.500 | .517 | .799 |
| Pe14 | 1.36 | .533 | 1.135 | .264 | .419 | .796 |

Regarding item-level descriptive statistics and reliability analysis, as shown in Table 10, every individual item in peer influence scale retained a Cronbach's alpha greater than .70, indicating the whole scale possesses adequate internal consistency though a specific item is

deleted. The reliability indices for peer influence did not show significant changes even when the individual items were dropped. The mean score of items was (*M*=1.92, *SD*= .39) which shows low peer influence of adolescents' behavior.

**Table 11**

*Internal Consistency the Scales and Sub-scales of PMT-R, Parenting Dimension, Peer Influence, Self-esteem, and Religiosity*

| Scale/Sub-Scale | Number of Items | Cronbach Alpha of a pilot Study | Cronbach Alpha of the main Study |
|---|---|---|---|
| Public | 4 | .89 | .90 |
| Altruism | 6 | .81 | .93 |
| Good feeling from donation | 3 | .94 | .77 |
| When being helped don't know | 2 | .84 | .78 |
| Emotional | 5 | .76 | .77 |
| Dire | 3 | .75 | .75 |
| Compliant | 2 | .81 | .86 |
| PMT-R Scale | 25 | .76 | .82 |
| Acceptance Parenting | 13 | .78 | .82 |
| Control Parenting | 12 | .90 | .90 |
| Peer Influence | 14 | .72 | .74 |
| Self-esteem | 10 | .70 | .74 |
| Religious Practice | 4 | .70 | .79 |
| Participating in religious activities | 3 | .62 | .83 |
| Religiosity Scale | 7 | .81 | .84 |

As can be seen from Table 10, the internal consistency of both pilot and main studies are satisfying the acceptable threshold of the alpha level. The overall scale for PTM-R showed strong internal consistency ($\alpha$ = .76 & .82) in both pilot and main studies. The sub-scale of acceptance parenting also indicated ($\alpha$ = .78 & .82) while the internal consistency of the control parenting revealed ($\alpha$ = .90 & .91) in both studies respectively. The peer influence scale demonstrated good internal consistency in pilot and main studies with ($\alpha$ = .72 & .74) respectively. Similarly, self-esteem scale showed acceptable internal consistency of ($\alpha$ = .70 & .74). The aggregate scale for religiosity showed strong internal consistency ($\alpha$ = .81 & .84) respectively in pilot and main studies.

## 3.8. Data Collection Procedures

Before data collection, a permission letter was obtained from Addis Ababa University, School of psychology and sent to concerning bodies following the approval of the proposal. The researcher communicated with South West Shewa zone's education office, selected Woredas education offices and all sampled schools to get lists of the students. After getting lists, the researcher conducted selection of the participants using computer system number generator and prepared the desired number of participants for the study. During the data collection period, each school's Director facilitated the data collection process, six enumerators were used for data collection, half a day training was given to the data collectors, the study participants were asked for their consent before participation, and finally the questionnaire which is prepared in both Afan Oromo and English languages were administered based on the participants' preferences of the language after all these processes. Throughout the data collection, academic class schedule of the students was considered to ensure the availability of the participants. Each teacher who had a

class with the selected section was communicated to allow 25- 30 minutes before beginning their class.

### 3.9. Methods of Data Analysis

The data was analyzed using different methods with the help of SPSS version 26. Descriptive statistics such as frequency, percentages, mean and standard deviation were used for socio-demographic variables (e.g., gender and grade level). Pearson product moment correlation coefficient was computed to examine the inter-correlation among independent and dependent variables (e.g., parenting styles, self-esteem, peer influence, religiosity and prosocial behavior). Independent t-test was used to examine variation in prosocial behavior by gender. To determine the level of prosocial behavior, one sample t-test was employed while one-way ANOVA was used to assess difference in prosocial behavior by four parenting styles. Tukey's HSD post hoc test was used to check for which groups significantly differ. Before conducting advanced quantitative analyses, the data was tested for normality, homoscedasticity, multi-Collinearity and linearity.

For further statistical analysis of dependent variable and independent variables, multivariate methods of analysis such as multiple linear regression and path analyses were also employed. According to Allen (2017), multiple linear regressions is a statistical analysis procedure that expands linear regression by including more than one independent variable in an equation to understand their association with a dependent variable aiming to reveal associations between multiple predictor variables and a single outcome variable. Multiple regression is a flexible statistical method employed to predict values of a particular variable based on knowledge of its association with known values of other variables, and it can be used to test

scientific hypotheses about whether and to what extent certain independent variables explain variation in a dependent variable of interest including continuous as well as categorical variables (Salkind, 2010).

In this study, multiple regression analysis was used with the purpose that it allows the researcher to assess the strength of the relationship between the dependent variable and several predictor variables. It has advantage in analyzing quantitative data because the ability to determine the relative influence of one or more predictor variables to the criterion value is central in addition to its ability to identify outliers, or anomalies. The strength of association between dependent (e. g., prosocial behavior) and predictors (e. g., parenting styles, self-esteem, peer influence, religiosity, gender and grade level) was also assessed using this method. Therefore, multiple linear regression analysis was used to examine the predictive power of the explanatory variables on the prosocial behavior. Partial Eta Squared was applied to estimate the effect size because it is more suitable effect size estimator for one-way ANOVA, indicating how large of an effect the factor is on the dependent variable (Levine & Hullett, 2002). This effect is classified in to different levels as Cohen (1988) described. Usually, eta squared less than .01 is negligible, .06 is small, .14 is medium and greater than .14 is considered as large effect size.

Before using multiple linear regressions, the following assumptions were tested. First, a linear relationship between the dependent and independent variables was checked through creating scatterplots and then visually inspecting the scatterplots for linearity. Second, multicollinearity, that states the independent variables are not highly correlated with each other or which occurs when the independent variables (explanatory variables) are highly correlated was also tested. In its principle, when independent variables show multicollinearity, there will

be problems figuring out the specific variable that contributes to the variance in the dependent variable. The best method to test for the assumption is the Variance Inflation Factor method and it was checked using this method. If the values of the variance inflation factor are less than 2 and the tolerance statistic is greater than.50, we can state that there is no Collinearity between the predictor variables. The results in this study show that all values of variance inflation factor are less than 2 and all values of tolerance statistic are greater than.50, which is a good value, and show lack of Collinearity between the independent variables.

Third, the assumption that states the variance of the residuals is constant or homoscedasticity was checked via plotting the data on a scatterplot or by using statistical software to produce a scatterplot that includes the entire model. This is because; multiple linear regressions assume that the amount of error in the residuals is similar at each point of the linear model. When analyzing the data, the researcher plotted the standardized residuals against the predicted values to determine if the points are distributed fairly across all the values of independent variables. Thus, there was no problem with homoscedasticity of the data in this study.

Fourth, independence of observation was tested. To test for this assumption, the Durbin Watson statistic was used. Durbin–Watson test was used to investigate the independence of residuals (lack of serial correlation between residuals or error). The model assumes that the observations should be independent of one another or the model assumes that the values of residuals are independent. The test result practically shows values from 0 to 4, where a value of 0 to 2 shows positive autocorrelation and values from 2 to 4 show negative autocorrelation. The mid-point, i.e., a value of 2, shows that there is no autocorrelation. However, the value of

Durbin–Watson test is acceptable if it found between 1.5 to 2.5 (Azami, Sharifi & Alvandpur, 2020). In this study, it was obtained 1.70, which is within the acceptable range (1.5 to 2.5) and it shows that the residuals have relative independence and there is no serial correlation between them. Fifth, multivariate normality, which occurs when residuals are normally distributed, was tested through look at how the values of residuals are distributed. It can also be tested using two main methods, i.e., a histogram with a superimposed normal curve or the normal probability plot method.

Path analysis was also used to test the relationships of prosocial behavior with the independent variables. Mediation analysis that quantifies the extent to which a mediating variable partakes (e. g., self-esteem, peers, religiosity) in the transferal of change from independent variables (e.g., parenting styles) to outcome variable (e.g. Prosocial behavior) was tested. Therefore, the direct effects of parenting style on prosocial behavior and the indirect effects via peer, self-esteem and religiosity were examined through meditational analysis.

## 3.10. Ethical Considerations

It is imperative that ethical issues are considered in conducting research. Consistent with the ethical guideline of the American Psychological Association (2020), the ethical issues were carefully taken into account. After a critical evaluation and comments on the research protocol, the Research Ethics Committee of the School of Psychology, Addis Ababa University provided ethical clearance for the researcher. Permission to access to the students was also obtained from the Zonal Educational Office of South West Shewa Zone. The consent form that described the purpose of the study and benefits of participating in the study like generating empirical evidence on their prosociality and the role of social and personal forces in shaping this behavior was

debriefed for the participants of the study. The confidentiality of information obtained from the participants was cared for by assigning identification numbers. This study adhered to strict ethical standards to confirm no harm to participants. The collection and analysis of data were also conducted with careful objectivity (e.g., tools were validated, behaviors are measured scientifically using quantitative data), ensuring a neutral position to maintain findings remain unbiased and truthful.

# Chapter Four

# Results

Under this chapter, results of the study guided by basic research questions were presented. This chapter presents and describes the demographic characteristics of the study sample, the level of prosocial behavior, major prosocial dimensions practiced among the participants, and the association between the study variables (i.e., parenting styles, peer influence, religiosity and self-esteem). Additionally, gender differences in the study variables (i.e., parenting styles, peer influence, religiosity, self-esteem and prosocial behaviors), variation in prosocial behavior across different parenting styles, and the mediation role of the predictor variables between parenting dimensions and prosocial behavior were presented.

## 4.1. Demographic information of the Participants

The demographic characteristics of the participants described using frequencies and percentages as shown in Table 12 below. Three hundred eighty (380) questionnaires were distributed. However, due to missing in filling out the questionnaires, incomplete responses of some participants were discarded. Thus, out of a total 380 questionnaires, 353 questionnaires were appropriately completed and used for further analysis. This shows that the response rate in this study is 92.89 percent.

**Table 12**

*Demographic Description of the Participants by Grade Level, Age and Gender*

| Demographic Characteristics | | Sex | | Total |
|---|---|---|---|---|
| Grade level | | Males | Females | |
| | 11 | 99(28.05%) | 75(21.25%) | 174(49.29%) |
| | 12 | 97(27.48%) | 82(23.23%) | 179(50.71%) |
| | Total | 196(55.53%) | 157(44.47%) | 353(100%) |
| Participants' Age | 16_17 years | 76(21.53%) | 72(20.39%) | 148(41.92%) |
| | 18_19 years | 69 (19.55%) | 78(22.1%) | 147(41.65%) |
| | 20 & above | 39(11.05%) | 19(5.38%) | 58(16.43%) |
| | Total | 184 (52.12%) | 169 (47.88%) | 353(100%) |
| Participants' religious affiliation | Orthodox | 82(23.23%) | 60(16.99%) | 142 (40.22%) |
| | Muslim | 50(14.16%) | 53(15.01%) | 103(29.17%) |
| | Protestant | 36(10.19%) | 35(9.92%) | 71(20.11%) |
| | Catholic | 4(1.13%) | 3(.85%) | 7(1.98%) |
| | Waaqeffataa | 20(5.66%) | 10(2.83%) | 30(8.49%) |
| | Total | 192(54.39%) | 161(45.6%) | 353(100%) |

As Table 12 shows, out of the total 380 samples, 353 participants completed the questionnaire appropriately and returned, indicating 92.89% response rate. As is shown in Table 9, the majority of participants are male students with a total number of 196(55.53%) from both grade 11 and 12, and the remaining 157(44.47%) are female students from both grades. The slight difference in sample representation between the two sexes may reflect the difference in the ratio of male and female students in secondary schools. With respect to the grade level of the students, most students, 179(50.71%), are from grade 12, while 174(49.29%) students are from grade 11. Moreover, the participants' age ranges from 16 to 20 years, where the majority of the participants, 295 (83.57%) are between 16 &19 years. Participants with the ages of 20 and above

are found to be the least 58(16.43%). The sample contains $M_{age}$ = 18.05, *SD* = 1.82. These results may reflect that the age of most students in senior secondary schools range from 16 to 20 years. In terms of religion affiliation of the participants, majority of the participants are Orthodox religion followers 142 (40.22%) followed by Muslim 103(29.17%) and Protestant 71(20.11%) religion followers. The least number of participants are from Catholic religion 7 (1.98%).

### 4.2. The Level of Prosocial Behavior among Students

Status of aggregate prosocial behavior was assessed using one-sample t-test. The participants were ranging from low score 25 meaning 1 * 25 to a high score 5 * 25 which gives 125 on prosocial behavior. A midpoint on Likert scale was used to compare results with an actual average score of the participants. Three (3) is a midpoint for the scale of PTM-R with 25 items as 1, 2, 3, 4 and 5. Therefore, 25*3 =75, is an expected average of the scale in this study. One sample t-test results indicated that participants had a significantly higher observed mean score of aggregate prosocial behavior (*M*= 81.99, *SD*= 11.13) than the expected mean test value (*M* = 75). This result shows that tendencies of the study participants in engaging in prosocial behavior aimed to support others is found to be good. This might be due to an inter-dependence and collective cultural values, norms and practices of Ethiopian context.

### 4.3. The major prosocial behaviors salient to the students

The original prosocial behavior has six structures. But in this study one factor divided into two and seven factors emerged in our context. To identify the commonly practiced prosocial dimensions, descriptive statistics (means and standard deviations) of each were used.

**Table 13**

*Descriptive Statistics for the Subscales of PMT-R*

| | *N* | *Mean* | *SD* |
|---|---|---|---|
| Public Dimension | 353 | 2.35 | .86 |
| Altruism Dimension | 353 | 3.77 | 1.33 |
| Donation Creates good feeling-Anonymous Dimension | 353 | 3.5 | 1.03 |
| Helping when being helped don't know Dimension | 353 | 3.67 | .98 |
| Emotional Dimension | 353 | 2.74 | .82 |
| Dire Dimension | 353 | 3.42 | 1.06 |
| Compliant Dimension | 353 | 4.08 | 1.06 |
| **PMT-R Total** | | 3.36 | 1.04 |

As Table 13 shows, the overall mean score for the seven factors of prosocial behavior was found to be (*M*=3.36, *SD*=1.04), indicating the mean score higher than mean score of the scale. Regarding the major prosocial dimension practiced among the participants, The mean score of compliant dimension (*M*= 4.08, *SD*=1.06) was found to be high followed by the mean score of altruism dimension (*M*= 3.77, *SD*=1.33), helping when being helped don't know dimension (*M*= 3.67, *SD*=.98), Donation creates good feelings (*M*=3.5, *SD*=1.03) and dire dimension (*M*=3.42, *SD*=1.06). Participants had low mean scores on emotional and public prosocial behavioral

tendencies (*M*=2.74, *SD*= .82; *M*= 2.35, *SD*=.86) respectively. This result reflects that public dimension reported lower than all other dimensions, implying participants perform prosocial actions less in the presence of others or in public.

### 4.3. Relationships between Parenting Dimensions, Peer Influence, Religiosity, Self-esteem and Prosocial Behavior

**Table 14**

*Intercorrelations of the Study Variables for the Participants (n = 353)*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. Prosocial Behavior | - | | | | | | | |
| 2. Acceptance P. Dimension | .354** | - | | | | | | |
| 3. Control Parenting Dimension | .012 | .042 | - | | | | | |
| 4. Peers influence | .367** | .217** | -.024 | - | | | | |
| 5. Religiosity | .147* | .053 | -.160** | .205** | - | | | |
| 6. Religious Practice | .118* | .-019 | .-078 | .087 | .904** | - | | |
| 7. Religious Participation | .142** | .131* | -.221** | .299** | .825** | .503** | - | |
| 8. Self-esteem | .197* | .053 | .099 | -.266** | -.376** | -.231** | -.454** | - |

** p < .01 & *p< .05

Intercorrelations of the study variables are given in Table 14. Pearson product-moment correlation coefficient revealed that there were relationships between prosocial tendencies and independent variables among the students. Despite differences in magnitude and direction, Intercorrelations of the study variables for the participants were revealed. More specifically, acceptance/involving parenting dimensions, peer influence, total religiosity, religious practice,

religious participation, and self-esteem were statistically significant and found to be positively related to prosocial tendencies of the participants', where $r$ (353) = .354, $p$ < .001, $r$ (353) = .367, $p$ < .001, $r$ (353) = .147, $p$ < .001, $r$ (353) = .118, $p$ < .001, $r$ (353) = .142, $p$ < .001 and $r$ (353) = .197, $p$ < .001 respectively. In addition, control parenting dimension was positive but there was no significant relationship between prosocial behavior and control parenting dimension of the participants.

With regards to independent study variables' association with one another, acceptance/involving dimension was related positively and significantly to peer influence, $r$ (353) = .217, $p$ < .001, as religious participation $r$ (353) = .131, $p$ < .001 did. There was also negative and significant relationship between controlling parental dimension and religiosity $r$ (353) = - .160, p < .001. Religiosity was found positive and statistically significant relationship with peer influence $r$ (353) = .205, p < .001, as religious participation $r$ (353) = .299, $p$ < .001 did. The total religiosity had positive and significant relation with both subscales of religiosity. Self-esteem was also negative and significantly related to peer influence and religiosity $r$ (353) = -.266, $p$ < .001, and $r$ (353) = -.376, $p$ < .001 as well as to the new dimensions of religiosity $r$ (353) = -.231, $p$ < .001, $r$ (353) = -.454, $p$ < .001 respectively. For both peer influence and religiosity, the negative association with self-esteem may be observed, suggesting that the students are forced to conform to external environment demands which may cause feeling of unable to achieve self-values.

### 4.3.1. The relationship between aggregate Parenting Style and Prosocial Behavior

A Pearson correlation coefficient was used to evaluate the relationship between prosocial behavior and composite parenting styles of the participants. Results indicated that there was a significant positive relationship between prosocial tendencies and parenting styles, $r$ (353) =

.105, $p < .05$. As can be seen from the result, the magnitude appears to be low. This could be attributed to other mediator factors and might be due to the conversion of continuous variable into category which reduces statistical power.

## 4.4. The major factors that influence the presence of Prosocial Behavior

### 4.4.1. Descriptive statistics of parenting dimensions/ styles, self-esteem, peer influence and religiosity

To assess factors that contributed to tendencies of the students to engage in prosocial behavior, some factors (e.g., parenting dimensions/styles, self-esteem, peer influence and religiosity) of the participants were considered. The descriptive results of each factor are presented hereafter.

**Table 15**

*Descriptive Statistics of Parenting Dimensions of the Participants*

| Parenting Dimensions | Descriptive results | |
|---|---|---|
| | *M* | *SD* |
| Acceptance Parenting | 38.80 | 4.53 |
| Control Parenting | 29.88 | 5.03 |

As shown in Table 15, the perception of the participants was presented using mean and standard deviation of the parental dimensions. Participants on acceptance dimension found to have ($M$ = 38.80, $SD$ = 4.53) while they tended to report ($M$ = 29.88, $SD$ = 5.03) on the control

dimension. This shows that the mean score of the participants for acceptance dimension is higher than the mean score of control dimension.

**Table 16**

*Descriptive Statistics of Parenting Styles of the Participants*

| Parenting styles | Frequencies and percentage | |
|---|---|---|
| | *n* | % |
| Authoritative | *127* | 36.0 |
| Authoritarian | *65* | 18.4 |
| Indulgent(permissive) | *94* | 26.6 |
| Neglectful | *67* | 19.0 |

The two parenting dimensions were categorized into the four common parenting styles based on mean scores of the participants using a widely used parenting style construct. This is based on the work of Diana Baumrind (1967) which was later revised by Maccoby and Martin (1983). Guided by the works of others (e.g., Abesha, 1997, 2012; Markos, 1996; Steinberg et al., 1992b), these two parenting dimensions namely acceptance/involvement and control/strictness were grouped into the four parenting styles such as authoritative, authoritarian, permissive and neglectful. For the categorization process, the sample medians for each dimension were first determined, and comparing with these median values, the scores of each participant were

labeled to the four parenting styles. These labeled parenting styles were counted using SPSS 26 and the frequencies and percentages were determined. As can be seen from Table 16, results of this study indicated that an authoritative parenting style was found to be the most commonly practiced parenting style in parents, followed by permissive parenting style. However, neglectful and authoritarian parenting styles are slightly the least frequently practiced parenting styles. This result suggests that an authoritative parenting style is the most approach used in Ethiopian families, particularly in the area of the study.

**Table 17**

*Descriptive Statistics of Self-esteem, Religiosity and Peer Influence*

| Variables | *M* | *SD* |
|---|---|---|
| Self-esteem | 29.19 | 5.38 |
| Religiosity | 23.97 | 6.73 |
| Peer influence | 26.83 | 3.31 |

The descriptive statistics results of self-esteem, religiosity and peer influence were found to be ($M$ = 29.19, $SD$ = 5.38; $M$ = 23.97, $SD$ = 6. 73; $M$ = 26.83, $SD$ = 3.31) respectively.

### 4.4.2. The Effects of Parenting styles/dimensions, Peer Influence, Self-esteem and Religiosity on Prosocial Behavior

#### 4.4.2.1.Results of Prosocial Behavior across the Four Parenting Styles

The assumptions of One-way ANOVA: independence of observation, normality and homogeneity were checked before analyzing the data. For the independence of observation, it is assured by the design of the study in which each participant answered the questionnaires once and independent of any other participant. For the second assumption of ANOVA, Skeweness and kurtosis values were examined to check the normality of dependent variables. Finally, Levine's test of equality of error variances was examined. The test did not reveal a significant result ($p$>.05), which shows the homogeneity assumption was satisfied. That is, checking the significance value (Sig**.**) for Levine's test, the Sig. value was found to be .144. As this is greater than .05, the homogeneity of variance assumption was not violated. Then, in order to determine whether any difference between parenting styles in prosocial behavior exists, one-way ANOVA was held since there is one independent and one dependent variable with subgroups.

**Table 18**

*Summary of ANOVA for Prosocial Behavior by the Four Parenting Styles*

| | Parenting Categories | N | M | SD | *F*(349) | P | $\eta_p^2$ |
|---|---|---|---|---|---|---|---|
| Prosocial Tendencies Total | Authoritative | 127 | 84.10 | 10.73 | 7.39 | .000 | .060 |
| | Authoritarian | 65 | 79.09 | 11.86 | | | |
| | Permissive | 94 | 85.15 | 8.29 | | | |
| | Neglectful | 67 | 79.01 | 11.66 | | | |

A one-way ANOVA was computed to determine if variation exists in prosocial behavior across the four parenting styles, namely authoritative, authoritarian, indulgence/permissive and neglectful. As Table 18 shows, results of one-way ANOVA for parenting style which was categorized into four groups (Group 1: Authoritative; Group 2: Authoritarian; Group 3: Permissive/indulgent; Group 4: Neglectful), show that there was a significant difference in prosocial tendencies of students from the four parenting styles $F$ (3, 349) = 7.394, $p$ <.001, $\eta_p^2$ = .060. Post-hoc comparisons using Tukey HSD test indicated that the mean prosocial for the students from permissive/indulgent group ($M$ = 85.15, $SD$ = 8.29) was significantly different from the authoritarian group ($M$ = 79.09, $SD$ = 11.86) and neglectful group ($M$= 79.01, $SD$= 11.66). The mean prosocial of authoritative group ($M$ = 84.10, $SD$ = 10.73) was also significantly different from authoritarian group ($M$ = 79.09, $SD$ = 11.85) and neglectful group ($M$= 79.01, $SD$= 11.66). The mean prosocial of Permissive/indulgent group and Authoritative

group did not differ significantly as did authoritarian and neglectful groups, indicating students from permissive and authoritative parents have better (larger) prosocial behavior. The effect size of the contribution is found to be medium. Partial eta squared ($\eta_p^{2)}$ is most widely used to quantify and determine the effect size in analysis of variance (ANOVA). The cut-off values for partial eta-squared approximately ranges from 0.01 to 0.14, where 0.01 is considered as small, 0.06 as medium and 0.14 as large effect sizes (Richardson, 2011). This was used to determine the proportion of dependent variable explained by independent variable.

#### 4.4.2.2.The Contributions of Parenting Dimensions, Peer Influence, Self-esteem and Religiosity to Prosocial Behavior

Multiple regression analysis was used to examine the influence of independent variables (i.e., parenting dimensions, peer influence, religiosity and self-esteem) on prosocial behavior. The statistical assumptions were checked before running the multiple regressions. Multicollinearity was assessed to check for independent variables correlation to each other. This was assessed using variance inflation factor (VIF) and tolerance indices. Scholars noted that if the variance inflation Factors' values are VIF> 10 and tolerance values are < .10, the multicollinearity between independent variables would be severe and this violation calls for concern (e.g., Brown, 2015; Collier, 2020; Kline, 2016; Myers, 1990). Guided by this criteria, results in this study showed that the variance inflation factor (VIF) values of the independent variables ranged between 1.220 and 1.031 (< 10), and the tolerance estimates ranged between 0.819 to 0.970 (> .10), indicating the absence of multicollinearity problem. According to Ozili (2023), variation in reporting R-squared could exist, however a low R-square of at least 0.1 meaning 10 percent is acceptable in social sciences on the condition that some or most of the

predictor variables are statistically significant. If it is lower than 0.1, it is low and should be rejected. In this study, R-square is found to be .246 fulfilling the acceptable criteria. This implies that the positive association obtained between prosocial behavior tendencies, parental acceptance, peer influence, religiosity and self-esteem is reflecting that the higher parents and peers positively involved in adolescents' behavior, the better they tend to behave in prosocial activities. Additionally, as students' level of commitment to their religious belief and activity is better, they more likely are good in prosocial behavior as self-esteem does. Results of the test indicated that all factors predicted prosocial behavior tendencies while control parenting dimension didn't predict.

**Table 19**

*Summary of Regression Analysis for Independent Variables Predicting Prosocial Behavior*

| | Prosocial Behavior | | | | Collinearity statistics | |
|---|---|---|---|---|---|---|
| | | | | | Tolerance | VIF |
| | B | SE | Beta | Sig. | | |
| Acceptance Parenting | .699 | .117 | .285 | .000 | .951 | 1.052 |
| Control Parenting | .026 | .105 | .012 | .805 | .970 | 1.031 |
| Peer influence | 1.097 | .168 | .326 | .000 | .877 | 1.141 |
| Self-esteem | .374 | .106 | .181 | .000 | .819 | 1.220 |
| Religiosity | .224 | .085 | .135 | .009 | .831 | 1.203 |
| F | 22.629 | | | .000 | | |
| $R^2$ | .246 | | | | | |

A multiple regression analysis was performed to test if the explanatory variables significantly predicted the prosocial tendencies of the participants. As Table 19 shows, the results of the regression analysis indicated that four of the factors in the model explained 24.6 percent of the variance in prosocial tendencies, $R^2$=.246, $F$ (5, 347) =22.63, $p$<.001. The results of the analysis revealed that acceptance parenting dimension (β=.285, $p$<.001), peer influence (β=.326, $p$<.001), self-esteem (β=.181, $p$<.001), and religiosity (β=.135, $p$<.05) significantly predicted the prosocial behavior of the participants.

### 4.5.Gender Differences in Prosocial Behavior, Parenting Styles, Peer Influence, Religiosity and Self-esteem

**Table 20**

*Gender Difference in the Study Variables*

| Variable (n=353) | Male | | Female | | *t*(351) | P |
|---|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | | |
| Prosocial Behavior | 81.60 | 11.73 | 82.48 | 10.34 | -.74 | .46 |
| Acceptance Parenting dimension | 39.05 | 4.34 | 38.55 | 4.76 | 1.03 | .31 |
| Control Parenting dimension | 29.82 | 5.29 | 29.97 | 4.71 | -.29 | .77 |
| Parenting Styles | 1.84 | 1.08 | 1.74 | 1.18 | .86 | .39 |
| Peer influence | 26.90 | 3.28 | 26.74 | 3.34 | .46 | .64 |
| Religiosity | 24.15 | 6.76 | 23.75 | 6.71 | .56 | .58 |
| Self-esteem | 29.64 | 5.49 | 28.62 | 5.21 | 1.77 | .08 |

An independent samples *t*-test was performed to evaluate whether there was a difference in the study variables between male and female participants. It was used to test mean difference between the two groups on all the study variables (e.g., prosocial behavior, parenting styles, parenting dimensions, religiosity, peer influence and self-esteem). Results of the test indicated that there was no statistically significant difference between the two groups on all the study variables as shown in Table 20 above.

### 4.5.1. Gender difference in Dimensions of Prosocial Behavior

**Table 21**

*Variation in Categories of Prosocial Behavior by Gender (n = 353)*

| Variable (n=353) | Male | | Female | | *t*(351) | p |
|---|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | | |
| Public Prosocial Dimension | 9.23 | 3.18 | 9.61 | 2.87 | -1.15 | .25 |
| Altuirism Prosocial Dimension | 22.44 | 6.87 | 22.85 | 7.02 | -.55 | .58 |
| Donation Creates good feeling Prosocial | 10.65 | 2.34 | 10.80 | 2.43 | -.58 | .56 |
| Helping when being helped don't know | 7.16 | 2.07 | 7.08 | 1.92 | .38 | .70 |
| Emotional Prosocial Dimension | 13.61 | 2.98 | 13.83 | 2.92 | -.70 | .48 |
| Dire Prosocial Dimension | 10.34 | 2.75 | 10.15 | 2.48 | .69 | .49 |
| Compliant Prosocial Dimension | 8.16 | 2.06 | 8.17 | 1.88 | -01 | .99 |
| Total PTM-R | 81.60 | 11.73 | 82.48 | 10.34 | -.74 | .46 |

Independent *t*-test was used to check if there is a statistically significant difference between male and female students on their level of prosocial tendencies. Results on each component and composite prosocial tendencies of the participants indicated no statistically significant

difference. Therefore, there was no significant variation by gender $t$ (351) = -.74, $p$ =.46. As can be seen in Table 21, female group has a slightly higher mean than male group (hence the negative t-value), but the difference is small relative to the variability in the data, showing statistically non-significant variation between the two groups. This result may reflect that the students gender had no influence on their prosocial behavior, indicating both relatively equally performing prosocial behaviors. This result may also suggest that there might be a positive awareness among individuals regarding gender roles and their tendency to participate on positive behaviors in the community.

### 4.6.The Mediation Effects of Self-esteem, Peer Influence and Religiosity between Parenting Dimensions (Acceptance and Control), and Prosocial Behavior

In order to address the effects of a mediating variable in the relationship between an independent variable and its corresponding dependent variable, displaying the position of the mediator between the variables in a model is necessary. Ideally, the test for mediator is meaningful only if the direct effect is statistically significant. Therefore, to easily identify the direct effect and indirect effect, drawing in a triangular structural form by adding mediator variable into the model appears to be critical. The researcher in this study analyzed the mediating effects of mediating variables (e.g., self-esteem, religiosity and peer influence) between independent variable (parenting dimensions) and prosocial behavior of the participants using AMOS 23 graphic illustration. Prior to mediation analysis, a specific direct effect of each independent variable on students' prosocial tendencies was examined separately. Then, the significance of direct influence of each exogenous variable on mediating variable was examined. In the same way, the significance of the influence of mediator variables on outcome

variable was examined. The researcher conducted Mediational analysis both in a separate form for each mediator and parallel analysis for all mediators together.

### 4.6.1. Mediational Analysis for each Mediating Variable Separately

**Table 22**

*Self-esteem between Acceptance Parenting dimension and Prosocial Behavior*

| Effects | Standardized Estimate | 95% CI | | *P* |
|---|---|---|---|---|
| | | Lower Bound | Upper Bound | |
| Total effect | 0.339 | 0.232 | 0.443 | 0.003 |
| Direct effect | 0.335 | .240 | .440 | 0.003 |
| Indirect effect | 0.004 | -0.019 | 0.002 | .234 |

As Table 22 shows results of simple mediation suggested that the indirect effect of acceptance parenting dimension on Prosocial behavior through self-esteem was not significant, *ab* =.004, *95%* CI [-0.019, 0.002]. However, the direct effect of acceptance parenting on prosocial behavior was found significant (*b* =.335, *p* =.003).

**Table 23**

*Religiosity between Acceptance Parenting Dimension and Prosocial Behavior*

| Effects | Standardized Estimate | 95% CI | | *P* |
|---|---|---|---|---|
| | | Lower Bound | Upper Bound | |
| Total effect | 0.335 | 0.232 | 0.443 | .003 |
| Direct effect | 0.327 | .224 | .440 | .003 |
| Indirect effect | .008 | -0.002 | 0.025 | .103 |

As Table 23 shows, analysis of mediation results indicated that religiosity had non-statistically significant indirect (mediation) effect between acceptance parenting dimension and Prosocial behavior ($\beta$ =.008, $p$ =.103). Since zero is found between the LB and UP of CI [-0.002, 0.025] and .103 is greater than .05, religiosity didn't mediate the association between acceptance parenting dimension and prosocial behavior of the students. However, the direct effect of acceptance parenting on prosocial behavior was found significant ($b$ =.327, $p$ =.003).

**Table 24**

*Peer Influence between Acceptance Parenting Dimension and Prosocial Behavior*

| Effects | Standardized Estimate | 95% CI | | *P* |
|---|---|---|---|---|
| | | Lower Bound | Upper Bound | |
| Total effect | 0.341 | 0.232 | 0.443 | .003 |
| Direct effect | 0.335 | .168 | .378 | .003 |
| Indirect effect | 0.006 | 0.004 | 0.099 | .002 |

Mediation analysis results showed that though the indirect effect is very small, peer influence had statistically significant indirect (mediation) effect between acceptance parenting dimension and Prosocial behavior ($\beta$ =.006, $p$=.002*).* Since zero is not found between the LB and UP of CI [0.004, 0.099] and 0.002 is less than 0.05, peer influence did mediate the relationship between acceptance parenting dimension and prosocial behavior of the students. Additionally, the direct effect of acceptance parenting on prosocial behavior was found significant ($b$ = 0.335, $p$ =.003).

**Table 25**

*Self-esteem between Control Parenting Dimension and Prosocial Behavior*

| Effects | Standardized Estimate | 95% CI | | *P* |
|---|---|---|---|---|
| | | Lower Bound | Upper Bound | |
| Total effect | 0.019 | -0.080 | 0.118 | 0.643 |
| Direct effect | 0.016 | -0.088 | .112 | 0.742 |
| Indirect effect | .003 | -0.006 | 0.021 | 0.345 |

Mediation analysis results indicated that self-esteem had statistically non-significant indirect (mediation) effect between control parenting dimension and Prosocial behavior ($\beta$ =.003, $p$ =.345*).* Zero is found between the LB and UP of CI [-0.006, 0.021] and 0.345 is greater than 0.05, indicating peer influence does not mediate the relationship between control parenting dimension and prosocial behavior of the students. Additionally, the direct effect of control parenting on prosocial behavior was found not-significant ($b$ = 0.016, $p$= .742).

**Table 26**

*Religiosity between Control Parenting Dimension and Prosocial Behavior*

| Effects | Standardized Estimate | 95% CI | | *P* |
|---|---|---|---|---|
| | | Lower Bound | Upper Bound | |
| Total effect | 0.045 | -0.080 | 0.118 | 0.643 |
| Direct effect | 0.019 | -0.061 | .138 | 0.405 |
| Indirect effect | 0.026 | -0.056 | 0.007 | 0.067 |

Results of the mediation analysis revealed that religiosity had statistically non-significant indirect (mediation) effect between control parenting dimension and Prosocial behavior ($\beta$ =.026, $p$ =.067*).* Zero is also found between the LB and UP of CI [-0.056, 0.007] and 0.067 is greater than 0.05, demonstrating religiosity does not mediate the relationship between control parenting dimension and prosocial behavior of the students. Additionally, the direct effect of control parenting on prosocial behavior was found non-significant ($b$ = 0.019, $p$ = 0.041).

**Table 27**

*Peer Influence between Control Parenting Dimension and Prosocial Behavior*

| Effects | Standardized Estimate | 95% CI | | *P* |
|---|---|---|---|---|
| | | Lower Bound | Upper Bound | |
| Total effect | 0.029 | -0.080 | 0.118 | .643 |
| Direct effect | 0.019 | -0.067 | 0.117 | .495 |
| Indirect effect | 0.010 | -0.049 | 0.027 | .680 |

Results of the mediation analysis shown in Table 27 indicated that peer influence had statistically non-significant indirect (mediation) effect between control parenting dimension and Prosocial behavior ($\beta$ =.010, $p$=.680*).* Zero is also found between the LB and UP of CI [-0.049, 0.027] and 0.68 is greater than 0.05, demonstrating peer influence did not mediate the relationship between control parenting dimension and prosocial behavior of the students. Additionally, the direct effect of control parenting on prosocial behavior was found non-significant (b = 0.019, $p$ =.495).

### 4.6.2. Mediational Analysis for all Mediating Variables together (Parallel Analysis)

**Figure 2**

*The AMOS Output Showing Regression Coefficient between Variables*

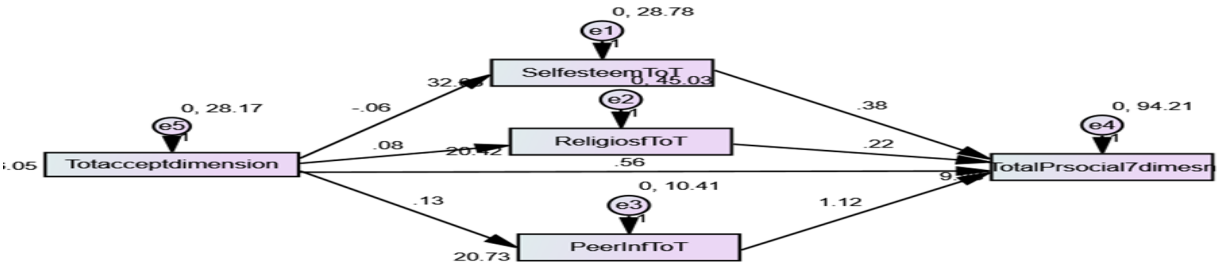



Figure 2 above indicates the structure of the parallel mediation effects of self-esteem, religiosity and peer influence between acceptance parenting and prosocial behavior.

**Table 28**

*The Parallel Mediation Paths and Unstandardized Coefficients with each Significance*

| Effects/Relationship | | | Estimate | S.E. | C.R. | P-Value | 95% CI [LLCI, ULCI] |
|---|---|---|---|---|---|---|---|
| ProsocialY | <--- | AcceptanceX | .561 | .100 | 5.602 | .001 | [.371, .797] |
| SelfesM | <--- | AcceptanceX | -.062 | .054 | -1.158 | .247 | [-.174, .050] |
| ProsocialY | <--- | SelfesM | .380 | .096 | 3.939 | .001 | [.586, .128] |
| Religiosity | <--- | AcceptanceX | .077 | .067 | 1.144 | .253 | [-.030, .176] |
| ProsocialY | <--- | Religiosity | .218 | .077 | 2.831 | .005 | [.029, .396] |
| PeerInflueM | <--- | AcceptanceX | .133 | .032 | 4.092 | .001 | [.083, .197] |
| ProsocialY | <--- | PeerInflueM | 1.117 | .160 | 6.963 | .001 | [.785, 1.464] |
| The total indirect effect | | | .141 | .39 | 3.62 | 003 | [.033, .102] |

The researcher tested self-esteem, religiosity and peer influence as mediators between acceptance parenting dimension and prosocial behavior. Acceptance parenting dimension significantly predicted prosocial behavior ($a$ = .56, $SE$ = .10, $p$< .001). Self-esteem significantly predicted prosocial behavior while controlling for acceptance parenting dimension, religiosity and peer influence ($b$ = .38, $SE$ = .096, $p$< .001). Acceptance parenting dimension significantly predicted peer influence ($a$ = .13, $SE$ = .032, $p$< .001), and peer influence significantly predicted prosocial behavior ($b$ = 1.12, $SE$ = .16, $p$< .001). As Table 28 shows, the indirect effect through

self-esteem, religiosity and peer influence was significant (*ab* = .14, SE = .042, *p*< .001). Most importantly, the 95% bias- corrected bootstrap confidence interval, 95% CI [0.033, 0.102]), did not contain zero, indicating that peer influence mediates the relationship between acceptance parenting dimension and prosocial behavior. Following the mediation guidelines established by Shrout and Bolger (2002), this represents a medium effect size, which demonstrates that the pathway plays a meaningful practical role in explaining the relationship between acceptance parenting and prosocial behavior.

**Figure 3**

*The AMOS Output Showing Regression Coefficient between Variables*

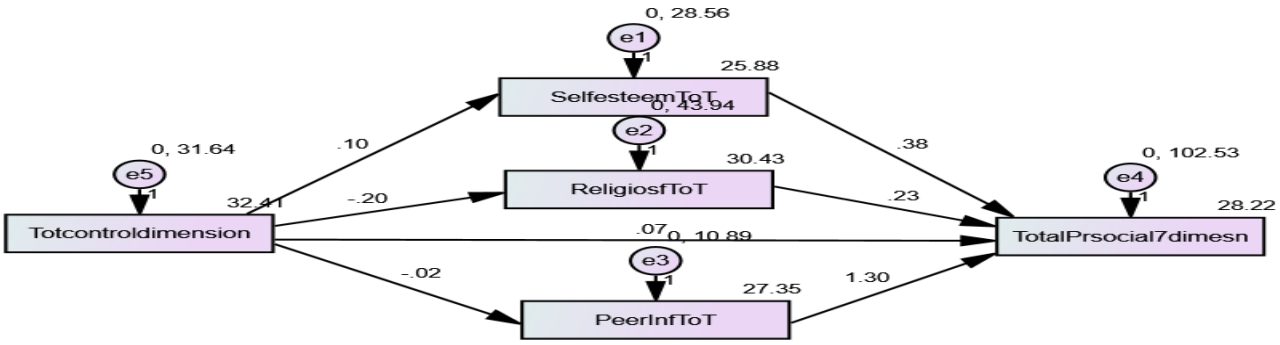



*Figure 3 above indicates the structure of the parallel mediation effects of self-esteem, religiosity and peer influence between control parenting and prosocial behavior.*

**Table 29**

*The Parallel Mediation Paths and Unstandardized Coefficients with each Significance*

| Effects/ Relationship | | | Estimate | S.E. | C.R. | P-Value | 95% CI[LLCI, ULCI] |
|---|---|---|---|---|---|---|---|
| ProsocialY | <--- | ControlX | .067 | .098 | .687 | .492 | [-.110, .255] |
| SelfesM | <--- | ControlX | .102 | .051 | 2.015 | .044 | [-.013, .188] |
| ProsocialY | <--- | SelfesM | .377 | .101 | 3.728 | .001 | [.133, .613] |
| Religiosity | <--- | ControlX | -.199 | .063 | -3.172 | .002 | [.321, -.078] |
| ProsocialY | <--- | Religiosity | .235 | .081 | 2.884 | .004 | [.056, .417] |
| PeerInflueM | <--- | ControlX | -.016 | .031 | -.511 | .610 | [-.073, .044] |
| ProsocialY | <--- | PeerInflueM | 1.304 | .164 | 7.972 | .001 | [.971, 1.654] |
| The total indirect effect | | | -.034 | .047 | -.723 | .536 | [-.121, .064] |

The researcher tested self-esteem, religiosity and peer influence as mediators between control parenting dimension and prosocial behavior. As can be seen from Table 29, control parenting dimension was not significantly predicted prosocial behavior ($a$ =.067, $SE$ =.098, $p$>.001). However, self-esteem and peer influence significantly predicted prosocial behavior ($b$ =.377, $SE$ = .101, $p$< .001) and ($b$ = 1.304, $SE$ = .164, $p$< .001) respectively. The total combined indirect effect of control parenting on prosocial behavior was not statistically significant ($ab$ = -.034, $SE$ = .047, $p$ > .05). Furthermore, because the 95% bias-corrected bootstrap confidence interval crosses zero, the proposed mediators (self-esteem, religiosity and peer influence) did not transmit a significant indirect effect within the model, 95% CI [-0.121, 0.64]).

# Chapter Five

# Discussion

This study investigates the relationship parenting styles; peer influence, self-esteem and religiosity have with prosocial behavior of senior secondary school students. The current researcher utilized reliable and valid instruments, and used various statistical methods to address six research questions. In this section, the major findings discovered in this study are discussed comparing with the literature reviewed.

## 5.1. The level and major prosocial behaviors practiced among the students

As a positive psychological and social development, prosocial behavior covers originally six categories where the first five such as altruistic, emotional, dire, compliant, and anonymous are driven by intrinsic motives, whereas public dimension is driven by external motives (Carlo & Randall, 2002). The status and kinds of prosociality dimension can vary in different contexts. In this study, for instance, the anonymous dimension is separated into two and formed seven structures of prosocial behavior. This situation implies the importance of culture in the conceptualization of prosociality. The current findings indicated that the aggregate score for seven factors of prosocial behavior was found to be greater than the scale mean, showing the participants had moderate prosocial behavior. This result shows a presence of good practice of prosocial behavior in adolescents. However, the existing literature concerning the level of prosocial behavior, particularly in Ethiopia, is found to be inadequate.

A recent study employing just eighty (80) volunteers in Bedesa town in Eastern Ethiopia found a higher level of prosocial behavior (Shemsedin, 2022). This slightly aligns with the

current finding. Another study by Gupta and Thapliyal (2015) among adolescents residing in Delhi, India, also reported an average prosocial behavior, which supports this finding. The consistency reflected between the current and previous findings in the level of prosociality, empirically and theoretically shows that prosocial behavior as one of adolescents' developmental outcome appears a distinctive behavior in adolescents, regardless of the contexts in which they may behave.

Regarding the major prosocial behavior practiced among participants, compliant dimension of prosociality was reported higher followed by altruism dimension, both categories of anonymous dimensions and dire dimension among the participants. On the other hand, emotional and public prosocial behaviors reported lower among the participants, which aligns with previous research conducted in different contexts. In the literature, there are consistencies whether all or some types of prosocial behaviors are commonly practiced in adolescents. Most literature, reported that, especially complaint, altruistic, anonymous, dire, and emotion are the major categories that individuals practice. For instance, in one study, adolescents in middle age reported that altruistic prosocial behavior found to be the most commonly exercised than other dimensions and followed by compliant, dire, emotional, anonymous, and public (Carlo, 2003).

In line with current findings, Ata and ve Artan (2021) also reported that compliant, anonymous, emotional, dire, and altruistic categories are the commonly practiced prosociality, while the public dimension indicated a least practiced prosocial behavior among high school students in Turkiye. Similarly, study in Argentina among primary and secondary school students aged 10 to 16, reported that complaint, emotional, and dire appeared to be the commonly practiced among the participants followed by anonymous, altruistic and public (Richaud et al., 2012). As can be seen from these reports, public prosocial behavior is found to be the least

practiced category in literature. However, it has also been widely evidenced in the literature that people behave differently in the presence of others and when others are not watching their actions (e.g., Soetevent, 2005, 2011). On this point, contrasting the current finding, previous reports showed that if people are being observed during help, this usually increases prosocial behaviors because people want to be liked and respected by others (Ariely et al., 2009; Birke, 2020) or want to avoid resentment (Andreoni et al., 2017; Butera et al., 2022; DellaVigna et al., 2012). As other scholars also described, individuals tend to behave more prosocially when they are observed, allowing them to obtain social recognition for their actions (Alpizar et al., 2008; Andreoni & Bernheim, 2009; Ariely et al., 2009; Bašic et al., 2020; Powell et al., 2012).

On the other hand, studies reported that complaint, emotional, dire and altruistic prosocial behavior scores are higher in adolescents, particularly among females, whereas public prosocial behavior score is higher in males (Hine, 2017; Xiao, Hashi, Korous & Eisenberg, 2019). However, gender wise variation in prosocial behaviors is not indicated in the current findings. It can be said that similar to the present findings; in many studies there is a consensus in consistency of findings in literature on public prosocial behavior that appears lower in score among the participants. This reflects that if it is a real helping guided by internal motives, engaging in public prosocial behavior that occurs when a person is likely intended to support others in the presence of others or audience is not common. This may also shows that helping others should not rely on the desire to achieve expected goals such as social approval, respect from others, and to be perceived as a good person.

## 5.2. The Linkage between Parenting approaches and Prosocial behavior

Empirical and theoretical evidence suggests that creating a positive and encouraging environment that connects adolescents, families, and community to minimize harmful practices

(e.g., antisocial behavior), and inspires prosocial behavior, that potentially reinforces sustainable development, is essential (Biglan & Hinds, 2009). Parents can create such environment by motivating adolescents to actively engage in social behaviors that benefit the community (e.g., prosocial behavior). In line with this notion, this study examined the form of relationship between prosocial behaviors and parenting dimensions/style. Concerning the relationship between prosocial behavior and parenting style, there was a significant positive association between prosocial behavior and parenting style among the participants. This reflects that as parents practiced positive approaches in parenting, the positive behaviors, including prosocial behavior, would be promoted.

In terms of parental dimensions, there was a positive and statistically significant relationship between prosocial behavior and participants' acceptance/involving parenting dimension. Similarly, results from multiple regression analysis indicated that acceptance parenting dimension significantly predicted prosocial behavior of the participants. In fact, the contribution of acceptance parenting dimension was found to be small in effect size. According to Cohen's (1988) guidelines for the classification of effect sizes, effect sizes between 0.10–0.29 are said to be only small, effect sizes between 0.30–0.49 are medium, and effect sizes of 0.50 or greater are large (Fey, Hu & Delios, 2022). Variation in prosocial behavior by the four parenting styles (authoritative, authoritarian, indulgence/permissive and neglectful) was examined using one-way ANOVA. Results of the analysis revealed that there was a significant difference in prosocial behavior for students from the four parenting styles, indicating students from permissive and authoritative parents have better prosocial behavior. A partial eta squared ($\eta_p^{2)}$ is used to determine the effect size in analysis of variance (ANOVA). The cut-off values for partial eta-squared approximately ranges from 0.01 to 0.14, where 0.01 is considered as small, 0.06 as

medium and 0.14 as large effect sizes (Richardson, 2011). Therefore, the effect size in this study is found to be medium.

The positive linkage between parenting styles/dimensions and prosociality of the adolescents is supported by literature. Existing literature showed that although the role of friends during the transition from childhood to adolescence is important, parenting styles play a key role in personal and social development of their children which later contribute to adolescents' behaviors (Malonda, Llorca, Mesurado, Samper & Mestre, 2019). As acceptance parenting approach is characterized by parental care, love and warmth, contrasting the features of control parental dimension known by strict supervision, it would be believable that acceptance dimension plays a great role in predicting prosocial behavior as did in the current study. In line with this, empirical evidence shows that when parents are responsive to and/or accept their children in a close relationship, it appears to nurture children to internalize the standards and expectations of their parents (Aymerich et al., 2018; Eccles et al, 1997; Georgiou et al., 2017; Martínez et al., 2019). However, studies that directly focus on the connection between parenting dimensions and prosocial behaviors are scarce, particularly during adolescence stage. Several studies focused on the relationship between prosocial behaviors and parenting styles.

African literature concerning parenting approaches linkage with developmental outcomes such as social competence, prosocial orientation and emotional regulation show that positive parenting practices cultivate adolescent's behavior. For instance, a study among South African youth aligns with the current study demonstrating that parenting with responsiveness and warmth directly elevates social competence and prosocial orientation (Roman et al., 2015). A meta-analysis across African countries such as Nigeria, South Africa, Kenya and Ghana also indicated

that the authoritative parenting style drives adolescents' self-esteem and prosocial behaviors (Mohammed, 2026).

Researchers (e.g., Padilla-Walker et al, 2008) argued that less is known about parental influences on prosocial outcomes during the transition to adolescence period than childhood stage. For instance, many classical studies conducted in the area of adolescents' developmental outcomes, including prosocial behavior have established that authoritative parenting style, characterized by warmth and caring, is often effective in resulting in better developmental outcomes (Eisenberg, Spinrad & Knafo-Noam, 2015; Hastings et al., 2000; Llorca, Richaud & Malonda, 2017b; Yarmurly & Sanson, 2009). Another study reported that adolescents who felt their parents are warm and involved in their lives demonstrated a higher level of engagement in voluntary work (Zaff et al., 2003). In the same manner, prior studies reported that the practice of prosocial behavior is higher and strong in individuals from parents with nurturing practices (Llorca et al., 2017b; Pratt, Hunsberger, Pancer & Alisat, 2003).

Empirical evidence suggests that supportive, warmth, and positive parenting approach is directly related to prosocial characteristics of individuals. In alignment with the current findings, previous studies showed that involvement/acceptance dimension of parenting influences adolescents positive behavior like prosociality; and both males and females who report having more affective relationships with their parents have reported greater emotional well-being and better psychosocial adjustment (Georgiou, 2008; Parra & Oliva, 2006). When attentive parenting approach exists, adolescents tend to have more prosocial behavior, and they are more inclined to enter into voluntary helping activities (Grusec & Hastings, 2007). For instance, a recent research using large scale survey of Finnish youth by Backman et al. (2024) highlighted that parental acceptance directly promotes adolescent prosocial actions by strengthening their internal self-

control. Correspondingly, other studies also reported that higher parental acceptance equips adolescents with better cognitive ability, which increases their willingness to help others (Putnick et al., 2018; Wang et la., 2025). As one feature of acceptance parenting approach, authoritative parenting style found to be the most effective in promoting prosociality in previous study (Penner, Dovidio, Piliavin & Schroeder, 2005).

Additionally, the present finding revealed that permissive parenting style played a significant role in contributing to prosocial behavior similar to some prior studies (Bagán et al., 2019; Carlo et al., 2017; Emagnaw & Hong, 2018; Williams & Berthelsen, 2017). This shows, permissive parenting style is also necessary for behavioral development. However, there are also some studies that contradict the current finding, while some still reporting non-significant or negative relationship between permissive parenting style and prosocial behavior. For instance, statistically a non- significant relationship between permissive parenting style and prosocial behavior was reported in previous studies (LaVita, 2020; Saima et al., 2020), while Llorca et al., (2017b) reported a negative association between permissive parenting and prosocial tendencies. On the other hand, it is stated that permissive parenting is less likely to contribute to the cultivation of prosocial development (Wong, Konishi & Kong, 2021).

The positive contribution of permissive parenting style in this study, which is less emphasized in literature, can be attributed to the nature of permissive parents who are known by showing warmth and loving characteristics with limited strictness tendency (Smith, 2019). In a limited strictness and demands, adolescents may have an opportunity to think and behave the way they consider better, but in socially acceptable manner. Research in adolescents' developmental outcomes area (e.g., empathy, self-concept, self-esteem) supports that permissive parenting results in better developmental outcomes even than the authoritative parenting style

because of its limited strictness. Adolescents who are from parents based on warmth but no strictness (permissive) reported equal or more empathy and self-concept than those who are from families based on warmth with strictness (e.g., authoritative) (Fuentes et al., 2022).

Another study also suggests that individuals raised by democratic parents tend to show better emotional and interpersonal qualities, which are vital for nurturing sustainable development (Tripon, 2024). If children are exposed early to social justice and equity discussions with their parents, it can lead to more inclusive attitudes and behavior in adolescents and adulthood, resulting in cultivating prosocial behaviors and ethical decision making (Pastorelli et al., 2016; Roy & Giraldo-García, 2018). This implies that recognizing and promoting an effective parenting style is essential for adolescents' prosociality as it contributes to long-term societal benefits. It also appears important to integrate effective parenting approaches into wider social policies (e.g., agriculture, health, education, economy, etc.) for sustainable future. Therefore, in the current study, findings suggest that by promoting authoritative and permissive parenting practices that foster individuals' socio-emotional abilities in the engagement of prosocial behavior, the societal challenges (e.g., antisocial behavior) would be resolved, and inclusive, equitable, and sustainable communities would be formed. The variation in findings across different contexts implies that parenting styles are contextual and can influence behavioral outcomes in different ways. On this point, while earlier literature has recognized authoritative parenting style to be most effective style in causing adolescents' developmental outcomes, permissive parenting style also contributed to prosocial tendencies of the adolescents in this study. This may exist because of the supportive nature of a permissive parenting style that allows them to get a great autonomy with fewer restrictive rules.

Generally, consistency in findings on the connection between parenting styles and/or dimensions, and prosocial behavior of adolescents suggests that welcoming and encouraging parents are critical in promoting prosocial behaviors in adolescents. This may occur due to the fact that when parents provide a constructive condition in their parenting, individuals would be inspired to be part of positive social behaviors.

## 5.3. Gender difference in Prosocial Behavior

Concerning gender differences in prosocial behavior, the current study revealed no significant difference between male and female students in all dimensions of prosocial behavior, indicating both genders reported moderate level of prosocial behavior. This finding is supported by most literature, though inconsistencies of findings are available, some reporting significant differences in all or some dimensions, while some still supporting non-significant gender variations in prosociality. In line with the current finding, prior studies showed that gender doesn't account for variation in prosocial tendencies, reporting statistically not significant differences between males and females in most prosocial dimensions (Abdullahi & Kumar, 2016; Barry, Lui & Anderson, 2017; Chadha & Misra, 2006; Hassan, Naveed, Saeed & Sadaf, 2021; Nielson, Padilla-Walker & Holmes, 2017; Solomon, 2015). However, most of the previous studies that report significant differences between genders in prosocial behavior, favors female students appearing more prosocial than male students. Studies (e.g., Ata & ve Artan, 2021; Carlo & Randall, 2002; Jaffee & Hyde, 2000; Tsehay et al., 2014; Van der Graaff et al. 2018; Xiao et al., 2019) have reported that females are higher in most prosocial tendencies.

Therefore, a non-significant difference revealed in prosocial behavior by gender in the current study might be due to a better awareness on gender issues at home, school and significant others, which allowed them to acquire and equally demonstrate a sense of doing good for others.

## 5.4. The relationship Prosocial Behavior has with Self-esteem, Peer influence and Religiosity

### 5.4.1. The contribution of Self-esteem to Prosocial Behavior

This study also examined the pattern of relationship between self-esteem, religiosity, peer influence and prosocial behavior, focusing on the mediating roles they played between parenting dimensions and prosocial behavior. Concerning the relationship between self-esteem and prosociality, the current finding revealed statistically significant positive relationship. Similarly, results from multiple regression analysis showed statistically significant prediction between self-esteem and prosocial behavior of the participants, though self- esteem didn't mediate the relationship between parenting dimensions and prosocial behavior. Conceptually, self-esteem holds a personal distinctive insight about one self. It refers to individual's subjective appraisal of one's own self-worth, capacity feelings of self-respect and self-confidence (Pyszczynski et al., 2004; Sedikides & Gress, 2003). Evidence indicates that adolescents with high self-esteem fostered by authoritative parents maintain choosing pro-community than authoritarian and neglectful (Adeyemi, 2025).

Studies indicated that individuals with high self-esteem are better than with low self-esteem in performing goal oriented behavior, quality of their life, self-regulation and attaining energy to mobilize their behavior (Di Paula & Campbell, 2002; Mackinnon, 2015). Based on this notion,

individuals with better self-esteem are good to perform prosocial actions. Consistent with the current findings, there are reports in the literature. For instance, studies have showed that self-esteem had a positive relationship with prosocial behavior in adolescence (Li & Hao, 2022; Ogunboyede & Agokei, 2015).

Additionally, Afolabi (2014) reported that self-esteem and family relations together predicted prosocial behavior among the participants, showing students with high self-esteem and good family relations are better in prosocial behavior. Regarding a mediation role, according to Oh and Park (2018), self-esteem had a mediating effect on the relationship between the parental acceptance-rearing attitude and behavior of college students. In line with this, in spite of small prediction and non-significant mediation effects, self-esteem has a significant positive relation with prosocial behavior in the current study. Furthermore, the current finding revealed a negative association between control parenting dimension and self-esteem. Similarly, previous studies (e.g., cited in Zabihi Hesari & Hejazi, 2011) reported that extreme parental monitoring leads to lower adolescent self-esteem, and a lowered sense of autonomy, which directs adolescents to develop norm-violating attitudes and behaviors. Consistency in findings of the current study and literature implies that self-esteem is important in determining adolescents' prosocial behaviors, indicating proper self-awareness of adolescents contributes to their decision-making in prosocial behavior.

### 5.4.2. The Contribution of Religiosity to Prosocial Behavior

Regarding the relationship between religiosity and prosocial behavior, the current study revealed that religiosity of the participants had a positive and statistically significant relationship with prosocial behavior. Multiple regression analysis result also revealed that there was a

significant prediction between religiosity and prosocial behavior. The effect size of the prediction is found to be small. The mediating effect of religiosity between parenting dimensions and prosocial behavior is positive but statistically non-significant. However, it can be said religiosity has a positive relationship with prosocial behavior.

Studies showed that religiosity is individual's level of commitment, participation and religious practices, which have a connection with peoples prosociality (Afolabi, 2014; Ahmed, 2008). Religiosity may also be an expression of spirituality, but couldn't guarantee that all religious people are spiritual (Zullig, Ward & Horn, 2006). Scholars in the area also asserted that religiosity is a form of social capital, acts as a source of social control, which provides people with moral directives, reinforcement for prosocial behavior, and punishment in case of lack of altruism (e.g., Furrow & King, 2004; Hardy & Carlo, 2005). Furthermore, in another study, results showed that religiosity of the adolescents positively predicted prosocial behaviors, which can be said that religiosity grants adolescents clear moral directives that direct and energize adolescents' perception and behavior (Abu Alghanam & Shehadeh, 2025).

Studies regarding religiosity and prosocial behavior in African countries Nigeria and Ethiopia indicated that high religious attendance deeply held values of religiosity and religious coping to difficulties increases prosocial reasoning, community helping and civic care (Abebaw, 2003; Nwafor et al., 2024;Woubishet, 2005).

Therefore, given that all religions have teachings that emphasize care and compassion for others, religiosity (in this study defined as commitment to, identification with and involvement in a system of religious beliefs) has a potential positive influence on adolescent prosocial behavior. It was based on this importance that the current researcher came to include this variable as one of determining factor of prosocial behavior of adolescents. In fact, there were mixed findings

regarding the contribution of being religious for prosociality. For example, Galen (2012) reported that religious individuals behave in more prosocial ways than nonreligious ones, whereas Grossman and Parrett (2011) examined the relationship between religiosity and prosocial behavior, and revealed no evidence of religious prosociality.

Additionally, prior studies reported that there was a significant relationship between religiosity prosocial behaviors (Abu Alghanam & Shehadeh, 2025; Kelly, Kramer, & Shariff, 2024). Another study revealed that religiosity was a significant positive predictor of specific dimensions of prosocial behavior (e.g., compliant, anonymous, and altruistic) other than public, dire and emotional prosocial behaviors (Hardy & Carlo, 2005).

On the other hand, a cross-cultural study that examined economic behavior across eight societies (Purzycki et al. 2016) found that people's particular views about the personality of their gods was a significant predictor of their behavior toward other people. Specifically, individuals who saw their gods as moralizing and punitive were more willing to favor distant members of their group over themselves or local coreligionists. Although non-significant, there was a positive effect of mediating role of religiosity. In line with the current study, prior studies showed that adolescents' religiosity is found to be a positive mediator of the relations between parental and prosocial behavior (French et al., 2013; Nabila et al., 2019). The current findings suggest that the commitment and involvement of one's religion can shape the way adolescents view their surrounding and make decision in helping others. Along with this, the social cognitive theory addresses the diverse functions of religiosity. Bandura suggests that individuals can observe a model, covertly learn the new behavior, and decide whether or not to exhibit the behavior depending on the consequences associated with that behavior (Bandura, 2003; Van Eyghen, 2015). Therefore, religiousness of adolescents facilitates their commitment and

engagement in religions activities, which leads to proper decision in participating in prosocial behaviors.

### 5.4.3. The Contribution of Peer influence to Prosocial Behavior

Although peer influence has often a negative reputation, it can substantially promote positive behaviors in adolescents. According to De Guzman (2007), peer influence can inspire individuals to involve in healthy and safe behaviors. Positive peer influence can make useful behaviors including participation and volunteering in the community. This can also create a stronger sense of belongingness and empathy toward helping others. As this influence empowers social competence in adolescents, they can actively engage in prosocial behaviors by modeling the source of their competence (positive peer influence). A study indicates that self-understanding feelings prompted by positive peer influence is peak at mid adolescence period, and connected to social responsiveness (Somerville et al., 2013). Prosocial behavior is one form of social responsiveness, acting as a positive response to the needs of others. Therefore, peer influence should not be always denoted by the negative influence, though usually the narrative of social influence during adolescence often revolves around maladaptive decisions and behaviors (e.g., Steinberg, 2005).

In the current study, findings revealed that peer influence significantly related to prosocial behavior. The regression analysis result also showed that peer influence significantly predicted prosocial behavior. Additionally, result revealed in this study indicated that peer influence was significant in mediating the relationship between acceptance parenting dimension and prosocial behavior. Findings in the current study, suggest that there is a positive linkage between positive peer influence and adolescents prosociality, which align with the existing literature. Peer

influence as a social force, increases adolescents' involvement in prosocial behaviors, and decreases risky behaviors (Braams et al., 2019; Van Hoorn et al., 2017).

Empirical evidence suggests that as children enter into adolescence stage, the opportunity to learn and participate in prosocial behaviors increases due to new and emerging interpersonal relationships, cognitive and emotional development (Fletcher, Elder & Mekos, 2000). Although parenting processes establish a foundation of security, peer influence creates a significant contribution to adolescents' behavioral shift (Adeyemi, 2025). A positive relationship of adolescents with their peers in the school and out of the school involves acceptance, care, and respect to each other, spending time together and listening to each other (Carrizales, 2018; Furrer, 2010; Oberle, Schonert-Reichl, & Thomson, 2010). This signifies the role of positive peer influence in determining adolescents' behavior.

Peer influence begins as a proximal social environment during adolescents' transition to secondary school, which may influence adolescents' behavior interacting with family influence baseline. Literature shows that the quality of parental attachment and specific parenting styles exercised at home dictate how adolescents handle and select external peer environments (Taferi, 2023; Nasiri Farsi & Pali, 2025). Secure and warm parenting situations are important to to seek out supportive and positive peer networks (Crespo-López & Koning, 2026).

A number of previous studies showed that positive peer influence ensures a positive sense of self, promote positive involvement in social developmental tasks and improves mental health (Maxwell, 2002; Newman et al., 2007; Ramirez et al., 2012; Tarrant, 2002). Similar to the current finding, a previous finding revealed that adolescents who saw their high school peers as positive were more likely to engage in the community's volunteering later in adulthood (Zaff, Moore, Papillo & Williams, 2003). Another study also reported that prosocial orientation was

associated negatively with negative peer influence, and positively with positive peer influence (Ma, Cheung & Shek, 2007).

Furthermore, a study indicated that social influence factors including peer, school, and parental influence are strong predictors of helping intention and prosocial behavior than individual competence like empathy and prosocial moral reasoning (Lai, Siu & Shek, 2015). Although cultural context matters, the current study is consistent with the previous studies. This consistency may exist due to the similarity in the nature of social learning by modeling peers through interaction and personal observation. That is, the way an individual learns in social modeling is almost similar, but different on what to be modeled. Research indicated that children who were raised in different cultural backgrounds display different patterns of behaviors during social interactions (Chen, French, & Schneider, 2006). For instance, in western societies, children are more prone to be socialized in autonomous way, self-directive, and assertive. In such culture, individual qualities matter than social influences. On the contrary, children who grow up in Asian societies are more likely to be socialized in cooperative and connected way in interacting with others (Chen et al., 2018). Therefore, positive peer influence, particularly in a collective society (e.g., Ethiopia) plays a significant role in helping adolescents to learn good behaviors from each other through social interaction and observation, resulting in the development of a sense of doing good for others.

Ultimately, acceptance parenting dimension, authoritative and permissive parenting style significantly influenced adolescents' prosocial behavior. Particularly, the overlooked importance of permissive parenting style actively accounted to prosociality equally with the long-established authoritative parenting style. While self-esteem, religiosity and peer influence played significant

roles in predicting prosocial behavior, peer influence specifically played a mediating pathway between acceptance parenting dimension and prosociality.

These findings align with the theoretical evidence that states responsive and secure attachment adolescents have with parents function as a predicting variable of their prosocial behaviors. Additionally, the theoretical concept supports that acceptance parenting, which is characterized with warmth, responsiveness and love enhances adolescent internal and external environments. This is also supported the current finding that revealed the internal moral, spiritual values (religiosity) and external social atmosphere (peer influence) predicted students prosocial behavior. Findings in this study are congruent with the social cognitive theory which provides the psychological rules for interdependence between personal and social forces in determining behavior. Specifically, the unidirectional relationships between variables in this cross sectional design aligns with social cognitive theory, indicating adolescents learn potential behavior from the parents and peers, and internalize value of the behavior and demonstrate the modeled behavior.

# Chapter Six

# Conclusions, Recommendations, Implications, Limitation and Future Directions

## 6.1. Conclusions

This study demonstrated the extent to which students' prosocial behavior is related with their perceived parenting dimensions/styles, peer influence, self-esteem and religiosity. Further, this study addressed the level of prosocial behavior and its variation by gender and parenting styles (e.g., Authoritative, Authoritarian, Permissive, and Neglectful).

The prosocial behavior among senior secondary school students was a moderate level, indicating positive participation in prosocial activities. The most salient prosocial behaviors were compliant, altruism, categories of anonymous and dire. Emotional and public prosocial behaviors were less practiced by the students. There was a positive relationship between acceptance parenting dimension and prosocial behavior. The overall parenting style was significantly related to prosocial behavior. Self-esteem, peer influence, and religiosity of the participants had positive relationship with their prosocial behavior. Most independent variables (e.g., acceptance parenting, self-esteem, religiosity and peer influence) significantly predicted the prosocial behavior of the students. In terms of gender difference in all independent variables, there was no significant difference between male and female students.

Concerning variation in prosocial behavior by specific parenting styles (e.g., Authoritative, Authoritarian, Permissive, and Neglectful), prosocial behavior differed for both authoritative and permissive parenting styles, indicating that both parenting styles apply high support, warmth, and

care in their parenting process. This finding suggests that as both parents are high in their warmth and responsiveness, a supportive emotional attachment provided was what motivated students to take into account, and participate in their communities; showing strict rules were not the determining factor for students 'prosociality in this study.

Peer influence played a significant mediating role between parental acceptance and prosocial behavior, indicating parenting does not just affect prosocial behavior; rather it also shapes students' social world, which in turn influences their behavior. Therefore, students from acceptance parents are more likely to seek out prosocial friends and build healthy peer connections. Generally, the positive connection between parenting styles, self-esteem, peer influence, religiosity, and students' prosociality in this study could reflect the notion of social cognitive theory that states social environments (e.g., parents, peers) and personal beliefs (e.g., self-esteem, religiosity) are important in influencing human behavior.

### 6.2.Recommendations

The findings of this study suggest that the social and personal environments are important in determining adolescents' prosocial behaviors though all variables were not equally contributed to their prosociality. Based on this fact, the current study provides the following recommendations to help future researchers, schools, policy makers on adolescent development in promoting prosocial behavior for sustainable future.

- Since the overall prosocial tendencies of the students was not fully explained by parental dimensions, peer influence, religiosity and self-esteem, future research is required to determine the remaining determinants of prosocial behavior (e.g., individuals' personality, school environments).

- In order to further strengthen prosocial behaviors in adolescents, parents should consistently implement authoritative and permissive parenting approaches, which provide warmth, responsiveness, and emotional support to adolescents.
- As self-esteem, positive peer influence and religiosity are important predictors of adolescents' prosocial behavior, senior secondary school students should be given a training that further support them to be aware of their self-worth, religious commitment, and peers' value in decision making for doing good for others.
- To strengthen more and make prosocial behaviour a culture of students in the school and beyond, secondary schools should also incorporate programs that encourage prosocial values, norms and participation among students in the form of training and extracurricula activities.
- Policymakers must leverage adolescent prosociality by embedding supportive, responsive parenting into national youth development.
- The importance of permissive parenting style in child rearing should not be overlooked in the literature, and academic arena.
- Furthermore, the measurement or factor structures devised in current study can be applied and tested in different contexts both in Ethiopia and elsewhere.

### 6.3.Practical Implications

The findings of this study showed the importance of authoritative and permissive parenting approaches, self-esteem, religiosity and positive peer influence as influencing factors of prosocial tendencies, while gender had no significant impact on this behavior. Therefore, parents should persist using these supportive parenting approaches in shaping their children's and adolescents' behavior. The way adolescents view themselves, better level of their religious faith, commitment, and participation, and their positive peer environment are important factors

in promoting prosociality. Gender equity in education should also be strengthened in promoting equality in academia and the community.

### 6.4.Limitations of the Study

This study added some contributions to scientific knowledge by focusing on the link between parenting styles, self-esteem, peer influence, religiosity, and prosocial behavior in adolescents. However, as this study is correlational, no causal conclusion can be drawn. The data used in this study is a perceived report of adolescents about their parents' parenting styles, which omits crucial context about adolescents from parents and measurement of actual parenting styles. In this study, the longitudinal data are not used, and this may cause a limitation in understanding behavioral development. The qualitative data of the participants is not used in this study, which may cause limitation in understanding personal narratives, subjective motivations and lived experiences of adolescents concerning their prosociality. Demographic variables of the parents, such as parental education, socio-economic status, family structure, and school type, are not controlled in this study. This study considered unidirectional structure and the bidirectional remains unexplored. This may cause limitation by oversimplifying the fluid nature of adolescent socialization.

### 6.5. Future Research Directions

Subsequent investigations might consider incorporating additional independent variables, such as parental socio-economic status and students' social media usage as mediating factors to elucidate this association using mixed research design. To fill the theoretical limitation of this study, that strictly evaluated the unidirectional relationship between independents and dependent variable using cross sectional survey, future research should use longitudinal design to examine potential reciprocal effects.

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# Appendices

1. Questionnaire

**Addis Ababa University**
**College of Education and Language Studies**
**School of Psychology**

## Questionnaire (To Be Filled By the Students)

**Dear participants:**

The purpose of this study is to examine parenting styles, religiosity, peer and self-esteem influences as determinants of prosocial behavior among high school students of South West Shewa Zone. To this end, the researcher respectfully requests your cooperation and participation in this study by completing this questionnaire. There is no right or wrong answer in this survey and you are only requested to indicate your personal opinion. The information you give will be used only for academic purpose. The researcher also assures you that all of your responses will be kept anonymous.

**Thank you for your Cooperation!!**

**Section I: General Information**

1. **Gender** **Male** ☐ **Female** ☐
2. **Grade level** **11th** ☐ **12th** ☐
3. **Age**_____

**Section II: A) Prosocial Tendencies Measure**

**Direction:** Below are sentences that might or might not describe you. Please indicate how much each statement describes you by **encircling** on the number using the scale below.

| No. | Items | (1) Does not Describe me at all | (2) Describes me a little | (3) Somewhat describes me | (4) Describes me well | (5) Describes me Great |
|---|---|---|---|---|---|---|
| 1 | I can help others best when people are watching me. | **1** | **2** | **3** | **4** | **5** |
| 2 | It makes me feel good when I can comfort someone who is very upset. | **1** | **2** | **3** | **4** | **5** |
| 3 | When other people are around, it is easier for me to help others in need. | **1** | **2** | **3** | **4** | **5** |
| 4 | I think that one of the best things about helping others is that it makes me look good. | **1** | **2** | **3** | **4** | **5** |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5 | I get the most out of helping others when it is done in front of other people. | **1** | **2** | **3** | **4** | **5** |
| 6 | I tend to help people who are in a real crisis or need. | **1** | **2** | **3** | **4** | **5** |
| 7 | When people ask me to help them, I don't hesitate. | **1** | **2** | **3** | **4** | **5** |
| 8 | I prefer to donate money without anyone knowing. | **1** | **2** | **3** | **4** | **5** |
| 9 | I tend to help people who are hurt badly. | **1** | **2** | **3** | **4** | **5** |
| 10 | I believe that donating goods or money works best when I get some benefit. | **1** | **2** | **3** | **4** | **5** |
| 11 | I tend to help others in need when they do not know who helped them. | **1** | **2** | **3** | **4** | **5** |
| 12 | I tend to help others especially when they are really emotional. | **1** | **2** | **3** | **4** | **5** |
| 13 | Helping others when I am being watched is when I work best. | **1** | **2** | **3** | **4** | **5** |
| 14 | It is easy for me to help others when they are in a bad situation. | **1** | **2** | **3** | **4** | **5** |
| 15 | Most of the time, I help others when they do not know who helped them. | **1** | **2** | **3** | **4** | **5** |
| 16 | I believe I should receive more rewards for the time and energy I spend on volunteer work/activity | **1** | **2** | **3** | **4** | **5** |
| 17 | I respond to helping others best when the situation is highly emotional. | **1** | **2** | **3** | **4** | **5** |
| 18 | I never wait to help others when they ask for it. | **1** | **2** | **3** | **4** | **5** |
| 19 | I think that helping others without them knowing is the best type of situation. | **1** | **2** | **3** | **4** | **5** |
| 20 | One of the best things about doing charity work is that it looks good on my future resume. | **1** | **2** | **3** | **4** | **5** |
| 21 | Emotional situations make me want to help others in need. | **1** | **2** | **3** | **4** | **5** |
| 22 | I often make donations without anyone knowing because they make me feel good. | **1** | **2** | **3** | **4** | **5** |
| 23 | I feel that if I help someone, they should help me in the future. | **1** | **2** | **3** | **4** | **5** |
| 24 | I often help even if I don't think I will get anything out of helping. | **1** | **2** | **3** | **4** | **5** |
| 25 | I usually help others when they are very upset. | **1** | **2** | **3** | **4** | **5** |

**B) Parenting Styles Scale**

**Direction:** Please read each of the following statements carefully and for each item from 1-13, think about your parents'/guardians' attitudes and behaviors in raising you, and rate them using the scale below by **encircling** the number that indicates the alternative which you believe best describes your response. Do not forget to respond for both your father/male guardian and mother/female guardian if you are living with both parents (two guardians) and **encircle** on

number of your choice. In addition, for item from 14-25 choose and encircle the response you think best describes your parents' direction on your behavior.

(1) Strongly Disagree (SD) (2) Disagree (DA) (3) Agree (A) (4) Strongly Agree (SA)

| No. | Items | (1) SD (2) DA (3) A (4) SA | |
|---|---|---|---|
| | | Father/Male Guardian | Mother/Female Guardian |
| 1 | I trust my parents/guardians to help me out, if I have any kind of problems. | **1 2 3 4** | **1 2 3 4** |
| 2 | My parents/guardians keep pushing (helping) me to do my best in what I do. | **1 2 3 4** | **1 2 3 4** |
| 3 | My parents/guardians allow me to tell them if I think my ideas are better than theirs. | **1 2 3 4** | **1 2 3 4** |
| 4 | My parents/guardians always speak to me with a warm and friendly voice (manner) | **1 2 3 4** | **1 2 3 4** |
| 5 | When my parents/guardians want me to do something, they explain why | **1 2 3 4** | **1 2 3 4** |
| 6 | When I get good marks in school, my parents/ guardians praise me | **1 2 3 4** | **1 2 3 4** |
| 7 | When I get poor marks in school, my parents/ guardians encourage me to work harder | **1 2 3 4** | **1 2 3 4** |
| 8 | My parents/guardians are interested in what I am learning at school. | **1 2 3 4** | **1 2 3 4** |
| 9 | My parents/guardians are involved in my education (e.g., helping with assignments when asked and helping me in selecting fields of study). | **1 2 3 4** | **1 2 3 4** |
| 10 | My parents/guardians know who my friends are. | **1 2 3 4** | **1 2 3 4** |
| 11 | My parents/guardians spend time talking with me when there is an issue (a case) of interest. | **1 2 3 4** | **1 2 3 4** |
| 12 | My parents/guardians enjoy staying home with me more than going out with friends. | **1 2 3 4** | **1 2 3 4** |
| 13 | My parents/guardians give me a lot of care, attention, and support. | **1 2 3 4** | **1 2 3 4** |

14. In a typical week, what is the latest time your parents/ guardians allow you to stay out on school nights (Monday-Friday)?

**1. Your father/ Male guardian:**

(1) As late as I want
(2) 9:00 P.M - Mid-night
(3) 7:00- 9:00 P.M
(4) Doesn't allow me out

**2. Your mother/Female guardian:**

(1) As late as I want
(2) 9:00 P.M - Mid-night
(3) 7:00- 9:00 P.M
(4) Doesn't allow me out

15. In a typical week, what is the latest time your parents/guardians allow you to stay out during weekend (Non-school) nights (Friday, Saturday or Sunday)?

**1. Your father/ Male guardian:**

(1) As late as I want
(2) 9:00 P.M - Mid-night
(3) 7:00- 9:00 P.M
(4) Doesn't allow me out

**2. Your mother/Female guardian:**

(1) As late as I want
(2) 9:00 P.M - Mid-night
(3) 7:00- 9:00 P.M
(4) Doesn't allow me out

16. How much do your parents/guardians try to know exactly where you are and what you are doing?

**1. Your father/ Male guardian:**

(1) Doesn't try
(2) Tries a little
(3) Tries a lot

**2. Your mother/ Female guardian:**

(1) Doesn't try
(2) Tries a little
(3) Tries a lot

17. How much do your parents/guardians try to know whether you go to school or not?

**1. Your father/ Male guardian:**

(1) Doesn't try
(2) Tries a little
(3) Tries a lot

**2. Your mother/ Female guardian:**

(1) Doesn't try
(2) Tries a little
(3) Tries a lot

18. How much do your parents/guardians try to know what you do with your free time?

**1. Your father/ Male guardian:**

(1) Doesn't try
(2) Tries a little
(3) Tries a lot

**2. Your mother/ Female guardian:**

(1) Doesn't try
(2) Tries a little
(3) Tries a lot

19. How much do your parents/guardians try to know where you are most afternoons after school?

**1. Your father/ Male guardian:**

(1) Doesn't try
(2) Tries a little
(3) Tries a lot

**2. Your mother/ Female guardian:**

(1) Doesn't try
(2) Tries a little
(3) Tries a lot

20. How much do your parents/guardians try to know what you do with your money?

**1. Your father/ Male guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

**2. Your mother/ Female guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

21. How much do your parents/guardians really know exactly where you are and what you are doing?

**1. Your father/ Male guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

**2. Your mother/ Female guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

22. How much do your parents/guardians really know exactly whether you go to school or not?

**1. Your father/ Male guardian:**

**2. Your mother/ Female guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

23. How much do your parents/guardians really know exactly where you are most afternoons after school?

**1. Your father/ Male guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

**2. Your mother/ Female guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

24. How much do your parents/guardians really know exactly where you are most afternoons after school?

**1. Your father/ Male guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

**2. Your mother/ Female guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

25. How much do your parents/guardians really know exactly what you do with your money?

**1. Your father/ Male guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

**2. Your mother/ Female guardian:**

(1) Doesn't know
(2) Knows a little
(3) Knows a lot

**C) Peer Influence Scale**

**Direction:** Please read each of the following statements carefully and for each item from 1-14, think about your peers' attitudes and behaviors in influencing you, and rate them using the scale below by encircling the number that indicates the alternative which you believe best describes your response.

**(1)No (2) Undecided (3) Yes**

| No. | **Items** | **No (1)** | **Undecided(2)** | **Yes (3)** |
|---|---|---|---|---|
| 1 | I like to please my friends. | **1** | **2** | **3** |
| 2 | I have a good relationship with my friends. | **1** | **2** | **3** |
| 3 | I make friends easily. | **1** | **2** | **3** |
| 4 | My peers respect me. | **1** | **2** | **3** |
| 5 | My peers recognize me as important. | **1** | **2** | **3** |
| 6 | Criticism by my friends upsets me. | **1** | **2** | **3** |
| 7 | My friends like to fight with others. | **1** | **2** | **3** |
| 8 | I feel uncomfortable in a group of my peers. | **1** | **2** | **3** |
| 9 | My friends encourage me to do bad things. | **1** | **2** | **3** |
| 10 | I feel I am rejected by my peers. | **1** | **2** | **3** |

| | | | | |
|---|---|---|---|---|
| 11 | My friends often ignore me. | **1** | **2** | **3** |
| 12 | My friends think I am boring. | **1** | **2** | **3** |
| 13 | I easily loose friends. | **1** | **2** | **3** |
| 14 | Belonging to a gang that can fight together is good/cool. | **1** | **2** | **3** |

**D) Religiosity Scale**

**Direction:** Please read each of the following statements carefully and for each item from 1-7, think about your religious' feelings, attitudes and behaviors and rate them using the scale below by encircling the number that indicates the alternative which you believe best describes your response.

| No. | Items | Your Responses | | | | |
|---|---|---|---|---|---|---|
| 1 | How important is religion in your life | (1) Not at all important | (2) Less important | (3) Slightly important | (4) Important | (5) Very important |
| 2 | How often do you go to your religion center | (1) Never | (2) Rarely | (3) In a weeks' time) | (4) Once a week) | (5) More than once a week |
| 3 | How often do you attend religion center related activities (such as youth activities) other than worship services? | (1) Never | (2) Rarely | (3)In a weeks' time | (4)Once a week) | (5) More than once a week |
| 4 | I am a spiritual person | (1)Very much unlike me | (2) Much unlike me | (3) Unlike me | (4) Much like me | (5) Very much like me |
| 5 | I practice my religion | (1)Very much unlike me) | (2) Much unlike me | (3) Unlike me | 4(Much like me | (5) Very much like me. |
| 6 | My faith never deserts me during hard times | 1 (Very much unlike me) | 2(Much unlike me) | 3(Unlike me) | 4(Much like me). | 5 (very much like me). |
| 7 | My faith makes me who I am | (1) Very much unlike me) | (2) Much unlike me) | (3) Unlike me | (4) Much like me | (5) Very much like me. |

E) **The Rosenberg Self-Esteem**

***Direction:*** *Please use the scale below to answer each of the following questions.* ***Encircle*** *an option that describes you best from the options given below (from* ***1 to 4*** *in the table below).*

***Strongly Disagree (1 )  Disagree (2)  Agree (3)  Strongly Agree ( 4)***

| No. | **Items** | ***Strongly Disagree*** | ***Disagree*** | ***Agree*** | ***Strongly Agree*** |
|---|---|---|---|---|---|
| 1 | I feel that I am a person of worth, at least on an equal basis with others | **1** | **2** | **3** | **4** |
| 2 | I feel that I have a number of good qualities | **1** | **2** | **3** | **4** |
| 3 | All in all, I am inclined to feel that I am a failure | **1** | **2** | **3** | **4** |
| 4 | I am able to do things as well as most other people | **1** | **2** | **3** | **4** |
| 5 | I feel I do not have much to be proud of | **1** | **2** | **3** | **4** |
| 6 | I take a positive attitude toward myself | **1** | **2** | **3** | **4** |
| 7 | On the whole, I am satisfied with myself | **1** | **2** | **3** | **4** |
| 8 | I wish I could have more respect for myself | **1** | **2** | **3** | **4** |
| 9 | I certainly feel useless at times | **1** | **2** | **3** | **4** |
| 10 | At times I think I am no good at all | **1** | **2** | **3** | **4** |

Please check that you have completed all the items!
Thank You Very Much Again, for the Cooperation!!

**Yuunivarsiitii Finfinnee**
**Kolleejjii Barnootaa fi Qorannoowwan Afaanii**
**Mana barnoota Saayikolojii**

# Bar-gaaffii (Barattootaan guutamu)

**Kabajamtoota Hirmaattotaa:**
Kaayyoon qorannaoo kanaa hariiroo haalli ykn amalli guddisa keessan keessatti (Abbaan, haati, guddistuu/saa) n agarsiisan, dhiibbaan hiriyaa, nama amntii ta'uun, ilaalchi waliigalaa ofiif qabdanii fi **ammam akka isin namaoota biraa gargaaruf yaaddan** qorachuudha. Kaayyoo kanaaf, af-gaaffii kana guutun akka qorannaoo kan deeggartanii fi keessatti hirmaattan qorataan kun kabajaan isin gaafata. Deebiin sirrii fi dogoggora jedhamee fudhatamu af-gaaffii kana keessaa hin jiru. Kan isin gaafatamtanii fi deebistan ilaalcha dhuunfaa keessanii qofa. Odeeffannoon isin kennitan kamuu dhimmi qorannaoo kana qofaaf oola. Qorataan qorannaoo kanaas deebii isn kennitan iccitiin qabata. □

**Deeggarsa keessaniif Galatoomaa!!**

**Kutaa 1ffaa: Odeeffannoo Waliigalaa**

4. **Saala Dhiira** ☐ **Dubara** ☐
5. **Sadarkaa barnootaa Kutaa11ffaa** ☐ **Kutaa 12ffaa** ☐
6. **Bakka jireenya (maatii waliin): Baadiyyaa** ☐ **Magaala** ☐
7. **Umurii _____**
8. **Gosa Amantii Hordoftu _____**

**Kutaa 2ffaa: A) Safartuu fedhii/kaka'uumsa namootni nama gargaaruuf qabanii (safartuu ammam akka namootni namaoota biraa gargaaruf hedanii/yaadanii)–kan fooyya'e (PTM-R-25)**

**<u>Qajeelfama</u>:** Himootni armaan gadii tarii si ibsuus danda'u ykn ammoo si ibsuu baachus danda'u. Safartuu armaan gadiitti tarreeffaman bu'ureffachuudhaan mee maaloo tokkoon tokkoo hima asi gaditti tarreeffaman hangam akka si ibsu agarsiisun itti mari (akka isin ibsu agarsiisuun itti maraa).

| Lk | Himoota | (1) Gonkumaa ana hin ibsu | (2) Xiqqoo wahii na ibsa | (3) Amma tokko na ibsa | (4) Na ibsa | (5) Sirriitti ykn baay'ee na ibsa |
|---|---|---|---|---|---|---|
| 1 | Kanin nama sirriitti gargaaru, yammuu namootni biraa na argaa/ilaalaa jiraniidha. | **1** | **2** | **3** | **4** | **5** |
| 2 | Nama aarii cimaa keessa jiru tokko yammuun gammachiisuu danda'e (aarii isaa/ishii dhiisisuu yammuun danda'e), keessi koo na gammada | **1** | **2** | **3** | **4** | **5** |
| 3 | Namoota gargaarsa barbaadan deeggaruun, yammuu namootni biraa na bira ykn naannawaa koo jiran, natti salphata. | **1** | **2** | **3** | **4** | **5** |
| 4 | Wanni gaariin nama gargaarun qabu tokko, nama biratti akkan fudhatama qabu (jaalatamu, akka nama gaaritti akka na ilaalan) taasisuudha jedheen yaada. | **1** | **2** | **3** | **4** | **5** |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5 | Nama gargaaru irraa waan guddaa kanin argadhu (kanin irra caalatti fayyadamu), yammuun gargaarsicha namoota biraa fuunduratti (osoo namootni biraa araguu) taasiseedha. | **1** | **2** | **3** | **4** | **5** |
| 6 | Namoota dhugumaan rakkina keessa jiran ykn dhugumatti gargaarsa barbaadan qofan gargaaruu heda/fedha. | **1** | **2** | **3** | **4** | **5** |
| 7 | Yommuu namootni akkan isaan gargaaruf na gaafatan, waa tokko duubatti hin jedhu (shakkii ykn mamii tokko maleen raawwadha). | **1** | **2** | **3** | **4** | **5** |
| 8 | Yommuun qarshiidhaan/maallaqaan nama gargaaru osoo namni tokko hin beekin osoon raawwadheen irra filadha (irra naaf wayya). | **1** | **2** | **3** | **4** | **5** |
| 9 | Namoota baay'ee miidhamanin caalatti gargaaruu heda/fedha. | **1** | **2** | **3** | **4** | **5** |
| 10 | Namoota qabeenyaan ykn ammoo qarshiidhaan gargaarun kan gaarii ta'u, yammuun fayidaa wahii irraa argachuu dandahe jedheen amana. | **1** | **2** | **3** | **4** | **5** |
| 11 | Namoota eenyu akka isaan gargaare osoo isaan hin beekin gargaarun heda/fedha/kajeela ykn barbaada (eenyumma koo otoo isaan hin beekin gargaarutu caalatti natti tola). | **1** | **2** | **3** | **4** | **5** |
| 12 | Namoota kanin gargaaru barbaadu ykn hedu keessattu yammuu isaan dhugumaan miira keessa galaniidha. | **1** | **2** | **3** | **4** | **5** |
| 13 | Waan gaarii hojjadhe jedhee kan fudhadhu, osoo namootni biraa na ilaalaa jiranuu yammuun namootaaf gargaarsa taasiseedha | **1** | **2** | **3** | **4** | **5** |
| 14 | Namoota gargaarun yammuu isaan haala badaa keessa jiran baay'ee natti salphata | **1** | **2** | **3** | **4** | **5** |
| 15 | Yeroo baay'ee kanin nama gargaaru yammuu isaan eenyu akka isaan gargaare adda baafachuu hin dandeenyetti ykn hin beeknetti. | **1** | **2** | **3** | **4** | **5** |
| 16 | Yeroo fi humnan tola-ooltummaa irratti dhangalasef/balleesseef badhaasa ykn kenna ykn onnachiistuu wahii argachuun koo dirqama jedheen amana. | **1** | **2** | **3** | **4** | **5** |
| 17 | Nama gargaaruf deebii gaarii kanin kennu, haalli jiru sirriitti miira keessa kan nama galchu yoo ta'eedha. | **1** | **2** | **3** | **4** | **5** |

| | | | | | | |
|---|---|---|---|---|---|---|
| 18 | Akkan isaan gargaaruf namootni na gaafannaan, oggasuman (osoo homaa hin turinan) gargaara. | **1** | **2** | **3** | **4** | **5** |
| 19 | Haalli baay'ee mijataan (gaarin) namoota gargaaruf tolu otoo isaan hin beekin gargaarudha jedheen yaada. | **1** | **2** | **3** | **4** | **5** |
| 20 | Gaarummaan hojii tola-ooltummaa hojjachuun qabu tokko, seenaa gabaabaa hojii fi barnootaa koo (CV) naaf bareechu ykn fudhatama argachiisudha. | **1** | **2** | **3** | **4** | **5** |
| 21 | Haalli miira keessa nama galchu jiraachun namoota gargaarsa barbaadan akka gargaaruf fedhii natti hora. | **1** | **2** | **3** | **4** | **5** |
| 22 | Yeroo baay'ee gargaarsa namaaf kanin taasisuu ykn kenna wahii namaaf kanin kennuuf osoo namni tokko hin beekin. Sababni isaas gochi akkasii (nama gargaarun) waan na gammachiisuf. | **1** | **2** | **3** | **4** | **5** |
| 23 | Nma tokko yoon har'a/amma gargaare namni sun gara fuunduraatti deebisee na gargaaruun dirqama jedheen yaada | **1** | **2** | **3** | **4** | **5** |
| 24 | Gargaarsa sana irraa waa tokkollee nan argadhaa jedhee yoon yaaduu baadhe, yeroo baay'ee gargaarsa namaaf nan taasisa | **1** | **2** | **3** | **4** | **5** |
| 25 | Yeroo baay'ee ani kanan nama gargaaru yammuu isaan aarrii cimaa ykn guddaa keessa jiraniidha | **1** | **2** | **3** | **4** | **5** |

**Kutaa 2ffaa: B) Safartuu Mala/haala Guddissa Daa'immanii (PSsS)**

**Qajeelfama:** Maaloo tokkoon tokkoo himoota armaan gaditti tarreeffaman sirriitti dubbisaa. Itti aansun waa'ee haala-amala abbaa fi haati (warri isin guddisan) yammuu isin guddisan agarsiisan ykn ilaalcha isaan qaban yaadadha. Achiin booda, tokkoon tokkoo himaa irratti ammam akka waliif galtan safartuu armaan gaditti lakkoofsaan ibsametti dhimma bahuudhaan agarsiisaa. Kana jechuun agarsiistuwwan akka filannootti dhihaatan keessaa akka gaaritti deebii ykn yaada keessan naaf ibsa jettanii yaaddan filadhaa jechuudha. Haaluma armaan gadiitti dhihaateen **gaaffii 1-13,** akkasumas **gaaffii 14-25** dubbisuun deebii filannoo keessanitti maraa.

**Yaadachiisa:** Abbaa fi haadha keessan ykn warra isin guddise (warra dhiiras ykn guddisaa ta'e warra dubartii ykn guddistuu) lachuu wajjin bakka tokkotti jiraachaa jirtu yoo ta'e, deebii keessan lachuufuu kennuu hin dagatinaa. (1) Gonkumaa itti waliif hin galu (2) Itti waliif hin galu (3) Ittin waliif nan gala (4) Sirriittan itti waliif-gala

| Lk | Himoota | Abbaa/Guddisaa | | | | Haadha/Guddistuu | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Yoo rakkoon wahii na mudate ykn qabaadhe abbaa fi haati koo ykn warri na guddise na gargaaru jedheen amana. | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 2 | Waanan hojjachaa jiru irratti akkan waan gaarii hojjadhuuf ykn bu'aa bareedaa fiduuf abbaa fi haati koo ykn warri na guddise na gargaaru | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 3 | Yaadni koo kan isaanii caalaa fooyyee yoo qabaate akkan isaanitti himuuf ykn dubbadhee isaan amansiisuf ykn yaada ibsadhuuf abbaa fi haati koo ykn warri na guddise naaf heeyyamu | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 4 | Abbaa fi haati koo ykn warri na guddise yeroo hundaa akka hiriyaa/michuutti natti dhihaatanii haala gammachuudhaan guutameen natti dubbatu | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 5 | Abbaa fi haati koo ykn warri na guddisan waa akkan hojjadhu yoo barbaadan, maalif akka barbaachise, maalif akkan hojjadhu naaf ibsu | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 6 | Mana-barnootatti yoon ani qabxii gaarii fide ykn sadarkaa gaarii bahe, abbaa fi haati koo ykn warri na guddisan na faarsu, na galateeffatu | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 7 | Mana-barnootatti yoon ani qabxii gaarii hin fidne ta'e ykn ammoo sadarkaan koo gad-aanaa ta'e, abbaa fi haati koo ykn warri na guddisan akka ani caalatti cimee hojjadhuuf na jajjaabeessu. | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 8 | Abbaa fi haati koo ykn warri na guddisan waanan ani mana -barnootatti barachaa jiru irratti fedhii qabu ykn gammadoodha | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 9 | Abbaa fi haati koo ykn warri na guddisan barnoota koo keessatti gumaacha ni taasisu ykn ni hirmaatu (Fkn. Yoon gaafadhe abbaltii naaf hojjachuu ykn na gargaaru irratti, gosa barnootaa ykn muummee ani baradhu filachuu irratti) | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 10 | Abbaa fi haati koo ykn warri na guddisan michuuwwan ykn hiriyoon koo eenyu akka ta'an ykn eenyu fi eessa akkan oolu ni beeku | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 11 | Dhimmi barbaachisu wahii jiraannan abbaa fi haati koo ykn warri na guddisan yeroo fudhataniitu na waliin dabarsu. | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 12 | Abbaa fi haati koo ykn warri na guddisan michuuwwan ykn hiriyoota isaanii wajjin alatti walarganii waliin dabarsuurra manatti ana waliin dabarsuutti caala gammadu. | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 13 | Abbaa fi haati koo ykn warri na guddisan kunuunsa ol'aanaa fi gargaarsa naaf taasisu; bakka naaf qabu (narratti xiyyeeffatu, na hordofu) | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |

14. Guyyaa barnootaa (Wiixata hanga Jimaataa), barnoota galgalaatif (yoo jiraate) yeroon abbaa fi haati kee ykn warri si guddisan akka ala turtuuf siif heeyyaman hagami?

**1. Abbaa kee/ Guddisaa kee:**

(1) Amman ani turuu barbaade
(2) halkan keessaa hanga sa'aa 2:00 tti
(3) halkan keessaa hanga sa'aa 4:00 tti
(4) Gonkumaa ala turuu naaf hin eeyyaman

**2. Haadha kee/Guddistuu kee:**

(1) Amman ani turuu barbaade
(2) halkan keessaa hanga sa'aa 2:00 tti
(3) halkan keessaa hanga sa'aa 4:00 tti
(4) Gonkumaa ala turuu naaf hin eeyyaman

15. Guyyaa barnooti hin jirre (Jimaata, Sanbata duraa fi Dilbata), barnoota galgalaatif (yoo jiraate) yeroon abbaa fi haati kee ykn warri si guddisan akka ala turtuuf siif heeyyaman hagami?

| **1. Abbaa kee/ Guddisaa kee:** | **2. Haadha kee/Guddistuu kee:** |
|---|---|
| (1) Amman ani turuu barbaade | (1) Amman ani turuu barbaade |
| (2) halkan keessaa hanga sa'aa 2:00 tti | (2) halkan keessaa hanga sa'aa 2:00 tti |
| (3) halkan keessaa hanga sa'aa 4:00 tti | (3) halkan keessaa hanga sa'aa 4:00 tti |
| (4) Gonkumaa ala turuu naaf hin eeyyaman | (4) Gonkumaa ala turuu naaf hin eeyyaman |

16. Abbaa fi haati kee ykn warri si guddisan qabatamaadhan eessa akka ati jirtuu fi maal akka ati hojjachaa jirtu ammam beekudhaaf yaalu?

| **1. Abbaa kee/ Guddisaa kee:** | **2. Haadha kee/Guddistuu kee:** |
|---|---|
| (1) Gonkumaa hin yaalu | (1) Gonkumaa hin yaaltu |
| (2) Amma tokko ni yaala | (2) Amma tokko ni yaalti |
| (3) Baay'ee yaala | (3) Baay'ee yaalti |

17. Gara mana-barnootaa deemu fi dhiisuu kee, abbaa fi haati kee ykn warri si guddisan ammam beekuf yaalii taasisu?

| **1. Abbaa kee/ Guddisaa kee:** | **2. Haadha kee/Guddistuu kee:** |
|---|---|
| (1) Gonkumaa hin yaalu | (1) Gonkumaa hin yaaltu |
| (2) Amma tokko ni yaala | (2) Amma tokko ni yaalti |
| (3) Baay'ee yaala | (3) Baay'ee yaalti |

18. Yeroo bilisaa ati qabdu (yammuu hojii ykn barnootan hin qabamne) maal akka ati hojjattu abbaa fi haati kee ykn warri si guddisan ammam beekuf yaalii taasisu?

| **1. Abbaa kee/ Guddisaa kee:** | **2. Haadha kee/Guddistuu kee:** |
|---|---|
| (1) Gonkumaa hin yaalu | (1) Gonkumaa hin yaaltu |
| (2) Amma tokko ni yaala | (2) Amma tokko ni yaalti |
| (3) Baay'ee yaala | (3) Baay'ee yaalti |

19. Erga mana barnootatii deebiteen boodaa eessaq akka ati dhaqxu, abbaa fi haati kee ykn warri si guddisan ammam beekuf yaalii taasisu?

| **1. Abbaa kee/ Guddisaa kee:** | **2. Haadha kee/Guddistuu kee:** |
|---|---|
| (1) Gonkumaa hin yaalu | (1) Gonkumaa hin yaaltu |
| (2) Amma tokko ni yaala | (2) Amma tokko ni yaalti |
| (3) Baay'ee yaala | (3) Baay'ee yaalti |

20. Maallaqa keetin ykn argattuun maal akka ati itti gootu ykn maalirra akka ati oolchitu, abbaa fi haati kee ykn warri si guddisan ammam beeku?

| **1. Abbaa kee/ Guddisaa kee:** | **2. Haadha kee/Guddistuu kee:** |
|---|---|
| (1) Gonkuma hin beeku | (1) Gonkumaa hin beektu |
| (2) Amma tokko ni beeka | (2) Amma tokko ni beekti |
| (3) Sirriitti beeka | (3) Sirriitti beekti |

21. Qabatamaadhan eessa akka ati ooltu fi maal akka ati hojjattu abbaa fi haati kee ykn warri si guddisan dhugumaan ammam beeku?

| **1. Abbaa kee/ Guddisaa kee:** | **2. Haadha kee/Guddistuu kee:** |
|---|---|
| (1) Gonkuma hin beeku | (1) Gonkumaa hin beektu |
| (2) Amma tokko ni beeka | (2) Amma tokko ni beekti |
| (3) Sirriitti beeka | (3) Sirriitti beekti |

22. Qabatamaadhaan/dhugumaan mana baruumsaa deemuu fi dhiisuu kee abbaa fi haati kee ykn warri si guddisan dhugumaan ammam beeku?

| **1. Abbaa kee/ Guddisaa kee:** | **2. Haadha kee/Guddistuu kee:** |
|---|---|
| (1) Gonkuma hin beeku | (1) Gonkumaa hin beektu |

(2) Amma tokko ni beeka (2) Amma tokko ni beekti
(3) Sirriitti beeka (3) Sirriitti beekti

23. Qabatamaadhan yeroo bilisaa ati qabdu (yammuu hojii ykn barnootan hin qabamne) maal akka ati hojjattu abbaa fi haati kee ykn warri si guddisan dhugumaan ammam beeku?

**1. Abbaa kee/ Guddisaa kee:** **2. Haadha kee/Guddistuu kee:**
(1) Gonkuma hin beeku (1) Gonkumaa hin beektu
(2) Amma tokko ni beeka (2) Amma tokko ni beekti
(3) Sirriitti beeka (3) Sirriitti beekti

24. Erga mana barnootatii deebiteen boodaa qabatamaadhan eessa akka ati dhaqxu, abbaa fi haati kee ykn warri si guddisan ammam beeku?

**1. Abbaa kee/ Guddisaa kee:** **2. Haadha kee/Guddistuu kee:**
(1) Gonkuma hin beeku (1) Gonkumaa hin beektu
(2) Amma tokko ni beeka (2) Amma tokko ni beekti
(3) Sirriitti beeka (3) Sirriitti beekti

25. Maallaqa keetin ykn argattuun maal akka ati itti gootu ykn maalirra akka ati oolchitu, abbaa fi haati kee ykn warri si guddisan qabatamaadhan ammam beeku?

**1. Abbaa kee/ Guddisaa kee:** **2. Haadha kee/Guddistuu kee:**
(1) Gonkuma hin beeku (1) Gonkumaa hin beektu
(2) Amma tokko ni beeka (2) Amma tokko ni beekti
(3) Sirriitti beeka (3) Sirriitti beekti

**Kutaa 2ffaa: C) Safrtuu Dhiibbaa Hiriyoonni/michuuwwan namarraan gahan**

**Qajeelfama:** Gaaffiwwan armaan gadii dubbisuun dhiibbaa hiriyoonni keessan isin iraan gahan hagam akka walii galtan filachuun itti maraa.

| No | **Items** | ***Lakki*** | ***Hin murteessu*** | ***Eeyyee*** |
|---|---|---|---|---|
| 1 | Michuuwwan/hiriyoota koo gammachiisuu nan jaaladha | **1** | **2** | **3** |
| 2 | Michuuwwan/hiriyoota koo wajjin hariiroo gaarin qaba. | **1** | **2** | **3** |
| 3 | Michuu/hiriyaa baafachuun anaaf baay'ee salphaadha | **1** | **2** | **3** |
| 4 | Michuuwwan/hiriyoota koo na kabaju | **1** | **2** | **3** |
| 5 | Michuuwwan/hiriyoota koo akka nama barbaachisaatti na ilaalu | **1** | **2** | **3** |
| 6 | Qeeqni michuuwwan koorraa natti dhufu na aarsa/dallansiisa | **1** | **2** | **3** |
| 7 | Michuuwwan koo namoota biraa wajjin wal loluu ni jaalatu | **1** | **2** | **3** |
| 8 | Tuuta/garee hiriyoota kootii keessatti baay'ee natti hin tolu | **1** | **2** | **3** |
| 9 | Hiriyoonni koo waan badaa/gadhee akkan hojjadhuuf na kakaasu | **1** | **2** | **3** |
| 10 | Hiriyoota koo biratti akka waan fudhata ma hin qabneetu natti dhagahama. | **1** | **2** | **3** |
| 11 | Michuuwwan koo yeroo baay'ee na tuffatu. | **1** | **2** | **3** |
| 12 | Michuuwwan koo akkan waanan ani nama nuffisiisutti yaadu | **1** | **2** | **3** |
| 13 | Akkuma salphaattan michuuwwan/hiriyoottan koo dhaba | **1** | **2** | **3** |
| 14 | Miseensa/qaama garee/tuuta warra wal-loluu ta'uun gaaridha | **1** | **2** | **3** |

**Kutaa 2ffaa: D) Safartuu sadarkaa nama-amantii ta'uu**

**Qajeelfama**: Safartuu sadarkaa nama-amantii ta'uu keenyaa ammam akka nuti amantii keenyaaf of-kennoo taane (kutannoo amantii keenyaf qabnu), ammam akka nuti hojii amantii irratti hirmaannu, ykn ammoo sadarkaa eenyummaa amantii keenyaa armaan gaditti ibsan fayyadamuun deebii keessanitti marsaa.

| Lk | Himoota | Deebii keessan | | | | |
|---|---|---|---|---|---|---|
| 1 | Jireenya kee keessatti amanitiin ammam barbaachisaadha? | (1) Gonkumaa barbaachisaa miti | (2)Amma tokko barbaachisaa miti | (3)Amma tokko barbaachisaadha | (4) barbaachisaadha | (5)Baay'ee barbaachisaadha |
| 2 | Bakka wiirtuu amantii ykn kadhannaa amantii keetii ammam ammaitti deemta/dhaqxa? | (1) Gonkumaa hin dhaqu | (2) Baay'ee darbee darbee | (3) Torbanitti darbee darbee | (4) Torbanitti al-tokko | (5)Torbanitti yeroo tokkoo oli |
| 3 | Hojiiwwan amantii tajaajila kadhannaan ala jiran (kan akka hojiiwwan adda addaa dargaggootaa) keessatti ammam hirmaatta | (1) Gonkumaa hin dhaqu | (2) Baay'ee darbee darbee | (3) Torbanitti darbee darbee | (4) Torbanitti al-tokko | (5) Torbanitti yeroo tokkoo oli |
| 4 | Ani nama amantii/afuura ti | (1) Gonkumaa ana hin ibsu | (2) Baay'ee ana hin ibsu | (3) Ana hin ibsu | (4) Na ibsa | (5) Sirriitti na ibsa |
| 5 | Amantii koo nan hordofaa, waan inni jedhus hojiirran oolcha | (1) Gonkumaa ana hin ibsu | (2) Baay'ee ana hin ibsu | (3) Ana hin ibsu | (4) Na ibsa | (5) Sirriitti na ibsa |
| 6 | Gaafa/yeroo rakkoo amanitiin koo gonkumaa na hin gatu ykn qophaatti ana hin dhiisu | (1) Gonkumaa ana hin ibsu | (2) Baay'ee ana hin ibsu | (3) Ana hin ibsu | (4) Na ibsa | (5) Sirriitti na ibsa |
| 7 | Eenyummaa ykn maalummaa koo har'aatiif bu'urri amantii kooti | (1) Gonkumaa ana hin ibsu | (2) Baay'ee ana hin ibsu | (3) Ana hin ibsu | (4) Na ibsa | (5) Sirriitti na ibsa |

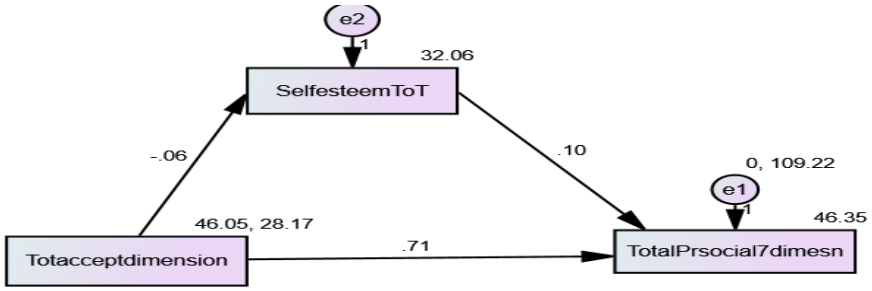
**Kutaa 2ffaa: E) Safartuu Ilaalcha waliigalaa nuti ofiif qabnuu**

**Qajeelfama:** Tokkoon tokkoo gaaffiwwan armaan gaditti tarreeffaman dubbisuun filannoowwan safartuu 1 -4 tti tarreeffamanitti dhimma bahuun deebii sadarkaa itti waliif galtanitti marsuun deebisaa.

(1) Gonkumaa itti waliif hin galu ykn gonkumaa naaf hin ta'u
(2) Itti waliif hin galu ykn naaf hin ta'u
(3) Ittin waliif-gala ykn naaf ta'a
(4) Sirriittan itti waliif-gala ykn haalan naaf ta'a

| Lk. | Himoota | *(1)* | *(2)* | *(3)* | *(4)* |
|---|---|---|---|---|---|
| 1 | Yoo xiqqaatee xiqqaate, hanguma warra kaanii ani nama barbaachisaadha ykn gatii qabudha jedheen yaada | 1 | 2 | 3 | 4 |
| 2 | Akkan waanan waantota gaggaarii heddu qabuutu natti dhagahama | 1 | 2 | 3 | 4 |
| 3 | Guutumaan guututti akka waanan nama bu'aa buusuu hin dandeenyetu ykn faayidaa hin qabneetu natti dhagahama. | 1 | 2 | 3 | 4 |
| 4 | Waantota namootni biroo baay'een hojjachuu dandahan anis hojjachuu nan dandaha | 1 | 2 | 3 | 4 |
| 5 | Waanan ittiin boonu waan baay'ee waan qabu natti hin fakkaatu | 1 | 2 | 3 | 4 |
| 6 | Akka waliigalaatti ilaalcha/bakka gaarin ofiif qaba | 1 | 2 | 3 | 4 |
| 7 | Osoon kabaja kana caalaa ofiif qabaadhee nan hawwa | 1 | 2 | 3 | 4 |
| 8 | Akka waliigalaatti ani ofii kootti gammadaadha | 1 | 2 | 3 | 4 |
| 9 | Yeroon itti dhugumatti akka nama fayidaa hin qabneetti of ilaalu ykn natti dhaghamu ni jira. Darbee darbee | 1 | 2 | 3 | 4 |
| 10 | Yeroon itti guutumaan guututti akka nama gaarii hin taanetti of ilaalu ykn natti dhaghamu ni jira. Darbee darbee. | 1 | 2 | 3 | 4 |

2. Mediational Analysis- Separate Analysis




**Regression Weights: (Group number 1 - Default model)**

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| SelfesteemToT | <--- | Totacceptdimension | -.062 | .054 | -1.158 | .247 | |
| TotalPrsocial7dimesn | <--- | Totacceptdimension | .709 | .105 | 6.738 | *** | |
| TotalPrsocial7dimes | <--- | SelfesteemToT | .103 | .10 | .995 | .32 | |

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| n | - | | | 4 | | 0 | |

**Scalar Estimates (Group number 1 - Default model)**

**Maximum Likelihood Estimates**

**Regression Weights: (Group number 1 - Default model)**

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| SelfesteemToT | <--- | Totacceptdimension | -.062 | .054 | -1.158 | .247 | |
| TotalPrsocial7dimesn | <--- | Totacceptdimension | .709 | .105 | 6.738 | *** | |
| TotalPrsocial7dimesn | <--- | SelfesteemToT | .103 | .104 | .995 | .320 | |

**Standardized Regression Weights: (Group number 1 - Default model)**

| | | | Estimate |
|---|---|---|---|
| SelfesteemToT | <--- | Totacceptdimension | -.062 |
| TotalPrsocial7dimesn | <--- | Totacceptdimension | .339 |
| TotalPrsocial7dimesn | <--- | SelfesteemToT | .050 |

**Means: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totacceptdimension | 46.051 | .283 | 162.794 | *** | |

**Intercepts: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| SelfesteemToT | 32.063 | 2.498 | 12.838 | *** | |
| TotalPrsocial7dimesn | 46.348 | 5.895 | 7.862 | *** | |

**Variances: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totacceptdimension | 28.167 | 2.123 | 13.266 | *** | |
| e2 | 28.781 | 2.169 | 13.266 | *** | |
| e1 | 109.218 | 8.233 | 13.266 | *** | |

**Matrices (Group number 1 - Default model)**

**Total Effects (Group number 1 - Default model)**

| | Totacceptdimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | -.062 | .000 |
| TotalPrsocial7dimesn | .702 | .103 |

**Standardized Total Effects (Group number 1 - Default model)**

| | Totacceptdimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | -.062 | .000 |
| TotalPrsocial7dimesn | .335 | .050 |

**Direct Effects (Group number 1 - Default model)**

| | Totacceptdimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | -.062 | .000 |
| TotalPrsocial7dimesn | .709 | .103 |

**Standardized Direct Effects (Group number 1 - Default model)**

| | Totacceptdimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | -.062 | .000 |
| TotalPrsocial7dimesn | .339 | .050 |

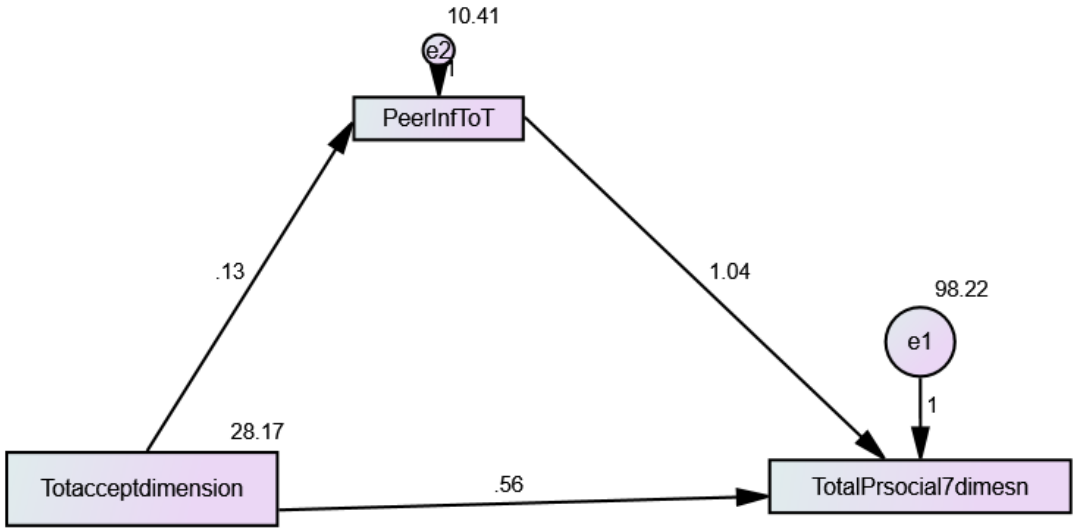
**Indirect Effects (Group number 1 - Default model)**

| | Totacceptdimension | SelfesteemToT |
|---|---|---|

| | Totacceptdimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | .000 | .000 |
| TotalPrsocial7dimesn | -.006 | .000 |

**Standardized Indirect Effects (Group number 1 - Default model)**

| | Totacceptdimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | .000 | .000 |
| TotalPrsocial7dimesn | -.003 | .000 |


10.41
e2
1
PeerInfToT
.13
1.04
98.22
e1
1
28.17
Totacceptdimension
.56
TotalPrsocial7dimesn

**Estimates (Group number 1 - Default model)**

**Scalar Estimates (Group number 1 - Default model)**

**Maximum Likelihood Estimates**

**Regression Weights: (Group number 1 - Default model)**

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| PeerInfToT | <--- | Totacceptdimension | .133 | .032 | 4.092 | *** | |
| TotalPrsocial7dimesn | <--- | Totacceptdimension | .564 | .102 | 5.536 | *** | |
| TotalPrsocial7dimesn | <--- | PeerInfToT | 1.042 | .164 | 6.364 | *** | |

**Standardized Regression Weights: (Group number 1 - Default model)**

| | | | Estimate |
|---|---|---|---|
| PeerInfToT | <--- | Totacceptdimension | .213 |
| TotalPrsocial7dimesn | <--- | Totacceptdimension | .269 |
| TotalPrsocial7dimesn | <--- | PeerInfToT | .310 |

**Variances: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totacceptdimension | 28.167 | 2.123 | 13.266 | *** | |
| e2 | 10.405 | .784 | 13.266 | *** | |
| e1 | 98.223 | 7.404 | 13.266 | *** | |

**Matrices (Group number 1 - Default model)**

**Total Effects (Group number 1 - Default model)**

| | Totacceptdimension | PeerInfToT |
|---|---|---|

| | Totacceptdimension | PeerInfToT |
|---|---|---|
| PeerInfToT | .133 | .000 |
| TotalPrsocial7dimesn | .702 | 1.042 |

**Standardized Total Effects (Group number 1 - Default model)**

| | Totacceptdimension | PeerInfToT |
|---|---|---|
| PeerInfToT | .213 | .000 |
| TotalPrsocial7dimesn | .335 | .310 |

**Direct Effects (Group number 1 - Default model)**

| | Totacceptdimension | PeerInfToT |
|---|---|---|
| PeerInfToT | .133 | .000 |
| TotalPrsocial7dimesn | .564 | 1.042 |

**Standardized Direct Effects (Group number 1 - Default model)**

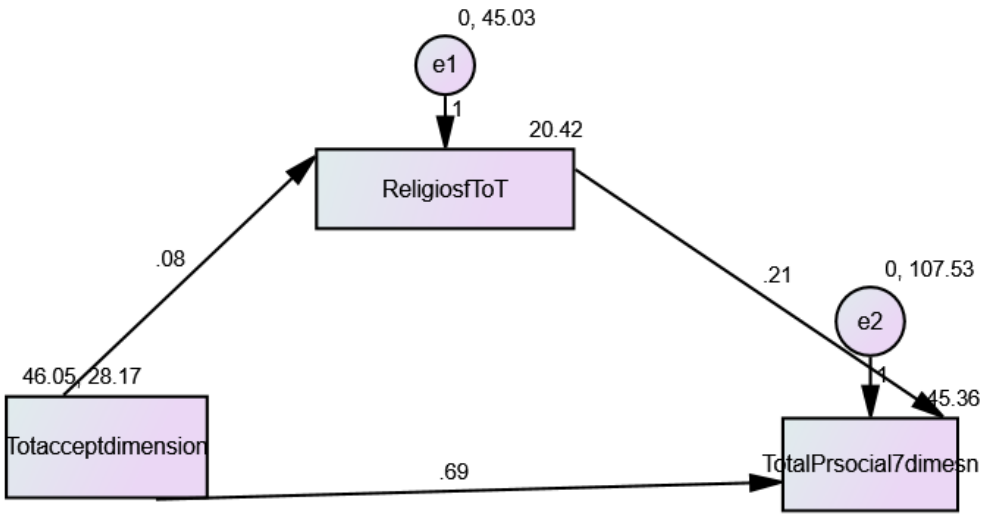
| | Totacceptdimension | PeerInfToT |
|---|---|---|
| PeerInfToT | .213 | .000 |
| TotalPrsocial7dimesn | .269 | .310 |

**Indirect Effects (Group number 1 - Default model)**

| | Totacceptdimension | PeerInfToT |
|---|---|---|
| PeerInfToT | .000 | .000 |
| TotalPrsocial7dimesn | .138 | .000 |

**Standardized Indirect Effects (Group number 1 - Default model)**

| | Totacceptdimension | PeerInfToT |
|---|---|---|
| PeerInfToT | .000 | .000 |
| TotalPrsocial7dimesn | .066 | .000 |


0, 45.03
e1
1
20.42
ReligiosfToT
.08
.21
0, 107.53
e2
1
46.05, 28.17
Totacceptdimension
45.36
.69
TotalPrsocial7dimesn

**Estimates (Group number 1 - Default model)**

**Scalar Estimates (Group number 1 - Default model)**

**Maximum Likelihood Estimates**

**Regression Weights: (Group number 1 - Default model)**

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| ReligiosfToT | <--- | Totacceptdimension | .077 | .067 | 1.144 | .253 | |
| TotalPrsocial7dimesn | <--- | Totacceptdimension | .686 | .104 | 6.574 | *** | |
| TotalPrsocial7dimesn | <--- | ReligiosfToT | .211 | .082 | 2.556 | .011 | |

**Standardized Regression Weights: (Group number 1 - Default model)**

| | | | Estimate |
|---|---|---|---|
| ReligiosfToT | <--- | Totacceptdimension | .061 |
| TotalPrsocial7dimesn | <--- | Totacceptdimension | .328 |
| TotalPrsocial7dimesn | <--- | ReligiosfToT | .127 |

**Means: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totacceptdimension | 46.051 | .283 | 162.794 | *** | |

**Intercepts: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| ReligiosfToT | 20.425 | 3.124 | 6.538 | *** | |
| TotalPrsocial7dimesn | 45.361 | 5.112 | 8.873 | *** | |

**Variances: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totacceptdimension | 28.167 | 2.123 | 13.266 | *** | |

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| e1 | 45.030 | 3.394 | 13.266 | *** | |
| e2 | 107.529 | 8.105 | 13.266 | *** | |

**Matrices (Group number 1 - Default model)**

**Total Effects (Group number 1 - Default model)**

| | Totacceptdimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | .077 | .000 |
| TotalPrsocial7dimesn | .702 | .211 |

**Standardized Total Effects (Group number 1 - Default model)**

| | Totacceptdimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | .061 | .000 |
| TotalPrsocial7dimesn | .335 | .127 |

**Direct Effects (Group number 1 - Default model)**

| | Totacceptdimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | .077 | .000 |
| TotalPrsocial7dimesn | .686 | .211 |

**Standardized Direct Effects (Group number 1 - Default model)**

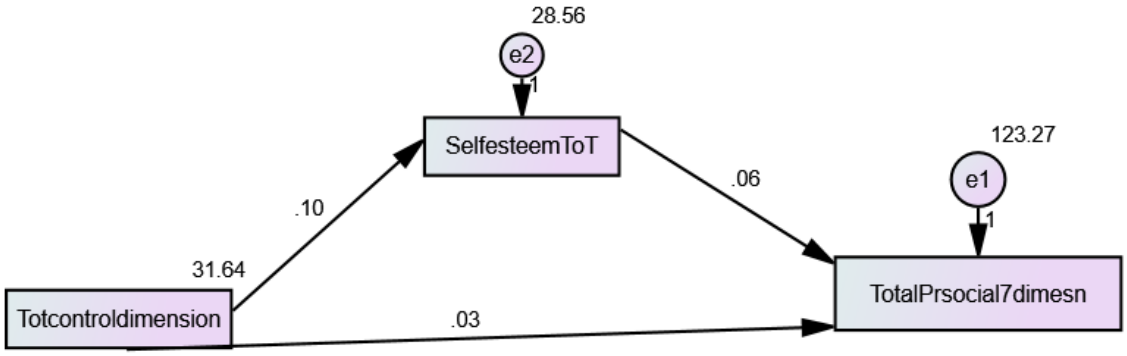
| | Totacceptdimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | .061 | .000 |
| TotalPrsocial7dimesn | .328 | .127 |

**Indirect Effects (Group number 1 - Default model)**

| | Totacceptdimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | .000 | .000 |
| TotalPrsocial7dimesn | .016 | .000 |

**Standardized Indirect Effects (Group number 1 - Default model)**

| | Totacceptdimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | .000 | .000 |
| TotalPrsocial7dimesn | .008 | .000 |


28.56
e2
1
SelfesteemToT
123.27
e1
1
.10
.06
31.64
Totcontroldimension
.03
TotalPrsocial7dimesn

**Estimates (Group number 1 - Default model)**

**Scalar Estimates (Group number 1 - Default model)**

**Maximum Likelihood Estimates**

**Regression Weights: (Group number 1 - Default model)**

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| SelfesteemToT | <--- | Totcontroldimension | .102 | .051 | 2.015 | .054 | |
| TotalPrsocial7dimesn | <--- | SelfesteemToT | .057 | .111 | .511 | .609 | |
| TotalPrsocial7dimesn | <--- | Totcontroldimension | .032 | .106 | .305 | .760 | |

**Standardized Regression Weights: (Group number 1 - Default model)**

| | | | Estimate |
|---|---|---|---|
| SelfesteemToT | <--- | Totcontroldimension | .107 |
| TotalPrsocial7dimesn | <--- | SelfesteemToT | .027 |
| TotalPrsocial7dimesn | <--- | Totcontroldimension | .016 |

**Variances: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totcontroldimension | 31.641 | 2.385 | 13.266 | *** | |
| e2 | 28.561 | 2.153 | 13.266 | *** | |
| e1 | 123.273 | 9.292 | 13.266 | *** | |

**Matrices (Group number 1 - Default model)**

**Total Effects (Group number 1 - Default model)**

| | Totcontroldimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | .102 | .000 |
| TotalPrsocial7dimesn | .038 | .057 |

**Standardized Total Effects (Group number 1 - Default model)**

| | Totcontroldimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | .107 | .000 |
| TotalPrsocial7dimesn | .019 | .027 |

**Direct Effects (Group number 1 - Default model)**

| | Totcontroldimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | .102 | .000 |
| TotalPrsocial7dimesn | .032 | .057 |

**Standardized Direct Effects (Group number 1 - Default model)**

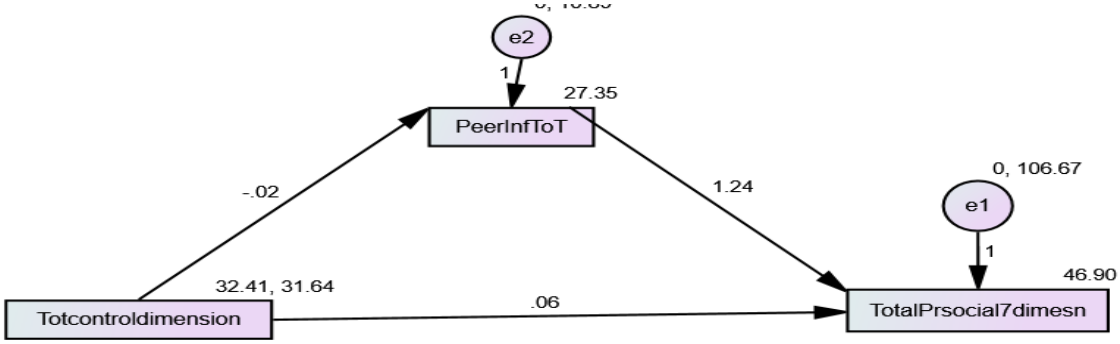
| | Totcontroldimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | .107 | .000 |
| TotalPrsocial7dimesn | .016 | .027 |

**Indirect Effects (Group number 1 - Default model)**

| | Totcontroldimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | .000 | .000 |
| TotalPrsocial7dimesn | .006 | .000 |

**Standardized Indirect Effects (Group number 1 - Default model)**

| | Totcontroldimension | SelfesteemToT |
|---|---|---|
| SelfesteemToT | .000 | .000 |
| TotalPrsocial7dimesn | .003 | .000 |


e2
1
27.35
PeerInfToT
-.02
1.24
0, 106.67
e1
1
46.90
32.41, 31.64
Totcontroldimension
.06
TotalPrsocial7dimesn

**Estimates (Group number 1 - Default model)**

**Scalar Estimates (Group number 1 - Default model)**

**Maximum Likelihood Estimates**

**Regression Weights: (Group number 1 - Default model)**

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| PeerInfToT | <--- | Totcontroldimension | -.016 | .031 | -.511 | .610 | |
| TotalPrsocial7dimesn | <--- | Totcontroldimension | .058 | .098 | .590 | .555 | |
| TotalPrsocial7dimesn | <--- | PeerInfToT | 1.238 | .167 | 7.423 | *** | |

**Standardized Regression Weights: (Group number 1 - Default model)**

| | | | Estimate |
|---|---|---|---|
| PeerInfToT | <--- | Totcontroldimension | -.027 |
| TotalPrsocial7dimesn | <--- | Totcontroldimension | .029 |
| TotalPrsocial7dimesn | <--- | PeerInfToT | .368 |

**Means: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totcontroldimension | 32.411 | .300 | 108.102 | *** | |

**Intercepts: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| PeerInfToT | 27.348 | 1.029 | 26.584 | *** | |
| TotalPrsocial7dimesn | 46.903 | 5.583 | 8.401 | *** | |

**Variances: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totcontroldimension | 31.641 | 2.385 | 13.266 | *** | |

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| e2 | 10.892 | .821 | 13.266 | *** | |
| e1 | 106.668 | 8.040 | 13.266 | *** | |

**Matrices (Group number 1 - Default model)**

**Total Effects (Group number 1 - Default model)**

| | Totcontroldimension | PeerInfToT |
|---|---|---|
| PeerInfToT | -.016 | .000 |
| TotalPrsocial7dimesn | .038 | 1.238 |

**Standardized Total Effects (Group number 1 - Default model)**

| | Totcontroldimension | PeerInfToT |
|---|---|---|
| PeerInfToT | -.027 | .000 |
| TotalPrsocial7dimesn | .019 | .368 |

**Direct Effects (Group number 1 - Default model)**

| | Totcontroldimension | PeerInfToT |
|---|---|---|
| PeerInfToT | -.016 | .000 |
| TotalPrsocial7dimesn | .058 | 1.238 |

**Standardized Direct Effects (Group number 1 - Default model)**

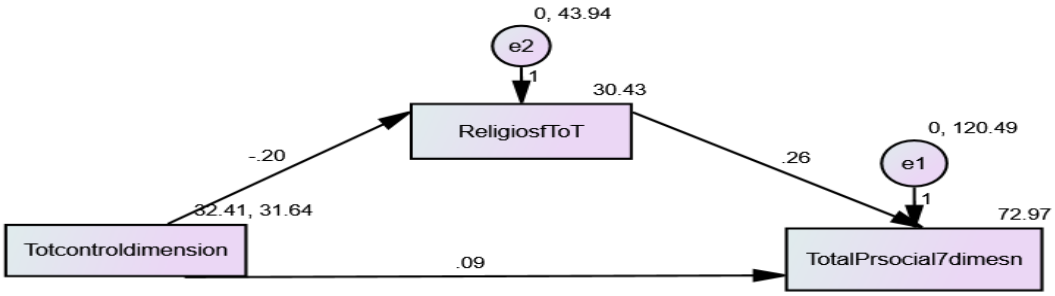
| | Totcontroldimension | PeerInfToT |
|---|---|---|
| PeerInfToT | -.027 | .000 |
| TotalPrsocial7dimesn | .029 | .368 |

**Indirect Effects (Group number 1 - Default model)**

| | Totcontroldimension | PeerInfToT |
|---|---|---|
| PeerInfToT | .000 | .000 |
| TotalPrsocial7dimesn | -.020 | .000 |

**Standardized Indirect Effects (Group number 1 - Default model)**

| | Totcontroldimension | PeerInfToT |
|---|---|---|
| PeerInfToT | .000 | .000 |
| TotalPrsocial7dimesn | -.010 | .000 |



**Estimates (Group number 1 - Default model)**

**Scalar Estimates (Group number 1 - Default model)**

**Maximum Likelihood Estimates**

**Regression Weights: (Group number 1 - Default model)**

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| ReligiosfToT | <--- | Totcontroldimension | -.199 | .063 | -3.172 | .320 | |
| TotalPrsocial7dimesn | <--- | Totcontroldimension | .089 | .105 | .844 | .399 | |
| TotalPrsocial7dimesn | <--- | ReligiosfToT | .256 | .088 | 2.900 | .241 | |

**Standardized Regression Weights: (Group number 1 - Default model)**

| | | | Estimate |
|---|---|---|---|
| ReligiosfToT | <--- | Totcontroldimension | -.167 |
| TotalPrsocial7dimesn | <--- | Totcontroldimension | .045 |
| TotalPrsocial7dimesn | <--- | ReligiosfToT | .155 |

**Means: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totcontroldimension | 32.411 | .300 | 108.102 | *** | |

**Intercepts: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| ReligiosfToT | 30.432 | 2.066 | 14.728 | *** | |
| TotalPrsocial7dimesn | 72.974 | 4.350 | 16.777 | *** | |

**Variances: (Group number 1 - Default model)**

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| Totcontroldimension | 31.641 | 2.385 | 13.266 | *** | |

| | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|
| e2 | 43.942 | 3.312 | 13.266 | *** | |
| e1 | 120.487 | 9.082 | 13.266 | *** | |

**Matrices (Group number 1 - Default model)**

**Total Effects (Group number 1 - Default model)**

| | Totcontroldimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | -.199 | .000 |
| TotalPrsocial7dimesn | .038 | .256 |

**Standardized Total Effects (Group number 1 - Default model)**

| | Totcontroldimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | -.167 | .000 |
| TotalPrsocial7dimesn | .019 | .155 |

**Direct Effects (Group number 1 - Default model)**

| | Totcontroldimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | -.199 | .000 |
| TotalPrsocial7dimesn | .089 | .256 |

**Standardized Direct Effects (Group number 1 - Default model)**

| | Totcontroldimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | -.167 | .000 |
| TotalPrsocial7dimesn | .045 | .155 |

**Indirect Effects (Group number 1 - Default model)**

| | Totcontroldimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | .000 | .000 |
| TotalPrsocial7dimesn | -.051 | .000 |

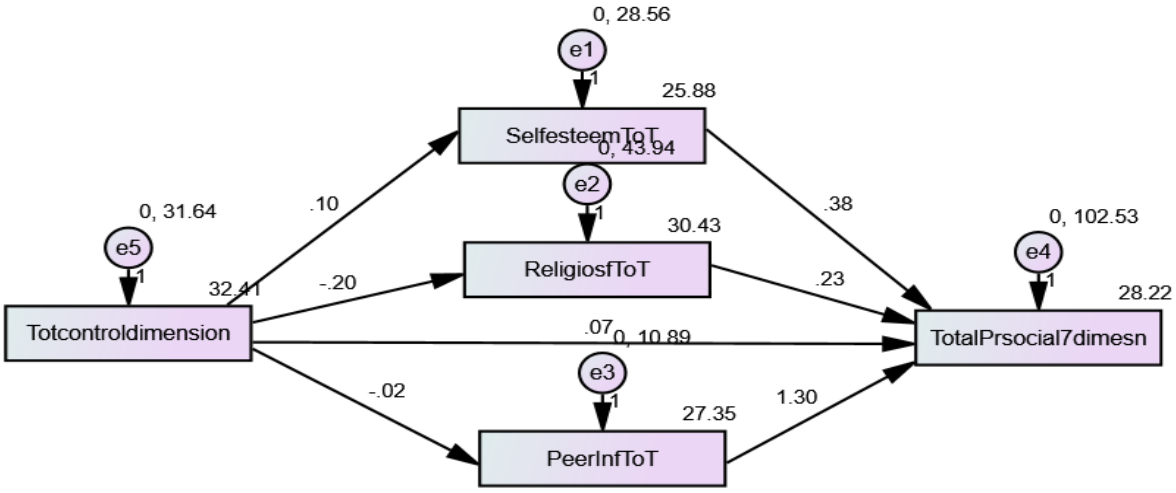
**Standardized Indirect Effects (Group number 1 - Default model)**

| | Totcontroldimension | ReligiosfToT |
|---|---|---|
| ReligiosfToT | .000 | .000 |
| TotalPrsocial7dimesn | -.026 | .000 |

3. Mediational Analysis- Parallel Analysis



| | | | Estimate | S.E. | C.R. | P-Value |
|---|---|---|---|---|---|---|
| ProsocialY | <--- | AcceptanceX | .561 | .100 | 5.602 | .001 |
| SelfesM | <--- | AcceptanceX | -.062 | .054 | -1.158 | .247 |
| ProsocialY | <--- | SelfesM | .380 | .096 | 3.939 | .001 |
| Religiosity | <--- | AcceptanceX | .077 | .067 | 1.144 | .253 |
| ProsocialY | <--- | Religiosity | .218 | .077 | 2.831 | .005 |
| PeerInflueM | <--- | AcceptanceX | .133 | .032 | 4.092 | .001 |
| ProsocialY | <--- | PeerInflueM | 1.117 | .160 | 6.963 | .001 |


0, 28.56
e1
1
25.88
SelfesteemToT
0, 43.94
e2
1
30.43
ReligiosfToT
0, 31.64
e5
1
32.41
Totcontroldimension
.10
-.20
.07
-.02
.38
.23
1.30
0, 102.53
e4
1
28.22
TotalPrsocial7dimesn
0, 10.89
e3
1
27.35
PeerInfToT

| | | | Estimate | S.E. | C.R. | P-Value |
|---|---|---|---|---|---|---|
| ProsocialY | <--- | ControlX | .067 | .098 | .687 | .492 |
| SelfesM | <--- | ControlX | .102 | .051 | 2.015 | .044 |
| ProsocialY | <--- | SelfesM | .377 | .101 | 3.728 | .001 |
| Religiosity | <--- | ControlX | -.199 | .063 | -3.172 | .002 |
| ProsocialY | <--- | Religiosity | .235 | .081 | 2.884 | .004 |
| PeerInflueM | <--- | ControlX | -.016 | .031 | -.511 | .610 |
| ProsocialY | <--- | PeerInflueM | 1.304 | .164 | 7.972 | .001 |

4. List of Publications from the Dissertation

Fura, M. L., & Hibiso, H. W. (2025). The impact of parenting styles and gender on prosocial tendencies among senior secondary students in Ethiopia. *Journal of Science and Inclusive Development*, *7*(2), 111–133. https://jsid.edu.et/index.php/jsid/article/view/285.

Fura, M. L., & Hibiso, H. W. (2024). Prosocial Behavior among Senior Secondary School Students: Validating the Prosocial Tendencies Measure. *International Journal of Education and Psychology in the Community*, *14*(1/2), 87-99.

Fura, D. L., & Wondimu, H. (2024). Examining the Relationship between Parenting Dimensions, Religiosity, Peer influence, Self-Esteem and Prosocial Behavior among Adolescents in High School of South West Shewa Zone. www.scope-journal.com, *14* (1) 282-292.