

A comparative study of the impact of parental involvement, peer relationships, and adult mentors
on the character development of adolescents

by

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B.S., Oklahoma State University, 2001

M.S., University of Florida, 2004

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

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School of Family Studies and Human Services

College of Human Ecology

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Abstract

Character development is core in building a moral society and in the development of an individual (Lickona, 1996; Park, 2009). Building character is a continual developmental process across the lifespan and is subject to a myriad of influences. Character is often defined as the respect an individual has for the rules of the community and cultural surroundings (Lerner, 2007; Lerner et al., 2006; Phelps et al., 2009; Roth & Brooks-Gunn, 2003; Snyder & Flay, 2012). Lickona's theory of character (1999) distinguishes character development as a continual work in progress, and the morality of an individual contributes "to the cognitive element of character" (2001, p. 246). Additionally, Bronfenbrenner's (1986; Bronfenbrenner & Morris, 1998) bioecological model more specifically identifies the potential relationships within the microsystem as well as between the elements of the microsystem and youth that affect character.

The purpose of this study was first, to examine the predictive nature of specific elements of the microsystem including peer relationships, parental involvement, and adult mentors on the development of character during adolescence and, secondly, to examine the change in variance explained by these specific elements on the development of character over time during the high school years. Data to address these questions were drawn from Lerner and colleagues' (2005) 4-H Study of Positive Youth Development.

Results of hierarchical multiple regression analyses reveal parental involvement to be significant in predicting youth's self-assessed character during their senior year, and each year between the freshman and senior years. The effects of peer relationships are significant only during the freshmen, sophomore, and senior years. Adult mentors reach positive significance only during the freshman year. When control variables are added, adult mentors are negatively significant during the junior and senior years.

Results suggest parent' involvement in predicting character is more enduring than peer relationships, which is consistent with previous research (Lickona, 2001; Park, 2004). With adult mentors reaching significance for only one year and with the other two years being negatively significant, the results of this study contradict what other research suggests as adult mentors' integral role in youth development, particularly with frequent engagement in extracurricular activities wherein youth interact with adult advisors. Additional research is needed to understand specifically the role of adult mentors in character development, as well as other developmental areas of high school adolescents.

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Approved by:

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Dedication

This dissertation is dedicated to the memory of my loving father, Delbert Maass, who taught me the importance of hard work, how to care for others, and how to have a little fun, and to my dear mother, Shirleen Maass, who has taught me how to be persistent and never give up, the importance of an education, and how to work with others. They both taught me all of this while growing up on the dairy farm. Despite being the only child to a dairy farming family, I would not trade any of my experiences on the farm for the world. I will be forever grateful for everything my father taught me, for everything my mother has taught me and continues to teach me, and for the experiences I have had because of them.

1. Introduction

As a 4-H Youth Development Extension Agent, a unique part of my job is the opportunity to observe 4-H members grow into mature and responsible young adults. One of my 4-H members, Clayton, has overcome challenges in his life. His father died when he was a young child. Clayton's mom does her best, yet there are never enough hours in the day to get everything done that she needs to complete. Clayton's paternal grandparents are actively involved in his life and with his 4-H career. While they live in southeast Kansas, they travel over three hours to the county fair every year in a central Kansas county to help Clayton and his mom keep up on what needs to be done regarding 4-H. As a high school adolescent, Clayton observes how busy his mom is and how she has a hard time keeping up with things. Therefore, Clayton takes it upon himself to ride his bike to the Extension Office and get things done for 4-H (i.e., pre-enter his fair entries, turn in his camp counselor application). He is not afraid to call or email his 4-H club leaders and Extension agents (adult mentors) to ask questions or ask them for help. Throughout his experiences with 4-H, school, community, and church, Clayton has continued to develop respect for his 4-H club, community, country, and world. Clayton has grown into being a responsible young man who, through these experiences, is uniquely shaping his own character.

Character development is core in building a moral society and in the development of an individual (Lickona, 1996; Park, 2009). Character is often defined as the respect an individual has for the rules of the community and cultural surroundings (Lerner, 2007; Lerner et al., 2006; Phelps et al., 2009; Roth & Brooks-Gunn, 2003; Snyder & Flay, 2012). One's moral development includes an individual's perception of what is right and wrong (Kohlberg, 1975). Character development unfolds throughout the lifespan. The situations (e.g., relationships,

resources, contexts) an individual experiences uniquely synthesize to affect the degree to which the youth may create productive and successful life into adulthood (Hendricks, 1998).

Berkowitz (2011) identified character as something internal that motivates and empowers an “individual to function as a competent moral agent, that is, to do ‘good’ in the world” (p. 153). Character can be viewed as an attitude and behavior that can be transferred from one realm to another (Weiss, Bolter, & Kipp, 2014).

Character forms from early age. According to Kohlberg (1975), young children are receptive to the concept of right from wrong. The tenets of right and wrong mean children learn to treat everyone fairly and with equal consideration. In early childhood, moral development may appear clear and distinct, but as a child gains age and cognitive maturity, the child’s analysis of response options become more nuanced and less defined (Kohlberg, 1975).

Values and morals are integral components of the character of an individual. What are the challenges to developing a strong, stable, moral, and compassionate character? What assures adolescent character development is going in the “right” direction? What sense of values do adolescents possess? What influences youth’s ethical decision-making skills? From whom are they learning these traits?

Historically, we hear what is wrong with the present generation. Every day, the news media report on the adverse actions of youth including school shootings, robberies, auto accidents, political battles, and the list continues. Some of these reports include adolescents engaging in violence and homicide. For example, two high school students in Colorado planned and executed a mass shooting in 1999 at their high school, Columbine High School (Hong, Cho, Allen-Meares, & Espelage, 2011). Multiple school shootings and other violent acts had occurred before and have happened since that time where youth were both the victim and the offender.

According to the Children's Defense Fund (2014), 4,028 youth are arrested annually in the United States, an arrest every 21 seconds. Lickona (1996) states that the problems in society are most visible through its youth. Lickona identified several trends that are troubling in youth. These include youth violence, an increase in peer cruelty, a decrease in work ethic, an increase in hate crimes, and a growing illiteracy in ethics.

However, we are beginning to see the active youth voice speaking out for gun control and against gun violence and on other issues and actions that define one's character (Alter, 2018). Each individual possesses morals and values; it is how individuals respond to the situations they experience that define their character. Lickona (1999) stated that developing personal character is every individual's life task; this includes understanding our own individual morals and values to react to everyday life experiences (Kohlberg, 1975).

Richard Lerner challenged researchers to change their way of thinking and their approach to youth and adolescence with his framework of positive youth development. Lerner et al. (2006) and other youth development researchers and professionals encourage society to move from a focus on criminalization and a deficit approach to that of positive youth development, which suggests that youth should be seen as resources to be developed. Positive youth development includes society's hopes and aspirations for youth to develop into productive, happy, and healthy members of society (Lerner et al., 2006; Roth, Brooks-Gunn, Murray, & Foster, 1998). The strength of a youth's character plays an integral role in the development of youth, positive or negative (Park, 2004; 2009). Positive youth development allows for a youth to thrive, or "manifest healthy, positive development changes," throughout adolescence (Geldhof, Bowers, & Lerner, 2013, p. 1). A person with mature character will have critical and thoughtful

reactions to situations that are appropriate for the time and place (Lerner & Callina, 2014).

“Good character is at the core of positive youth development” (Park, 2009, p. 43).

Adolescence is regarded as a traditional time when an individual’s biological, cognitive, social, and psychological characteristics mature from a childlike mindset towards an adult mindset (Lerner & Galambos, 1998). Adolescence can be divided into three stages: early adolescence (10-13 years old), middle adolescence (14-16 years old), and late adolescence (17-20 years old) (Lerner, 2007). Arnett (2000) identified that following adolescence is emerging adulthood, which he states begins roughly around 18 years-of-age and closes when the individual establishes himself or herself as financially and emotionally independent (Arnett, 2000). During adolescence, youth are expected to begin to care for themselves and to master skills, develop values, and establish their identity (Aviles & Helfrich, 2004). The adolescent becomes her or his “own person” or develops his or her own unique nature. During adolescence, youth develop a sense of individual identity and build competence in various skills, which include social interaction and relationships. At this stage of development, youth look toward the future, to determine what career path they may take (Erikson, 1968). Adolescence is a time when culture that surrounds youth influences them and their decisions (Arnett, 2000; Erikson, 1963). Ideally, adolescence is a time when youth begin their pathway to become productive citizens of a community. However, Bronfenbrenner (1986; Bronfenbrenner, & Morris, 1998) reminds us that the context in which adolescents live influences their effect on the community. Positive character development is critical to success as an adult to adapt to society’s norms and expectations.

Aoki, Romeo, and Smith (2017) discuss the plasticity of development in adolescence; it is a time in life when youth begin to mature from basic to more complex skills and tasks. During

this time, youth are experiencing differential levels of peer pressure, stress of earning strong grades, deciding in which social circles to be a part of, exploring possible career paths including colleges and majors, and experimenting with a broader range of life-styles—possibly including drugs and alcohol. Youth want to fit in, but they also want to stand out and be recognized for their individuality.

Because adolescence is identified as a transformative time, various youth development programs, or out-of-school time youth development programs, may support youth by developing skills and traits that effect character. Examples of such programs are Boy Scouts, Girl Scouts, Boys and Girls Club, and 4-H. Each organization has its own strengths and contributes to development of youth character in various ways (Kansas 4-H, 2016). Leaders of these organizations often serve as close mentors for the members.

According to Park (2004), character is composed of positive traits: “individual differences that exist in degrees and are shown in a range of thoughts, feelings, and actions” (p. 47). Character can be taught through education, parenting, and interaction with society. Parents can play a crucial role in the development of a child’s character, influencing cognitive and emotional behavior (Lickona, 2001) and prosocial behavior (Park, 2004).

There are numerous methods used to mentor youth: face-to-face, online, one-on-one, groups, peers, and through community, school, and religious organizations (Rhodes & Spencer, 2010). Adult mentors provide listening support, emotional support, and appreciation of tasks completed, plus they provide challenging tasks and give help or personal assistance (Gomez & Mei-Mei Ang, 2007). These mentoring relationships usually occur within a social network where the youth is already a member (DuBois & Silverthorn, 2005b). These committed

relationships, which occur over an extended period, are meaningful, caring, sincere, and thoughtful (Lerner, 2007). The relationships are not cursory or considered short-term.

Mentoring relationships can be an opportunity to focus on critical skills and help youth nurture “a sense of purpose” (Rhodes & Spencer, 2010, p. 150). Mentor relationships play a vital role in settings that are significant to youth (DuBois & Silverthorn, 2005b). Youth who enter mentoring programs come with a history; some have experienced supportive relationships while others have experienced negative, abusive, or neglected relationships (Rhodes & Spencer, 2010). Berkowitz (2011) found if a positive relationship develops between an adolescent and a mentor, it leads to the adolescent modeling the character strengths of the mentor. “Relatives, friends, teachers, and community-based mentors all contribute to educational success” (Erickson, McDonald, & Elder, Jr., 2009, p. 345). Mentoring can be a resource for youth, both a compensatory and complementary resource (Erickson et al., 2009).

“Character doesn’t function in a vacuum; it functions in a social environment” (Lickona, 2001, p. 249). To understand the psychology of an individual’s character, one must look at the impact of the environment. Kohlberg and Hersh (1977) define moral situations as cognitive by the judging of an individual on his or her social interactions. Character is not a “fixed feature of a person,” but a process that is vigorous (Sokol, Hammond, & Berkowitz, 2010, p. 584) and is a continual work in progress (Lickona, 1999).

The purpose of this study is to explore the predictive nature of elements of context (i.e., peer relationships, parental involvement, adult mentors) on the development of character during adolescence. Secondly, it is to examine the change in variance explained by these contextual elements over time on the development of character during late adolescence, that is between the freshman and senior years in high school.

2. Literature Review

Character

What is character? How is character developed? According to Lickona (1999), character is a culmination of virtues; as our character strengthens, we increase the number of virtues we possess. Virtues are positive qualities that individuals possess such as self-discipline, wisdom, kindness, and honesty (Lickona, 1999; Park, 2004). Lickona (1999) suggests that developing personal character is every individual's life task. Moral development for a child may appear clear and distinct, but with age and cognitive maturity, it becomes more nuanced and less defined (Kohlberg, 1975). Values and morals, which can be positive or negative, are integral components of the character of an individual.

Character is often defined as the respect an individual possesses for the rules of the community and cultural surroundings (Lerner, 2007; Lerner et al., 2006; Phelps et al., 2009; Roth & Brooks-Gunn, 2003; Snyder & Flay, 2012) including an individual's perception of what is acceptable and appropriate. Hendricks (1998) defines character as "a person's moral strength; integrity, fortitude, reputation; a person's usual qualities or traits; adherence to a code of values or ethical principles" (p. 33). Park (2009) states that if an individual does not have good character, they may have no desire to do what is right. Berkowitz (2011) explains character as something internal that motivates and empowers an "individual to function as a competent moral agent, that is, to do 'good' in the world" (p. 153). Lerner and Callina (2014) define character as "a specific set of mutually beneficial relations, that vary across ontogenetic time and contextual location (place), between person and context and, in particular, between the individual and other individuals that comprise his/her context" (p. 323). The character of an individual incorporates the features of being truthful, responsible, having a good set of values, and an unwavering

loyalty to one's principles (Moore & Halle, 2001). Character may be viewed as an attitude and behavior that can be transferred from one realm of life to another (Weiss, Bolter, & Kipp, 2014). Character is not a "fixed feature of a person," but a process that is vigorous (Sokol, Hammond, & Berkowitz, 2010, p. 584) and is a continual work in progress (Lickona, 1999). These definitions of character have several commonalities including individual morals and values, the context of an individual's surroundings, and the inner knowledge of what is acceptable in various situations. While Lickona (1999) distinguishes the development of character as a continual work in progress, he also states the morality of an individual contributes "to the cognitive element of character" (2001, p. 246).

Elements of Character

Lickona's Components of Character. Lickona (1999; 2001) identifies three components of character of an individual: *moral knowing*, *moral feeling*, and *moral action* (see Figure 2.1). Understanding and craving what is good and acting with the habits of the mind, heart, and behavior is the way individuals exemplify character.

Figure 2.1 Lickona's Components of Character

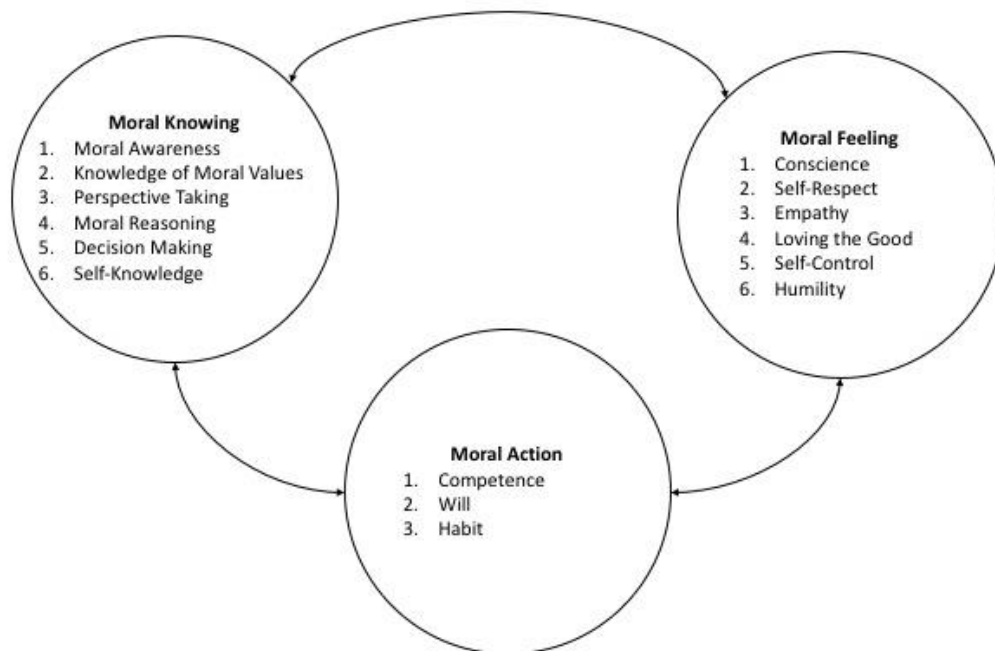


Figure 2.1. Illustration of the components of good character by T. Lickona, 2001, *Reclaiming Children and Youth*, 9(4), p 241.

Lickona (1999; 2001) states that moral knowing encompasses six areas: 1) *moral awareness*, 2) *knowledge of moral values*, 3) *perspective taking*, 4) *moral reasoning*, 5) *decision making*, and 6) *self-knowledge*. It is crucial that youth practice moral awareness because it is the basis of reaching moral judgment. Youth must first assess a situation, determine if it requires a moral judgment, and then carefully consider the right course of action.

An individual's knowledge of moral values requires knowing the specific concepts associated with moral values and delineates the following concepts as crucial to moral values: respect, responsibility toward others, tolerance, fairness, self-discipline, honesty, compassion, courtesy, and courage (Lickona, 2001). Values an individual possesses for the greater good are based on any situation they may experience.

Perspective taking is an individual's capability to see a situation that someone else is in and view it as they do, being able to conceive how the individual may react, think, and feel.

Following perspective taking is moral reasoning (Lickona, 2001). Most relate the Golden Rule to this area; it helps individuals create their hierarchy of values and select what is right in any given situation. The Golden Rule is “do unto others as you would have them do unto you.”

Decision making is the fifth area of moral knowing (Lickona, 2001). Some people want more facts or time before making a decision, while others are more reflective thinkers. The ability to decide in a thoughtful, systematic manner is an essential aspect of moral knowing.

The last area for moral knowing is self-knowledge. Lickona (2001) indicates that self-knowledge is crucial for the development of character and is one of the harder aspects of moral knowledge to achieve. Self-knowledge is the ability to know strengths and weaknesses of our character and how we can counterbalance our shortcomings. Collectively, each of these six areas contribute to the cognitive component of character.

The second component of character Lickona (1999; 2001) identifies is moral feeling. This is the emotional side of character. Lickona (2001) states “simply knowing what is right is no guarantee of right conduct. People can be very smart about matters of right and wrong and still choose the wrong” (p. 245). *Conscience, self-respect, empathy, loving the good, self-control, and humility* are all characteristics of moral feeling that deserve attention. Conscience has a cognitive side and an emotional side. Individuals know what the right thing to do is, but may not have the commitment to act upon it. Self-respect “is a proper regard for the worth and dignity of one’s person” (Lickona, p. 246). Helping youth develop a positive self-worth is a challenge, yet a quality of character that cannot be ignored. Empathy is the ability to take the perspective of another person; it allows us to sense how another person is feeling. Loving the good is the ability to honestly and sincerely be drawn to doing good, which is the highest form of character according to Lickona (2001). Gratification comes from supporting others which

motivates individuals to serve and support others. Self-control is a characteristic essential to keeping emotions from overpowering an individual's ability to reason. It is challenging for a person to behave ethically at all times when repeatedly presented with temptation; therefore, self-control assists a person in making ethical decisions even when he or she is tempted to do otherwise. Parents typically assist youth in developing their capacities for self-control (Berkowitz & Grych, 1998). Damon (1988) stated that children not only need to become accustomed to their own emotional responses but also their reaction to that of others. Finally, humility includes the ability to be truthful and to be responsible for our actions. Lickona (2001) states that "humility is the best safeguard against doing evil" (p. 248).

The final component of character Lickona (1999; 2001) identifies is moral action, which brings knowing and feeling to maturity. The moral action includes *competence*, *will*, and *habit*. Moral competence is when an individual can translate moral feeling and judgment into effective action. Will is what gives us the energy and ability to do what we feel and know is right. Will is what is necessary to keep emotions in check. Will gives us what we need to do when we need to do what is required of us. A habit is central to the moral action, and it is a configuration that is consistent with acting, thinking, and feeling. Habits are considered second nature; thinking is not required before acting (Lickona, 2001). The synthesis of moral knowing, acting, and feeling result in an individual's character.

Hilliard et al. (2014) examine three types of character: civic, moral, and performance. They found during adolescence (defined as grades 6 through 10) that moral character of youth is stable, while there is an increase in civic character by grade 10. The researchers indicate that adolescents, in general, see themselves understanding the consequences of their actions throughout middle adolescence, with a "slight increase in behaviors reflective of active

citizenship” (Hilliard et al., p. 998). The findings also indicate that each type of character (civic, moral, and performance) correlates with bullying status. Those who identify themselves as bullies report lower levels of the three types of character when compared to those who did not identify themselves as bullies. Bully-victims (those who reported being bullies and being bullied by others) report low levels of civic and moral character when compared to those who were not bullies. However, bullies report an increase in performance character over time. Hillard et al. (2014) did not find “differences in initial levels or changes in moral, civic, or performance character between victims and youth not involved in bullying” (p. 998).

Moral Development as a Component of Character. While Lickona’s elements of character focus on moral knowing, moral feeling, and moral action, Kohlberg (1975) takes a cognitive developmental approach to moral development. As a child, moral development may appear clear and distinct, but with age and cognitive maturity, the analysis of option suggestions becomes more nuanced and less defined (Kohlberg, 1975). Values and morals are integral components of the character of an individual. Lickona (1999) states that developing personal character is every individual’s life task; this includes understanding our own individual morals and values to react to everyday life experiences (Kohlberg, 1975). Kohlberg (1975) studied moral development with a cognitive development approach. Kohlberg used Jean Piaget’s cognitive development research in his theory of moral development.

Piaget (1964) proposes that an individual’s cognitive development is spontaneous and associated with a process called *embryogenesis*. Embryogenesis includes body, nervous system, and mental development that ends with the onset of adulthood. Piaget contends that the development of an individual is not only a process but a process that is involved with the complete structures of knowledge. Piaget suggests development precedes learning.

Jean Piaget's (1964; 1972) theory of cognitive development includes four stages: *sensorimotor*, *preoperational*, *concrete operational*, and *formal operational*. The sensorimotor and preoperational stages occur before the age of 8 years old. Beginning at age 8, children begin to gradually transition to the concrete operational stage. When a child begins to carry out responsibilities and think logically, the child is experiencing the concrete operational stage. Piaget (1964; 1972) suggests that this stage is the turning point for youth in their development of conceptual tools. As an adolescent continues to develop and mature, the adolescent enters the formal operational stage. This is when adolescents begin to think more logically and abstractly. Thinking hypothetically and systematically through problems are indicators that the individual has moved to the formal operational stage.

Piaget (1964) proposes four main factors that differentiate development from one stage to another: *biological maturation*, *experience*, *social transmission*, and *equilibration or self-regulation*. To understand the psychology of an individual's character, one must look at the impact of the environment. Piaget (1964) contends that the development of an individual is not only a process but a process that is involved with the complete structures of knowledge. The development of an individual's moral reasoning is based on the interaction with his or her environment (Kohlberg & Hersh, 1977). Lickona examines the characterization of character, but he does not look at the change over time nor what could be predictive of character. Therefore, to examine predictive elements and change, my research will examine the essential elements and change by drawing from two theories and one framework: life-span human development theory by Baltes, Bioecological model by Bronfenbrenner, and the framework of Positive Youth Development (PYD) as proposed by Lerner.

Life-Span Theory of Human Development

This research study draws upon the definition of development proposed by Baltes et al. (1998) which includes the three factors which are focused on the development of the individual: *commonalities, inter-individual developmental differences, and the intra-individual development related to plasticity*. Relative plasticity is a developmental process (Lerner, 1998) and refers to the flexibility within an individual as it relates to behavior and development (Baltes, 1987). Plasticity is a component in the lifespan development theory and varies across the lifespan (Baltes, 1987, 1997; Baltes et al., 1998; Lerner et al., 2003). Emotional and cognitive development are highly plastic during adolescence, which potentially supports the continued development of character.

Bioecological Model

Bronfenbrenner (1986) proposed a paradigm initially known as the ecological theoretical framework, currently identified as the bioecological model (Bronfenbrenner, 1986; Bronfenbrenner & Morris, 1998). This model analyzes the context or environment surrounding the individual and encompasses four constructs and the relationships between them: process, person, context (environmental), and time (Bronfenbrenner, 1986; Bronfenbrenner & Morris, 1998). The interaction between an individual and his or her environment is referred to as the proximal process (Bronfenbrenner, 1986; Bronfenbrenner & Morris, 1998). The development that occurs during and from the proximal process varies over time.

Bronfenbrenner and Morris (1998) propose three different systems including the *micro*, *meso*, and *macro systems*. The microsystem for an individual includes those people who are in the individual's life over an extended time period consistently and who have direct interaction with the individual. For adolescents, this potentially includes parents, friends, mentors, coaches,

and teachers. The mesosystem represents the associations the individual has with the people who make up their microsystem or the interaction between two or more elements in the microsystems that influence the youth directly (Bronfenbrenner, 1986). The macrosystem is defined as the child rearing and situations the individual experiences that affect their development regarding their belief systems (Bronfenbrenner & Morris, 1998).

Two additional systems, the *exo* and *chrono* systems, complete the bioecological model (Bronfenbrenner, 1986). The exosystem refers to the external environments that may impact an individual, yet the individual may or may not participate directly (Bronfenbrenner, 1986). An example for youth is a parent's place of work. While a parent's workplace may not be someplace a child enters on a regular basis, the effects of the workplace on a parent may be brought home and affect the youth.

Change over time, as it relates to human development, is a factor Bronfenbrenner (1986; Bronfenbrenner & Morris, 1998) refers to as the chronosystem. This change over time is not just referring to change within the individual but also with changes in the individual's environment or context over the lifespan. Bronfenbrenner (1986) refers to the simplest form of this system focusing on the transition of life.

An individual's character can be influenced by a wide array of contextual factors: culture, politics, values, and religion (Park, 2004). However, some factors of character may be seen as universal or ubiquitous. The interaction an individual has with the culture, community he or she is part of, and family can assist with determining the type of person he or she will become (Narvaez & Bock, 2014).

Positive Youth Development Framework

Richard Lerner (2007) introduced the concept of the PYD framework in the 1990s with the intent of describing, predicting, and explaining the relationships between the uniqueness of youth including interests, abilities, assets, and character and youth's potential for the future (Damon, 2004; Lerner, Almerigi, Theokas, & Lerner, 2005; Snyder & Flay, 2012). This framework shifted the way researchers think about character from a deficit approach to recognizing the positive resources or assets already present in youth. PYD examines the relationship between adolescent development and the circumstances in which adolescents thrive and build character, particularly seeking to identify, characterize, and understand these relationships (Lerner, 2007; Lerner et al., 2005). PYD recognizes that all youth face myriad problems and levels of risk throughout adolescence (Benson, 2007; Damon, 2004; Snyder & Flay, 2012). The critical components of this theoretical concept include a focus on the assets (or strengths) of the youth and the potential for the individual to mature positively, the importance of the types and levels of support that exist within the youth's environment, and the two-way interaction between the various environments and the youth (Benson, 2007; Damon, 2004; Snyder & Flay, 2012). "Youth are viewed as resources to be developed" (Lerner et al., 2005, p. 20). Relative plasticity is a developmental process (Lerner, 1998) and refers to the flexibility within an individual as it relates to behavior and development (Baltes, 1987). Plasticity varies across the lifespan (Baltes, 1987, 1997; Baltes, Lindenberger, & Studinger, 1998; Lerner, Dowling, & Anderson, 2003). Applied developmental scientists have put forth an effort, which is directed at the thriving process and nurturing youth towards a "commitment to make healthy, integrated contributions to self, family, community and civil society" (Lerner et al., 2003, p. 174).

PYD includes society's hopes and aspirations for youth to develop into productive, happy, and healthy members of society (Lerner et al., 2006; Roth et al., 1998). This framework proposes and the evidence strongly suggests adolescents possess the potential to develop successfully, healthy, and positively (Lerner et al., 2003). Ultimately, having a positive youth development experience is the outcome we want for all youth (Roth et al., 1998).

Several researchers examine character using the 4-H Study of PYD. Theokas and Lerner (2006) report that various dimensions of the youth's daily context including the neighborhood, family, and school "had the most comprehensive impact on the developmental outcomes" from wave one (fifth graders) of the 4-H Study of PYD (p. 71).

The 5 Cs of Positive Youth Development. In what circumstances do youth thrive? According to Lerner et al., (2003), the primary proposition of the framework of PYD is that all adolescents possess the potential to develop in a healthy manner, successfully, positively. There are five constructs, known as the five Cs, which comprise the PYD perspective: *competence, confidence, connection, character, and caring* (Lerner, 2007; Lerner et al., 2003; Lerner, Fisher, & Weinberg, 2000; Lerner, Lerner, & Benson, 2011; Lerner et al., 2005; Lerner et al., 2006). A sixth C, *contribution*, materializes when all five constructs exist (Larson, 2000; Lerner, 2007; Lerner et al., 2005; Lerner et al., 2006). When youth not only believe but act on their beliefs to contribute to self and their situations, they will promote and reflect on their positive personal development (Lerner et al., 2006). This action leads to youth advancing the well-being of the world around them. The definitions of the Cs can be found in Table 2.1.

Table 2.1

Definitions of the C's in the Framework of Positive Youth Development

Competence	The certainty of an individual's performance in the academic, cogitative, social, and vocational areas. This includes decision making, grades in school, conflict resolution, work habits, and test scores.
Confidence	An individual's awareness of his/her own self-worth and capabilities.
Connection	The positive bonds individual's have with others and their social environments. The interaction between these entities (i.e., community, family, peers, school) are bi-directional.
Character	The appreciation an individual has for the rules of the community and cultural surroundings. This includes an individual's idea of what is right and wrong.
Caring	The ability of an individual to display compassion for others.
Contribution *	The size and scope of an individual ability to effectively participate and foster the needs of oneself, by not being a big burden on others, and by giving back to their communities, to their families at home, and in citizenship.

* Lerner, 2007; Lerner et al., 2006; Phelps et al., 2009; Roth & Brooks-Gunn, 2003; Snyder & Flay, 2012

Lerner (2007; Lerner et al., 2006) identifies the “Big Three” ways to grow the five constructs, which are part of Lerner’s theory of PYD. The Big Three are “have sustained, positive interactions with adults,” “participate in structured activities that enable them to develop valued life skills,” and “become leaders of valued community service activities” (Lerner, 2007, p. 39). The interaction an individual experiences in his or her community is an important characteristic in the framework of PYD (Lerner, 2007; Lerner et al., 2006; Lerner et al., 2003).

40 Developmental Assets

The PYD concept includes 40 Development Assets as identified by the Search Institute (2014). Researchers at the Search Institute (2014) define the 40 Developmental Assets framework as identifying “a set of skills, experiences, relationships, and behaviors that enable young people to develop into successful and contributing adults” (para. 1). Researchers divide the 40 Development Assets into two main categories with eight sub-categories. The *external assets category* encompasses the subcategories of *support, empowerment, boundaries, and expectations*, and *constructive use of time*. The *internal assets* include the following subcategories: *commitment to learning, positive values, social competencies*, and *positive identity* (Benson, Scales, Hamilton, & Sesma, Jr., 2006; Search Institute, 2007).

Lerner (2007) references the 40 Developmental Assets from the Search Institute, additionally, Damon (2004) and Roth et al. (1998) note the contribution made by the 40 Development Assets framework to the PYD perspective. Lerner (2007) identifies that when youth can use certain resources available to them in their environments, healthy growth occurs. Lerner states, “these resources, what I call developmental assets, nurture all the Cs” (p. 37). These developmental concepts are positive factors that allow youth to grow in a healthy manner. Scales, Benson, Leffert, and Blyth (2000) discovered youth are considerably more likely to be successful in school, maintain physical health, overcome adversity, and delay gratification the higher their levels of developmental assets than youth with lower levels of developmental assets. Additionally, the researchers found youth are more apt to report thriving when they are exposed to a high number of positive developmental factors.

A study by Bowers and colleagues (2011) examines developmental trajectories of intentional self-regulation and parenting among youth (grades 5 to 11). They found the group with the highest scores on the positive development indicators were described having high levels

of parental involvement (i.e., maternal warmth, parental school involvement, and parental monitoring). In a follow-up study, Bowers et al. (2014) analyze data from the 4-H Study of PYD (Lerner et al., 2005) on the importance of non-parental adults and PYD across middle to late adolescence (grades nine through 12), controlling for the parenting styles. Students at grade nine who experienced an authoritative parenting (parents who are “high demanding, high responsive, and low intrusive”) (Baumrind, 2005, p. 62) profile are found to have a significantly higher score on the mean of all five Cs of PYD (which includes character) than the other parenting styles (authoritarian, highly involved, integrative, and uninvolved). Youth who perceive their parents as being highly involved in their lives at grade 10 have significantly higher scores on the mean of all five Cs of PYD, including character than all other parenting profiles (Bowers et al., 2012). Youth at grade 11 show the same results; however, competence is not found to be significant. Grade 12 youth whose parents were both highly involved and of the permissive parenting style have the highest scores on character, confidence, competence, and connection in general. Additionally, a study by Bowers et al. (2012) finds that youth who have the personal quality of higher intentional self-regulation are found to have self-reported positive character changes (i.e., integrity, moral compass, and socially conscious).

Character, a continual work in progress (Lickona, 1999), is developed over time, throughout life, through actions, not just talking and thinking (Park, 2004). Park states that having an open mind and being fair are characteristics of good character, which require a level of mature cognition. Not only does character develop over time, but it is plastic or malleable. Therefore, character changes over the course of the lifespan. This research study focuses on the predictive nature of parents, peers, and adult mentors over time in context with one another.

Relationships that youth develop through the microsystem are seen by Lerner (2007) as one of the Big Three in the framework of PYD as having a positive and sustained adult interactions (Lerner, 2007; Lerner et al., 2006). Relationships that occur over an extended period of time which contain meaning, are sincere, thoughtful, and caring are committed relationships (Lerner, 2007). They are often long-term relationships.

Character Education

In addition to parents and others in the microsystem, what else influences adolescents' character development? *Character education* is another avenue.

“Becoming personally committed to moral values is a developmental process, and helping students through that process is one of the most important challenges we face as moral educators” (Lickona, 2001, p. 246). Character education is a term that has emerged in schools and communities (Lickona, 1996), and its purpose is to assist in creating a productive individual of society (Smith, 2013). Programming areas for character education focus on citizenship education, moral values, and ethics (Lickona, 1996). Character education is a well thought out effort to foster virtue (Lickona, 1999). The three goals of character education are good people, good schools, and a good society (Lickona, 1996; 1999). Lickona's conclusion is that if we want to create supportive learning environments in school, as a moral and right society, we must implement character education in our schools and communities.

Character Education in School Curriculum. Smith (2013) states that character education has been part of the public school system in the United States since the beginning of public education, primarily for kindergarten through eighth grades. Initially, character education focused primarily on moral values. The character education in the 19th century blended the two goals of religiosity and moral value “promoting such ‘virtues’ as love of God, love of country,

honesty, duty to parents, thrift, and hard work” (Smith, p. 351). Character education emphasized the norms of society, which was not always reflected in the cultures of the immigrants that came to the United States. Despite the rise and fall of the emphasis on character education throughout the years, educators still strived for the programs to stay in the schools. In the 1950s, the emphasis was the difference between “right” and “wrong” with infusing patriotism; the 1960s shifted to Kohlberg’s theories of moral development looking at a more child-centered approach (Smith, 2013). This shift increased the emphasis on the rights of the individual and questioned the rights of those in authoritative power to identify the values. From the 1960s to 1970s, character education moved to a values clarification style where students were encouraged to make informed decisions themselves on what they believed to be morally correct. This encouraged a self-awareness and critical thinking within the youth to assist them in determining their values. In the 1980s, “school-based character education began focusing on identifying and directly promoting ethical values and virtues thought to be widely shared and even ‘universal’” (p. 352). Various aspects of character education emerged including character word of the month, performance character, social-emotional learning, and curriculum such as The Second Step Program (Smith, 2013).

Research on character development to date has focused on educational intervention within the public school system and youth group activities. Snyder and colleagues (2013) discovered fifth-grade students who attended schools with positive action intervention (a school-based program which focuses on developing positive behaviors and character development) reported less risky and violent behaviors and more positive behaviors than the students in the control group. Overall, researchers found that boys were more apt to participate in negative behaviors than girls. Additional findings revealed that the positive action intervention students

“reported significantly better Academic Behaviors (ABs) related to student involvement in school and motivation to learn” (p. 57). Ji et al. (2005) found youth in grades six through 12, who were in a positive action intervention program, were connected with either a higher-order behavior factor or a higher-order emotion factor as it relates to the nine aspects of character (decision making, good friend, honestly, learning, physical health, responsibility, self-concept, self-control, and self-improvement).

A challenge that character education faces is “effectively helping students actually build skills and embrace positive values” (Smith, 2013, p. 354). When students can apply the skills they learn in character education lessons to real-life situations, the skills are reinforced and the transfer-of-learning takes place. For example, such application is a strength of Second Step, a program of the Committee for Children, a global nonprofit organization dedicated to fostering the safety and well-being of children through social-emotional learning and development (Smith, 2013).

“While funding from the federal government for these programs has declined, educators still feel that teaching students to become responsible, ethical, contributing members of society is part of their mission, and so character education remains widespread in U.S. Schools” (Smith, p. 355). Partnerships outside of the federal government have been established to provide resources for educators to teach character education to students in their classrooms and extracurricular activities. The Josephson Institute is another of those private partners. The Josephson Institute (2015) has focused on character education for a number of years using the six pillars of character framework. The six pillars are trustworthiness, respect, responsibility, fairness, caring, and citizenship. This program has been used in schools and in youth development programs to help

develop character in youth. Since 1995, this program has been endorsed and officially recognized annually by each president of the United States (Josephson Institute, 2015).

Character Development in Organized Social Groups. In addition to character education in schools, adolescents have the opportunity to develop character through social groups. Researchers have examined character development within youth social groups or youth development organizations.

Wang, Ferris, Hershberg, and Lerner (2015) found that character traits of cheerfulness, kindness, helpfulness, hopeful future expectations, religious reverence, obedience, trustworthiness, and thriftiness were all associated with character development in the programming of the Boy Scouts of America. Research by Wang et al. (2015) found youth who participate in Boy Scouts exhibit positive developmental changes in some of these character attributes that the Boy Scouts organization emphasizes. Prior studies show that traits of character such as moral virtues, civic and future-orientation, and performance are a better fit for development with older adolescents and adults than with children and early adolescence.

A 4-H study conducted in six western states (Colorado, Idaho, Montana, Nevada, New Mexico, and Utah) found that 4-H members in four of the states self-reported having a higher level of self-confidence, character, and empowerment than those who were not in 4-H (SeEVERS, Hodnett, & Van Leeuwen, 2011). Additionally, youth enrolled in 4-H responded more positively to character, empowerment, and character statements, than those who were not enrolled in 4-H. Another study conducted by Deaver and Probert (2016) found that 98% of 4-H alumni from Missouri who were members of a dairy judging team agreed and strongly agreed that character was a trait that 4-H had instilled in them. Maass, Wilken, Jordan, Culen, and Place (2006) found 4-H alumni from Oklahoma contributed the 4-H program with assisting them with their character

development (mean = 4.22 on a 5 point Likert scale). Additionally, they found that other youth development organizations had also contributed to the development of character (mean = 4.42 on a 5 point Likert scale).

This concludes the examination of the outcome variable of character. Next is the examination of potentially predictive variables including parental involvement, peer relationships, and adult mentors.

Parental Involvement

As part of a child's microsystem, as Bronfenbrenner's (1986; Bronfenbrenner & Morris, 1998) model outlines, parents have daily interactions with their child and are a primary factor of influence in their child's life. From the first days of a child's life and looking forward, the interaction patterns and activity of a parent-child relationship influence the development of the child both socially and cognitively (Moore & Halle, 2001). Possessing a positive relationship with parents, being an engaged participant in an activity with parents, and enjoying a positive, emotional connection with parents are all components of PYD (Moore & Halle, 2001).

However, from fifth grade through freshman in high school years, students reported their time spent with family was reduced to half of what it was in earlier years (Larson & Richards, 1991).

Parents provide various levels of support to their children for the skills they are developing and continuing to develop through guidance and feedback (Berkowitz & Grych, 1998). Berkowitz and Grych (1998) state that parents who discuss their parenting behavior with their children are more likely to have empathetic children. Seevers, Hodnett, and Van Leeuwen (2011) compared parental support between 4-H members and non-4-H members in grades five, seven, and nine and found that 4-H members were more likely to discuss important items with their parents/guardians more frequently than those who were not in 4-H.

Parents can play a crucial role in the development of a child's character, cognitive, and emotional (Lickona, 2001), and prosocial behavior (Park, 2004). My study will look at the predicative nature of parental involvement in context with peer relationships and adult mentors such as teachers, youth leaders of organizations, or coaches.

Peer Relationships

While the first social interaction a child has is with his or her parent, those interactions “are further refined through social interaction with peers” (Moore & Halle, 2001, p. 155). From late childhood to early adolescence, youth spend less time with family and more time with their peers or alone (Larson & Richards, 1991). The increase in the interaction among peers suggests that it is more rewarding than when adolescents spend time with their families. Teens (age 13-17) tend to spend time with their closest friends in such ways as texting, social media, and other technological venues (Pew Research Center, 2015b). Moore and Halle (2001) found while some parents feel peers have a negative influence on their child, often the peer-to-peer relationships are more positive than negative. Friendships serve as another avenue of support outside of the family and provide intimacy and emotional security in good times and bad (Mooney, Laursen, & Adams, 2007; Moore & Halle, 2001). “Good friendships are one of life's pleasures at any age, and they can provide a protective buffer against mental health problems and destructive behaviors” (Moore & Halle, 2001, p. 156).

McHale, Crouter, and Tucker (2001) analyzed data from a short-term longitudinal study to assess the links “between free-time activities in middle childhood and school grades, depression, and conduct problems both concurrently and in early adolescence” (p. 1766). Of the 198 families that participated, McHale et al. (2001) found that girls spent more time reading, playing outdoors, and working on their hobbies than boys. Boys spent more time participating in

sports activities than girls. There were no gender differences found for watching television, hanging out, or playing with games and toys. The most common free time activity found was watching television. The time youth spent working on hobbies was related positively with hanging out and reading, but negatively related to sports activities. Hanging out and playing outdoors were both correlated positively. McHale et al. (2001) also found that the free time spent working on hobbies was related positively to the unsupervised free time spent with peers; and time spent in sporting activities, playing outdoors, and hanging out was positively related to the time spent with peers (unsupervised) thus adolescents tend to select peers as friends who share and enjoy similar interests and activities.

Lempers and Clark-Lempers (1992) found among youth, ages 11-19, same-sex friendships were significantly ranked for companionship and intimacy. Lempers and Clark-Lempers also found that 14-16-year-old females and 17-19-year-old males and females “perceived friends as very important for instrumental aid” (p. 91). Additionally, conflict was found to be less among friends and more among parents and siblings.

Hartup (1996) concluded that friendships during adolescence are developmentally significant. “When children have friends, they use them as cognitive and social resources on an everyday basis” (p. 10). Relationships that are supportive and are between individuals who are socially competent have advantages developmentally. Individuals who are considered more antisocial and who have more coercive and conflicting relationships are at a developmental disadvantage.

Schonert-Reichl (1999) examined the relationship between moral reasoning and friendships during early adolescence. Her study included students in fifth through seventh grades (10-13 years of age), specifically 108 elementary school students (54 boys and girls).

Schonert-Reichl (1999) found for both sexes that the leadership nominations the students received were positively and significantly related to moral reasoning, an aspect of character. “For girls, moral reasoning was related significantly to prosocial behavior” (p. 263). In contrast, moral reasoning was positively and significantly related to antisocial behavior and negatively and significantly related to withdrawn behavior in boys. “Peer relationships and friendships adjustment both affect moral reasoning directly and indirectly” (p. 270). Social behaviors mediated between peer acceptance and moral reasoning.

Technology has advanced over the years and it has the potential to impact peer-to-peer relationships. This merits a review of peers and the access and use of technology.

Peer Relationships and Technology. While it might be assumed peer relationships implies face-to-face interaction, peer relationships among Generation Z (born mid 90’s into the 2000s) have taken a whole new form from previous generations, that is engaging through the internet. The internet is becoming increasingly accessible to teens (ages 12-17). In 2000, 73% of teens were online (Pew Research Center, 2007a). In 2004, that number increased to 87%, and in 2006 swelled to 93%. Not only has the number of teens using the internet increased, but the frequency of the use has increased over the years with 42% in 2000, 51% in 2004, and 61% in 2006 using the internet daily. Of those with internet access, 89% are using the internet on a weekly basis.

In 2006, the Pew Research Center (2007a) found 55% teens to have an online profile with a social media outlet. Of those teens, 91% who are online use social media to stay connected with friends they see on a regular basis and 82% use social media to stay connected with those they rarely see. Older teens (ages 15-17) are more apt to share more personal information than younger teens (ages 12-14). Females are more likely to post photos of themselves and their

friends than males post on their online profile. Males are more likely to post the name of the town in which they live, their cell phone number, and their last name.

Teens shared more on the internet in 2006 than 2004 (Pew Research Center, 2007b). In 2006, 39% of teens shared their personal creative items online (i.e., artwork, stories, photos, or videos); 33% developed items for others (i.e., websites, blogs); 28% created their blog or online journal; 27% have developed and continue to maintain their website; and 26% have remixed “content they find online into their creations” (p. 3). Of these teens, 55% are female, 45% are male, 55% are ages 15-17, and 45% are ages 12-14.

Of the teens that use the internet, 32% have been bullied online (Lenhart, 2007, p. 1). According to the Pew Research Center (2007c), teens identified the most common form of cyberbullying happening to them: 15% identified someone taking a private electronic message and sending it to someone else or posting it online, 13% identified spreading a rumor online, 13% identified receiving an aggressive or threatening electronic message, 6% identified having an embarrassing picture posted online without permission, and 32% indicated *yes* to any of the above four answers.

Technology has continued to advance, and advance fairly quickly over the last decade. According to the Pew Research Center (2015a), 24% of teens (ages 13-17) are “almost constantly” online, with 92% of teens self-report going online daily. Internet use has become more easily accessible to teens due to mobile devices such as smartphones and tablets, which are fueling internet use by teens. Of teens with mobile devices, 91% report using these devices to access the internet. Of those youth who do not have access to a mobile device, 68% report accessing the internet daily.

Social media can have negative consequences and can lead teens to make negative comparisons of their life with that of their peers. (Pew Research Center, 2015b). Of the teens that use social media, 88% think others share too much personal information about themselves on social media and 53% were made aware of various social events they were not invited to. Additionally, 42% have had a social media post circulate about them of which they had no control over, and 21% have felt “worse about their own life because of what they see from other friends on social media” (p. 7).

Technology has allowed teens to express themselves through a variety of digital avenues. Teens communicate digitally through photos, video, music, and emoji’s to name a few.

Adult Mentors

The third predictive element to review is adult mentors. There are numerous methods used to mentor youth: face-to-face, online, one-on-one, group, peer, and through the community, school, and religious organizations (Rhodes & Spencer, 2010). Adult mentors provide listening support, emotional support, emotional challenges, appreciation of tasks completed, offer challenging tasks, and provide help or personal assistance (Gomez & Mei-Mei Ang, 2007). These mentoring relationships usually occur within a social network where the youth is already a member (DuBois & Silverthorn, 2005b) and these committed relationships often occur over an extended period which contains meaning, are caring, sincere, and thoughtful (Lerner, 2007). The relationships are not cursory or considered short-term relationships. Mentoring relationships can be considered an opportunity to focus on the critical skills and help youth nurture “a sense of purpose” (Rhodes & Spencer, 2010, p. 150). Numerous mentor relationships play a vital role in various settings that are significant to youth (DuBois & Silverthorn, 2005b). Youth who enter mentoring programs enter with a developmental history; some have supportive relationships,

while others have had negative, abusive or neglected relationships (Rhodes & Spencer, 2010). Berkowitz (2011) found if a positive relationship develops between an adolescent and a mentor, it leads to the adolescent modeling the character strengths of the mentor. “Relatives, friends, teachers, and community-based mentors all contribute to educational success” (Erickson, McDonald, & Elder, Jr., 2009, p. 345). Mentoring can be a resource for youth, both a compensatory and complementary resource (Erickson et al., 2009).

Zand and colleagues (2009) examined the “positive and negative aspects of the mentor-youth relationship” (p. 4). These aspects included family bonding, relationships with adults, school bonding, and life skills. A total of 276 youth, ages nine to 19 years, participated in the study, and all were participants in a mentoring program (national sites) for an average of 10.7 months. The results indicated girls had a higher quality of mentor relationship than boys. Additionally, the four competency domains of life skills, family bonding, relationships with adults, and school bonding were found to be positively associated with higher quality adult relationships.

A national study conducted by DuBois and Silverthorn (2005a) analyzed the natural mentorship between an adolescent (grades 7-12) and an adult. This included a look at the mentor role, frequency of contact, closeness, and duration. The data was taken from the National Longitudinal Study of Adolescent Health, waves one and three ($N = 2,053$) (DuBois & Silverthorn, 2005a). The researchers found that the impact of mentoring relationships varies by developmental domain during adolescence. Mentors were more linked to influencing the adolescent outcomes of education and physical health. Closeness was positively correlated with “psychological well-being (greater self-esteem and life satisfaction, fewer depressive symptoms

and reports of suicidal ideation)” of the adolescent (p. 86). Additionally, closeness positively correlated with level of physical activity, and closeness reduced the probability of drug use.

McHale, Crouter, and Tucker (2001) found with youth (average age of 10.9 years), the free time spent working on hobbies was related positively to the free time spent with non-parental adults, and time spent participating in sporting activities was found to be positively related to time spent with non-parental adults.

In a study conducted by DuBois & Silverthorn (2005b) consisting of high school students ($n = 3,187$), researchers found nearly three-quarters of the participants self-reported having a mentor. Over 40% of the mentors were family members, while 26% were guidance counselors or teachers. The remainder of mentors (approximately 26%) were coaches, religious leaders, parents of friends, employers, co-workers, doctors or therapists, neighbors, and other. DuBois and Silverthorn (2005b) also found youth had a greater likelihood of completing high school and attending college if they had a mentor. DeBois and Silverthorn (2005b) also found youth with a mentor were significantly less likely to join a gang, hurt someone during a fight, and take risks. Youth with mentors were more likely to self-report higher levels of self-esteem, life satisfaction, and physical activity. “Longevity appears to be an important factor underlying beneficial mentoring relationships” (DuBois & Silverthorn, 2005b, p. 522).

Erickson et al. (2009) found advantaged seniors in high school are more likely to report having a mentor where youth who are disadvantaged are significantly less like to report having a mentor in their lives. Mentors, who also serve as teachers, “have a substantial impact on the educational attainment of disadvantaged youths” (Erickson et al., 2009, p. 345). The resources parents have are a significant predictor of their child having a mentor. Additionally, seniors in high school increase their chances of having a mentor if they have advantaged peer resources

(i.e., friends with higher GPAs, having more friends). Erickson et al. (2009) found that only 53% of disadvantaged youth (seniors in high school) had mentors, where 74% of advantaged youth had mentors. The researchers also found mentors contribute positively to the overall educational attainment and high school performance of seniors in high school.

Greenberger, Chen, and Beam (1998) conducted a study of 201 11th graders from a southern California high school. They found 83% of females and 68% of males self-reported having a nonparental mentor in their lives. However, the perceived warmth of the mentor and the students' willingness to talk to their mentor about problems and issues the students were facing was not related to the level of behavioral problems that involved the student.

In a study conducted by Zimmerman, Bingenheimer, and Notaro (2002), 53.8% of seniors in high school (GPA of 3.0 or below) reported having a mentor. Of the 53.8%, 35.7% reported the mentor being an extended family member; additionally about 10% were professionals (i.e., teachers, coaches). Youth who had mentors self-reported more positive attitudes towards school and lower levels of problem behavior than those without mentors. "They were also more likely to like school, to believe that success in school is important, and to feel capable of succeeding in school" (Zimmerman et al., 2002, p. 232). Students with mentors self-reported a lower level of nonviolent delinquency and use of marijuana. No connection was found between having a mentor and the level of depression or anxiety of seniors in high school.

Throughout life, individuals transition from one stage to another. Youth transition from early to middle to late adolescence and from late adolescence to early adulthood. "Supportive mentoring relationships with non-parent adults during this period thus have the potential to make a key contribution to promoting outcomes important to public health goals and objectives"

(DuBois & Silverthorn, 2005b, p. 518). “Mentoring alone will not likely be sufficient to fully address the needs of at-risk youth” (DuBois & Silverthorn, 2005b, p. 523).

Summary

Sustained relationships youth develop through the microsystem are seen as one of the Big Three within the framework of PYD as having a positive and sustained adult interactions (Lerner, 2007; Lerner et al., 2006). These relationships are committed relationships that occur over an extended period of time which contains meaning, are caring, sincere, and thoughtful (Lerner, 2007).

Instead of society seeing youth as problems (Lickona, 1996), society may view or understand youth literally as resources who are to be developed (Lerner et al., 2006). According to Lerner, Dowling, and Anderson (2003), the concepts of the framework of PYD have confidence that all adolescents possess the potential to develop successfully, healthy, and positively; character is one of the five constructs of PYD. Park (2004; 2009) stated that individual strength of character plays a vital role in PYD, enabling conditions that allow for the thriving of an individual. “Good character is at the core of positive youth development” (Park, 2009, p. 43). PYD includes society’s hopes and aspirations for youth to develop into productive, happy, and healthy members of society (Lerner et al., 2006; Roth et al., 1998).

Snyder and colleagues (2013) indicate there is an absence of research that examines character development not only in adolescence (Snyder et al., 2013) but across the span of human development (Wang et al., 2015). Lerner and Callina (2014) indicated the absence of research that has a theoretical approach and is empirically applied for at least eight decades. Lerner and Callina also identify that there has been a revitalization of studies on character attributes and educational models that are “designed to promote character among children and

youth” (p. 323). Some character development research has focused on adults and their character content rather than the development of character (Lerner & Callina, 2014). A limited number of studies focus on the developmental trajectories of certain character traits and a lack of consistent character development research (Wang et al. 2015). Research studies conducted typically focus on academic competence, bullies and victims of bullying (Ma, Phelps, Lerner, & Lerner, 2009), school discipline, bullying and victimization (Gregory et al., 2010), and self-regulation (Bowers, et al., 2011; Gestsdóttir & Lerner, 2007; Gestsdóttir et al., 2010).

While the majority of studies examined the influence of one of the elements of the microsystem, we know that youth engage with multiple elements in the microsystem simultaneously and that to separate them offers limited ecological validity. Indeed, we need to understand the combined influences of the peer relationships, parental involvement, and adult mentors. Therefore, this study assesses the variance explained by the elements of the adolescent microsystem (i.e., peer relationships, parental involvement, adult mentors) on the development of their character during adolescence, that is, the final four years of their secondary education (freshman through senior years).

Research Questions

- 1) To what degree do parental involvement, peer relationships, and adult mentors explain adolescent’s development of character in youth?
- 2) How do parental involvement, peer relationships, and adult mentors affect adolescent’s development of character over time (freshmen to senior in high school)?

Alternative Hypothesis 2: The impact of peer relationships, parents, and adult mentors will equally and significantly explain the development of character changes over time from freshman to senior grade levels.

3. Methodology

Data for my study were drawn from Lerner and colleagues' (2005) 4-H Study of Positive Youth Development.

Methodology

In 2002, Lerner et al. conducted the first wave of data collection in the longitudinal study of youth development beginning with youth in fifth grade ($N = 1,700$) (Lerner et al. 2005). Participants represented 40 cities/towns in 13 states as well as multiple ethnic, regional, religious, and community locations (i.e., rural, urban, suburban). Researchers followed this initial set of participants collecting data annually through eight waves. Each year, a notice was sent to more schools to invite additional participants. By Wave 8, more than 7,000 youth had participated in one or more waves of this study with representation from 42 states (Lerner et al., 2013). Data were collected for Wave 1 primarily in schools and after-school locations (Lerner et al., 2005); by Wave 8, partnerships were established with the land-grant universities to help reach more participants (Lerner et al., 2013). My study analyzed data from Waves 5, 6, 7, and 8, from the 4-H Study of PYD data set (Institute for Applied Research in Youth Development, 2009). A total of 55 youth participated in each wave (refer to Table 4.1 for demographics).

Procedure. Lerner and colleagues (2005) outlined data collection procedures for Wave 1 which were replicated during Waves 2 through 8. Initiated as a paper-pencil survey, researchers transferred to a paperless survey conducted on the computer (Bowers, Geldhof, Johnson, Lerner, & Lerner, 2014). Due to the longitudinal nature of the study, participants agreed to engage in each of the eight waves of this study (K. Callina, personal communication, February 9, 2016). However, wave attrition (i.e., participants absent for one or more waves, but appear again) and item nonresponse occurred. Additionally, schools withdrew from the study; therefore, leaving

participants unable to complete the study (Jeličić, Phelps, & Lerner, 2010). Nonetheless, researchers added new schools and participants across each of the eight waves of the study. Reports described the methodological details of the 4-H Study of PYD (e.g., Lerner et al., 2005; Phelps et al., 2009).

Measures

My study measures variables of character, peer relationships, parental involvement, and adult mentors using the secondary data set. The measures address the research question and hypotheses.

Character. In the 4-H Study of PYD, character was defined as the respect an individual possesses for the rules of the community and cultural surroundings (Lerner, 2007; Lerner et al., 2006; Phelps et al., 2009; Roth & Brooks-Gunn, 2003; Snyder & Flay, 2012) including an individual's perception of what is acceptable and appropriate.

Four scales measured character in Waves 5 through 8: The scales consisted of *Conduct Morality Scale* (self-perception profile for adolescents) (five items), *Personal Values Scale* (five items), *Social Conscience Scale* (six items), and the *Values Diversity Scale* (four items) (Bowers et al., 2010; Lerner et al., 2005; Phelps et al., 2009).

The Conduct Morality Scale included five questions taken from the Self-Perception Profile for Adolescents (SPPA: Harter, 1983; Harter, 1988). The SPPA assessed the competence perceived as it related to global self-worth and eight areas of functioning. For my research study, only the conduct morality competence questions were used for the character construct. The questions were dichotomous with the participant deciding which one of two statements was more like them. An example question is: "Some teenagers usually do the right thing" BUT "Other teenagers often don't do what they know is right." Once the statement was determined, the

participant indicated if the statement they selected was “really true” or “sort of true.” The items were scored one to four (the first statement “really true” = 1; “sort of true” = 2; the second statement “sort of true” = 3; “really true” = 4). The Cronbach’s alpha reported for the conduct morality competence questions ranged from 0.77 to 0.79 across waves five through eight (Schmid et al., 2012).

The Personal Values Scale consisted of five questions taken from the Search Institute’s Profiles of Student Life: Attitudes and Behaviors (PSL – AB) (Leffert et al., 1998). These questions were to evaluate the extent to which the participant placed importance on certain values. These items were asked on a five-point Likert Scale, with 1 = not important to 5 = extremely important. The prompt question was “How important is each of the following to *you* in your life?” An example of the sub-question asked includes: “Doing what I believe is right, even if my friends make fun of me.” Across all eight waves of the study, the Cronbach’s alpha ranged from 0.84 to 0.91 for this scale (Schmid et al., 2012).

Beginning in Wave 4, the Social Conscience Scale was modified to use six items taken from the Search Institute’s PSL – AB (Leffert et al., 1998). These questions were used to assess how the participant placed importance on the concept of social consciousness. These six items used a five-point Likert Scale, with 1 = not important to 5 = extremely important. The prompt question was “How important is each of the following to *you* in our life?” An example of the sub-question asked includes: “Speaking up for equality (everyone should have the same rights and opportunities).” The Cronbach’s alpha ranged from 0.89 to 0.91 for this scale across Waves 4 through 8 (Schmid et al., 2012).

The Values Diversity Scale consisted of four items taken from the Search Institute’s Profiles of Student Life: Attitudes and Behaviors (PSL – AB) (Leffert et al., 1998). These four

items were measured using a five-point Likert Scale. The prompt question for one of the items was “How important is each of the following to *you* in our life?” An example of a response was “Getting to know people who are of a different race than I am” ranked on the Likert Scale of 1 = not important to 5 = extremely important. The prompt question for the three remaining items was “Think about *people who know you well*. How do you think *they would rate you* on each of these?” An example of a sub-question asked included: “Respecting the values and beliefs of people who are of a different race or culture than I am.” The remaining three questions used a five-point Likert Scale, with 1 = not at all like me to 5 = very much like me. No Cronbach’s alpha was reported for this scale (Schmid et al., 2012).

Peer Relationships. Peer relationships for the 4-H Study of PYD were defined as interaction, connection, and support between two or more individuals of the same cohort. To measure peer relationships, all eight waves from the 4-H Study of PYD used questions from the *Peer Support Scale* (four items) and the *Friends’ Influence/Risk Avoidance Scale* (four items).

Four questions from the Inventory of Parent and Peer Attachment (IPPA) evaluated the relationships youth had with their friends, with the questions drawn from the Peer Support Scale (Armsden & Greenberg, 1987). The IPPA questions were acquired from the Teen Assessment Project (TAP) Survey Question Bank (Small & Rodgers, 1995). These four questions were asked using a five-point Likert Scale, with 1 = never true to 5 = always true (Armsden & Greenberg, 1987). The prompt question was “How true is each of these statements for you?” An example of a sub-question asked included: “I trust my friends.” The Cronbach’s alpha ranged from 0.89 to 0.95 for this scale across waves four through eight (Schmid et al., 2012).

The Friends’ Influence / Risk Avoidance Scale included seven items for Waves 1 through 5 and four items for Waves 6 through 8 (Leffert et al., 1998; Theokas et al., 2005). This scale

resulted from an exploratory factor analysis with items taken from the Search Institute's questionnaire on Profiles of Student Life: Attitudes and Behaviors (PSL – AB). The factor analysis returned the seven-item scale to assess the risk avoidance as it relates to the risk behaviors of friends. These four questions used a five-point Likert Scale, with 0 = none to 4 = all. The four questions consistent across Waves 5 through 8 included a prompt question “Among the people you consider to be your closest friends, how many would you say... .” An example of a sub-question asked included: “Drink alcohol once a week or more?” No Cronbach's alpha was reported in the measures boilerplate for the 4-H Study of PYD (Schmid et al., 2012).

Parental Involvement. Parental involvement was defined as the level of participation and involvement a parent/guardian has with his/her own child. The *Parental Involvement Scale* (four items) and the *Parental Monitoring Scale* (eight items) were used to measure the 4-H Study of PYD.

The Parental Involvement Scale included four questions taken from the Search Institute's Profiles of Student Life: Attitudes and Behaviors survey (PSL – AB: Leffert et al., 1998; Theokas et al., 2005). The four items used a five-point Likert scale, with 0 = never to 4 = always. The prompt question was “How often does one of your parents... .” An example of a sub-question asked included: “Go to meetings or events at your school?” The Cronbach's alpha ranged from 0.44 to 0.81 for waves five through eight (Schmid et al., 2012).

The Parental Monitoring Scale consisted of eight items and was used to assess the ecological assets, specifically the perception of parental monitoring by the youth (Small & Kerns, 1993). These questions used a five-point Likert scale, with 0 = never to 4 = always. Examples of the questions asked using this scale are “I talk to my parent(s) about the plans I have with my friends” and “When I go out at night, my parent(s) know where I am.” In order to

calculate the scale, a minimum of five items were required (Schmid et al., 2012). The Cronbach's alpha for Wave 5 through 7 was 0.92 and 0.93 for Wave 8.

Adult Mentors. This research study defined adult mentors as an adult individual who was not the participant's parent(s), with whom the participant regularly interacted. Four sets of questions were analyzed from the 4-H Study of PYD to measure the influence of adult mentors had on youth. The questions included: *Adult Mentors Scale* (five items), mentoring items (two items), other adult relationships item (one item), and the *Social Support and Rejection Scale* (22 items). These questions were presented in Waves 5 through 8.

The Adult Mentors Scale was taken from the Search Institute's PSL – AB survey (Leffert et al., 1998). The scale consisted of five items that measured the relationships the participants had with adults that do not include their parents. The response for this set of questions ranged from 0 = one to 4 = 5 or more adults, “indicating the number of relevant non-parental relationships.” The prompt to the question was “Not including your parents or teachers, how many adults have you known for one or more years who... .” An example of a sub-question is: “Spend a lot of time helping other people.” Across the eight waves of the study, the Cronbach's alpha was reported to range from 0.83 to 0.93 (Schmid et al., 2012).

The Social Support and Rejection Scale was a 22-item scale that was included in Waves 5 through 8 (Roffman, Pagano, & Hirsch, 2000). This scale was made up of three sub-scales: positive interaction (11 items); negative interaction (6 items); and mentoring (5 items). The scale measured the interactions, positive and negative, with non-parental adults whom the participants identified as being significant in their lives. The scale was rated on a five-point Likert scale with 1 = never to 5 = always. An example of the set of questions included: “This person looks out for me and helps me.” The positive interaction and mentoring questions with

high scores signify a high level of support and positive mentoring. A high score found on the negativity scale indicated that the relationship had a high level of stress and negativity. The Cronbach's alpha reported ranged from 0.91 to 0.95 for the positive interaction sub-scale, 0.90 to 0.93 for the mentoring sub-scale, and 0.95 to 0.96 for the negative interaction sub-scale (Schmid et al., 2012).

Demographics

The variables *sex*, *race/ethnicity*, and *location* served as control variables. Sex was coded as male or female. Race/ethnicity was coded as Asian, Asian American, or Pacific Islander; Black or African American; Hispanic or Latino; White, Caucasian, Not Hispanic; and American Indian / Native American. Location or residence was taken from the earliest wave of participation and was categorized as rural-inside a metropolitan statistical area; rural-outside a metropolitan statistical area, small town of less than 25,000, large town greater than 25,000, urban fringe, mid-size city, urban fringe, large city, mid-size central city less than 250,000, and large central city greater than 250,000. Location was coded into eight categories by Lerner and his colleagues based off of the area code that was gathered on the earliest wave survey (K. Callina, personal communication, October, 31, 2016) (refer to Table 4.1 in Chapter 4, page 46, for demographics).

Data Preparation. More than 7,000 youth participated in the 4-H Study of PYD. For the purpose of my research study, data was used from individuals who participated in Waves 5 through 8 from the 4-H Study of PYD. Allowing for attrition due to schools withdrawing or participants unable to complete the study, a total of only 55 participants participated each year in Waves 5 through 8. This allowed for a longitudinal analysis of individual character over time related to peer relationships, parental involvement, and adult mentors.

Due to missing data from the sample, multiple imputation was used to predict the missing values in the data set, which created 10 complete data sets. According to Rubin (2003), this method allows the researcher to make the most of the data that already exists and “avoid largely extraneous complications created by limited fractions of missing information” (p. 619-620). Multiple imputation allows for the missing data to be filled in with data that is unbiased estimates. Rubin (2003) points out that there are some cases where validity and efficiency may be lost using multiple imputation, mostly with large amounts of missing data, but argues that it is a sacrifice worth making for the practicality of multiple imputation’s results.

After multiple imputation was performed, correlations and reliability analyses were conducted reporting using Cronbach’s Alpha. The Parental Involvement Scale for Wave 5 was reverse coded to match the coding in Waves 6 to 8. Variables for all scales were rounded using post-imputation rounding, and the lowest and highest values were truncated (Rodwell, Lee, Romaniuk, & Carlin, 2014). This allowed for the researcher to put restriction on the range as specified in the 4-H Study of PYD. Rodwell et al. (2014) pointed out a concern that rounding after the data sets have been generated “may cause bias in the resulting parameter estimates,” (p. 2) specifically the marginal mean of the truncated variable and may diminish the adjustment made to the truncated variable.

Because not all the scales were on the same Likert scale, the variables values were re-coded from zero to 12 to match the method Lerner et al. (2005) used (K. Callina, personal communication, October, 31, 2016).

Summation of Scales. For the purpose of my study, the scales that comprise the dependent and independent variables were summed by wave to create one variable for character, one variable for peer relationships, one variable for parental involvement, and one variable for

adult mentors. Bivariate correlations were conducted for the dependent variable of character against each independent variable, peer relationships, parental involvement, and adult mentors. Results will be presented in Chapter 4. I used SPSS version 24 for Macintosh (IBM Corp, 2016) to conduct all data analyses. The research protocol for secondary data analysis was reviewed and approved by the Kansas State University Institutional Review Board #8259 (see Appendix A).

4. Results

Purpose

The purpose of the correlation, multiple regression, and hierarchical multiple regression analyses was to assess the predictive variance explained by elements of the adolescent microsystem (i.e., peer relationships, parental involvement, adult mentors) as measured during the freshman, sophomore, and junior years each year and the change over time in the predictive variance by year on character in the senior year of high school.

Participants

My research study included a four-year-age span across four waves (5, 6, 7, 8). Due to the timing of the year in which the survey was administered during Wave 8, only three different ages were captured (see Table 4.1). The mean and standard deviations by wave are as follows: Wave 5 (mean age = 15.11; $SD = 0.59$); Wave 6 (mean age = 16.12; $SD = 0.59$); Wave 7 (mean age = 17.34; $SD = 0.54$); and Wave 8 (mean age = 18.29; $SD = 0.52$). Sex was collected at each wave. At Wave 5, participants included females (56.4%) and males (43.6%). Sex shifted for Waves 6 through 8 with 58.2% female and 41.8% male. While there was racial/ethnic diversity within the sample, it was a predominately Caucasian-non-Hispanic sample. Race/ethnicity identified by the participants at Wave 5 included 5.5% Asian, 3.6% African American, 7.3% Hispanic, 76.4% Caucasian, 5.5% American Indian, and 1.8% not identified. The location used for my study was the location reported in the earliest wave of participation by the participant (it was not updated at any time during the data collection). My research study included participants from both urban and rural areas. Table 4.1 displays the self-reported demographic information from the participants at each wave.

Table 4.1

Sociodemographic Characteristics of Participants (N = 55)

Characteristic	Wave 5		Wave 6		Wave 7		Wave 8	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Age								
13	1	1.8						
14	23	41.8	1	1.8				
15	26	47.3	24	43.7	1	1.8		
16	4	7.2	26	47.3	13	23.4		
17			4	7.2	36	64.8	16	28.8
18					5	9	35	63
19							4	7.2
Missing	1	1.8						
Sex								
Female	31	56.4	32	58.2	32	58.2	32	58.2
Male	24	43.6	23	41.8	23	41.8	23	41.8
Race								
Asian, Asian American, or Pacific Islander	3	5.5	2	3.6	2	3.6	2	3.6
Black or African American	2	3.6			1	1.8	1	1.8
Hispanic or Latino	4	7.3	4	7.3	6	10.9	6	10.9
White, Caucasian, Not Hispanic	42	76.4	41	74.5	40	72.7	40	72.7
American Indian/Native American	3	5.5	2	3.6	2	3.6	3	5.5
Multiethnic or Multiracial			3	5.5	1	1.8	1	1.8
Other			2	3.6	1	1.8	1	1.8
Missing	1	1.8			2	3.6	1	1.8
Residence from Earliest Wave of Participation								
Large Central City > 250K	5	9.1						
Mid-Size Central City < 250K	3	5.5						
Urban fringe, Large city	12	21.8						
Urban fringe, Mid-size city	2	3.6						
Large town > 25K	1	1.8						
Small town < 25K	6	10.9						
Rural, outside MSA	3	5.5						
Rural, inside MSA	23	41.8						

Data Analysis

I conducted a bivariate correlation analysis for each wave to assess the relationship between the scales that compose the dependent (character) and independent (peer relationships, parental involvement, adult mentors) variables.

Peer Relationships. A comparison of the Friends' Influence / Risk Avoidance Scale and Peer Support Scale throughout the four waves, revealed negatively correlated relationship with the Peer Support Scale at Wave 5 ($r = -0.1$). The relationship between the two scales was not significant in Waves 5 and 8 ($r = 0.08$); and Waves 6 and 7 showed a significant relationship between the two scales (Wave 6, $r = 0.23$, $p < 0.01$; Wave 7, $r = 0.12$, $p < 0.01$). Across Waves 5 through 8, Cronbach's alpha ranged from 0.88 to 0.96 for the Peer Support Scale and 0.77 to 0.84 for the Friends' Influence / Risk Avoidance Scale. The Cronbach's alpha decreased but remained acceptable, ranging between 0.75 to 0.83 when the scales were combined (refer to Tables 4.2 – 4.5).

Table 4.2

Bivariate Correlation Matrix (Wave 5): Character and Peer Relationship Scales (N=55)

Variables	1	2	3	4	5	6	Mean	SD
1. Peer Support Scale (Peer Relationship)	1.00						16.73	3.68
2. Friends' Influence / Risk Avoidance Scale (Peer Relationship)	-0.10	1.00					13.37	3.21
3. Social Conscience Scale (Character)	0.38**	0.39**	1.00				23.31	4.96
4. Personal Values Scale (Character)	0.47**	0.28**	0.58**	1.00			20.69	3.65
5. Values Diversity Scale (Character)	0.38**	0.20**	0.59**	0.44**	1.00		14.11	3.01
6. Conduct Morality Scale (Character)	0.23**	0.45**	0.49**	0.48**	0.54**	1.00	15.97	3.01

** $p < 0.01$

Note: Scales 1, 2, and 5 range from 0 to 48.
Scales 3, 4, and 6 range from 0 to 60.

Table 4.3

Bivariate Correlation Matrix (Wave 6): Character and Peer Relationship Scales (N=55)

Variables	1	2	3	4	5	6	Mean	SD
1. Peer Support Scale (Peer Relationship)	1.00						17.13	2.86
2. Friends' Influence / Risk Avoidance Scale (Peer Relationship)	0.23**	1.00					13.04	2.95
3. Social Conscience Scale (Character)	0.27**	0.20**	1.00				24.61	4.71
4. Personal Values Scale (Character)	0.34**	0.35**	0.77**	1.00			21.10	3.91
5. Values Diversity Scale (Character)	0.26**	0.08**	0.57**	0.58**	1.00		14.56	3.51
6. Conduct Morality Scale (Character)	0.23**	0.38**	0.33**	0.58**	0.41**	1.00	15.49	3.23

** $p < 0.01$

Note: Scales 1, 2, and 5 range from 0 to 48.
Scales 3, 4, and 6 range from 0 to 60.

Table 4.4

Bivariate Correlation Matrix (Wave 7): Character and Peer Relationship Scales (N=55)

Variables	1	2	3	4	5	6	Mean	SD
1. Peer Support Scale (Peer Relationship)	1.00						16.65	3.36
2. Friends' Influence / Risk Avoidance Scale (Peer Relationship)	0.12**	1.00					13.06	2.81
3. Social Conscience Scale (Character)	0.28**	0.08	1.00				24.75	4.06
4. Personal Values Scale (Character)	0.19**	0.46	0.66**	1.00			21.13	3.90
5. Values Diversity Scale (Character)	0.32**	0.20**	0.60**	0.36**	1.00		14.58	3.53
6. Conduct Morality Scale (Character)	0.24**	0.36**	0.28**	0.37**	0.27**	1.00	15.47	3.61

** $p < 0.01$

Note: Scales 1, 2, and 5 range from 0 to 48.
Scales 3, 4, and 6 range from 0 to 60.

Table 4.5

Bivariate Correlation Matrix (Wave 8): Character and Peer Relationship Scales (N=55)

Variables	1	2	3	4	5	6	Mean	SD
1. Peer Support Scale (Peer Relationship)	1.00						15.87	3.88
2. Friends' Influence / Risk Avoidance Scale (Peer Relationship)	0.08	1.00					12.59	3.30
3. Social Conscience Scale (Character)	0.38**	0.02	1.00				24.29	5.15
4. Personal Values Scale (Character)	0.37**	0.11**	0.66**	1.00			21.62	4.05
5. Values Diversity Scale (Character)	0.40**	0.01	0.64**	0.56**	1.00		14.48	3.76
6. Conduct Morality Scale (Character)	0.35**	0.27**	0.25**	0.45**	0.30**	1.00	15.35	2.85

** $p < 0.01$

Note: Scales 1, 2, and 5 range from 0 to 48.
Scales 3, 4, and 6 range from 0 to 60.

Due to the decrease in the Cronbach's alpha and the non-significant correlation findings between the Peer Support and Friends' Influence / Risk Avoidance Scales, the Friends' Influence / Risk Avoidance Scale was dropped in my study. I conducted a bivariate correlation with only the Peer Support Scale (the Friends' Influence/Risk Avoidance Scales were dropped) and the four scales that comprise the variable of character across Waves 5 through 8 (refer to Tables 4.6 – 4.9). In Waves 5 through 8, the relationships between the Peer Support Scale and the character scales were each found to be positive and significant ($p < 0.01$). The Pearson's r correlation between the Peer Support Scale and Social Conscience Scale ranged from 0.28 to 0.38. Correlations the Peer Support Scale and Personal Values Scale had a range of 0.19 to 0.47. The correlation for the Values Diversity Scale and the Peer Support Scale ranged from 0.26 to 0.40. The correlation between the Conduct Morality Scale and Peer Support Scale range from 0.23 to 0.35 (refer to Tables 4.6 – 4.9).

Table 4.6

Bivariate Correlation Matrix (Wave 5): Character and Peer Relationship Scales (N=55)

Variables	1	2	3	4	5	Mean	SD
1. Peer Support Scale (Peer Relationship)	1.00					16.73	3.68
2. Social Conscience Scale (Character)	0.38**	1.00				23.31	4.96
3. Personal Values Scale (Character)	0.47**	0.58**	1.00			20.69	3.65
4. Values Diversity Scale (Character)	0.38**	0.59**	0.44**	1.00		14.11	3.01
5. Conduct Morality Scale (Character)	0.23**	0.49**	0.48**	0.54**	1.00	15.97	3.01

** $p < 0.01$

Note: Scales 1 and 4 range from 0 to 48.
Scales 2, 3, and 5 range from 0 to 60.

Table 4.7

Bivariate Correlation Matrix (Wave 6): Character and Peer Relationship Scales (N=55)

Variables	1	2	3	4	5	Mean	SD
1. Peer Support Scale (Peer Relationship)	1.00					17.13	2.86
2. Social Conscience Scale (Character)	0.27**	1.00				24.61	4.71
3. Personal Values Scale (Character)	0.34**	0.77**	1.00			21.10	3.91
4. Values Diversity Scale (Character)	0.26**	0.57**	0.58**	1.00		14.56	3.51
5. Conduct Morality Scale (Character)	0.23**	0.33**	0.58**	0.41**	1.00	15.49	3.23

** $p < 0.01$

Note: Scales 1 and 4 range from 0 to 48.
Scales 2, 3, and 5 range from 0 to 60.

Table 4.8

Bivariate Correlation Matrix (Wave 7): Character and Peer Relationship Scales (N=55)

Variables	1	2	3	4	5	Mean	SD
1. Peer Support Scale (Peer Relationship)	1.00					16.65	3.36
2. Social Conscience Scale (Character)	0.28**	1.00				24.75	4.06
3. Personal Values Scale (Character)	0.19**	0.66**	1.00			21.12	3.90
4. Values Diversity Scale (Character)	0.32**	0.60**	0.36**	1.00		14.58	3.53
5. Conduct Morality Scale (Character)	0.24**	0.28**	0.37**	0.27**	1.00	15.47	3.61

** $p < 0.01$

Note: Scales 1 and 4 range from 0 to 48.
Scales 2, 3, and 5 range from 0 to 60.

Table 4.9

Bivariate Correlation Matrix (Wave 8): Character and Peer Relationship Scales (N=55)

Variables	1	2	3	4	5	Mean	SD
1. Peer Support Scale (Peer Relationship)	1.00					15.87	3.88
2. Social Conscience Scale (Character)	0.38**	1.00				24.29	5.15
3. Personal Values Scale (Character)	0.37**	0.66**	1.00			21.62	4.05
4. Values Diversity Scale (Character)	0.40**	0.64**	0.56**	1.00		14.48	3.76
5. Conduct Morality Scale (Character)	0.35**	0.25**	0.45**	0.30**	1.00	15.35	2.85

** $p < 0.01$

Note: Scales 1 and 4 range from 0 to 48.
Scales 2, 3, and 5 range from 0 to 60.

Parental Involvement. A comparison of the Parental Involvement and Parental Monitoring Scales throughout the four waves, showed scales to be highly correlated and significant. Across Waves 5 through 8, Cronbach's alpha ranged from 0.77 to 0.86 for the Parental Involvement Scale and 0.91 to 0.95 for the Parental Monitoring Scale. Combined scales revealed a Cronbach's alpha ranged from 0.89 to 0.94 (refer to Tables 4.10 – 4.13).

Table 4.10

Bivariate Correlation Matrix (Wave 5): Character and Parental Involvement Scales (N=55)

Variables	1	2	3	4	5	6	Mean	SD
1. Parental Involvement Scale (Parental Involvement)	1.00						14.38	2.43
2. Parental Monitoring Scale (Parental Involvement)	0.62**	1.00					25.36	6.87
3. Social Conscience Scale (Character)	0.41**	0.53**	1.00				23.31	4.96
4. Personal Values Scale (Character)	0.27**	0.36**	0.58**	1.00			20.69	3.65
5. Values Diversity Scale (Character)	0.44**	0.44**	0.59**	0.44**	1.00		14.11	3.01
6. Conduct Morality Scale (Character)	0.55**	0.55**	0.49**	0.48**	0.54**	1.00	15.97	3.01

** $p < 0.01$

Note: Scales 1 and 5 range from 0 to 48.
Scale 2 range from 0 to 96.
Scales 3, 4, and 6 range from 0 to 60.

Table 4.11

Bivariate Correlation Matrix (Wave 6): Character and Parental Involvement Scales (N=55)

Variables	1	2	3	4	5	6	Mean	SD
1. Parental Involvement Scale (Parental Involvement)	1.00						9.03	4.31
2. Parental Monitoring Scale (Parental Involvement)	0.42**	1.00					25.44	5.68
3. Social Conscience Scale (Character)	0.26**	0.28**	1.00				24.61	4.71
4. Personal Values Scale (Character)	0.37**	0.48**	0.77**	1.00			21.10	3.91
5. Values Diversity Scale (Character)	0.15**	0.43**	0.57**	0.58**	1.00		14.56	3.51
6. Conduct Morality Scale (Character)	0.43**	0.57**	0.33**	0.58**	0.41**	1.00	15.49	3.23

** $p < 0.01$

Note: Scales 1 and 5 range from 0 to 48.
 Scale 2 range from 0 to 96.
 Scales 3, 4, and 6 range from 0 to 60.

Table 4.12

Bivariate Correlation Matrix (Wave 7): Character and Parental Involvement Scales (N=55)

Variables	1	2	3	4	5	6	Mean	SD
1. Parental Involvement Scale (Parental Involvement)	1.00						9.34	4.05
2. Parental Monitoring Scale (Parental Involvement)	0.60**	1.00					23.71	6.16
3. Social Conscience Scale (Character)	0.33**	0.32**	1.00				24.75	4.06
4. Personal Values Scale (Character)	0.30**	0.43**	0.66**	1.00			21.13	3.90
5. Values Diversity Scale (Character)	0.22**	0.37**	0.60**	0.36**	1.00		14.58	3.53
6. Conduct Morality Scale (Character)	0.33**	0.52**	0.28**	0.37**	0.27**	1.00	15.47	3.61

** $p < 0.01$

Note: Scales 1 and 5 range from 0 to 48.
 Scale 2 range from 0 to 96.
 Scales 3, 4, and 6 range from 0 to 60.

Table 4.13

Bivariate Correlation Matrix (Wave 8): Character and Parental Involvement Scales (N=55)

Variables	1	2	3	4	5	6	Mean	SD
1. Parental Involvement Scale (Parental Involvement)	1.00						8.59	4.05
2. Parental Monitoring Scale (Parental Involvement)	0.52**	1.00					20.78	8.89
3. Social Conscience Scale (Character)	0.45**	0.45**	1.00				24.29	5.15
4. Personal Values Scale (Character)	0.39**	0.46**	0.66**	1.00			21.62	4.05
5. Values Diversity Scale (Character)	0.31**	0.32**	0.64**	0.56**	1.00		14.48	3.76
6. Conduct Morality Scale (Character)	0.34**	0.52**	0.25**	0.45**	0.30**	1.00	15.35	2.85

** $p < 0.01$

Note: Scales 1 and 5 range from 0 to 48.
Scale 2 range from 0 to 96.
Scales 3, 4, and 6 range from 0 to 60.

Adult Mentors. Bivariate correlations between the Adult Mentors Scale and the character scales, Waves 5 through 8, were positive and significant ($p < 0.01$) with the exception of Wave 6 between the Social Conscience Scale of character and the Adult Mentor's Scale ($r = 0.08$). Correlations between the Adult Mentors Scale and Social Conscience Scale were 0.38 for Wave 5, 0.08 for Wave 6, 0.12 for Wave 7, and 0.28 for Wave 8. Correlations between the Adult Mentors Scale and Personal Values Scale ranged from 0.16 to 0.39. Correlations between the Values Diversity Scale and the Adult Mentors Scale ranged from 0.19 to 0.28. The correlation between the Conduct Morality Scale and Adult Mentors Scale ranged between 0.24 and 0.41. The Cronbach's alpha for the Adult Mentors Scale ranged between 0.73 and 0.80 (refer to Tables 4.14 – 4.17).

Due to amount of missing data in the Social Support and Rejection Scale answers across Waves 5 through 8 prior to the multiple imputation being conducted, it was decided to eliminate this scale from the analysis.

Table 4.14

Bivariate Correlation Matrix (Wave 5): Character and Adult Mentor Scales (N=55)

Variables	1	2	3	4	5	Mean	SD
1. Adult Mentors Scale (Adult Mentors)	1.00					39.89	13.49
2. Social Conscience Scale (Character)	0.38**	1.00				51.93	14.88
3. Personal Values Scale (Character)	0.38**	0.58**	1.00			47.07	10.95
4. Values Diversity Scale (Character)	0.25**	0.59**	0.44**	1.00		30.32	9.03
5. Conduct Morality Scale (Character)	0.40**	0.49**	0.48**	0.54**	1.00	47.92	9.02

** $p < 0.01$

Note: Scales 1, 2, 3, and 5 range from 0 to 60.
Scale 4 range from 0 to 48.

Table 4.15

Bivariate Correlation Matrix (Wave 6): Character and Adult Mentor Scales (N=55)

Variables	1	2	3	4	5	Mean	SD
1. Adult Mentors Scale (Adult Mentors)	1.00					39.76	13.16
2. Social Conscience Scale (Character)	0.08	1.00				55.84	14.13
3. Personal Values Scale (Character)	0.16**	0.77**	1.00			48.31	11.73
4. Values Diversity Scale (Character)	0.19**	0.57**	0.58**	1.00		31.69	10.52
5. Conduct Morality Scale (Character)	0.41**	0.33**	0.58**	0.41**	1.00	46.47	9.70

** $p < 0.01$

Note: Scales 1, 2, 3, and 5 range from 0 to 60.
Scale 4 range from 0 to 48.

Table 4.16

Bivariate Correlation Matrix (Wave 7): Character and Adult Mentor Scales (N=55)

Variables	1	2	3	4	5	Mean	SD
1. Adult Mentors Scale (Adult Mentors)	1.00					39.82	13.62
2. Social Conscience Scale (Character)	0.12**	1.00				56.24	12.18
3. Personal Values Scale (Character)	0.19**	0.66**	1.00			48.38	11.69
4. Values Diversity Scale (Character)	0.26**	0.60**	0.36**	1.00		31.73	10.60
5. Conduct Morality Scale (Character)	0.24**	0.28**	0.37**	0.27**	1.00	46.40	10.83

* $p < 0.05$; ** $p < 0.01$

Note: Scales 1, 2, 3, and 5 range from 0 to 60.
Scale 4 range from 0 to 48.

Table 4.17

Bivariate Correlation Matrix (Wave 8): Character and Adult Mentor Scales (N=55)

Variables	1	2	3	4	5	Mean	SD
1. Adult Mentors Scale (Adult Mentors)	1.00					37.74	15.21
2. Social Conscience Scale (Character)	0.28**	1.00				54.86	15.45
3. Personal Values Scale (Character)	0.39**	0.66**	1.00			49.86	12.14
4. Values Diversity Scale (Character)	0.28**	0.64**	0.56**	1.00		31.45	11.27
5. Conduct Morality Scale (Character)	0.30**	0.25**	0.45**	0.30**	1.00	46.04	8.54

** $p < 0.01$

Note: Scales 1, 2, 3, and 5 range from 0 to 60.
Scale 4 range from 0 to 48.

Summation of Scales

For the purpose of my study, the scales that comprise the dependent and independent variables were summed by wave to create one variable for character, one variable for peer relationships, one variable for parental involvement, and one variable for adult mentors. Bivariate correlations were conducted for the dependent variable of character against each summed independent variable, peer relationships, parental involvement, and adult mentors.

In Waves 5 through 8, the relationships between the summed variables were each found to be positive and significant ($p < 0.01$). The bivariate correlation matrices are located in Tables 4.18 – 4.20.

Table 4.18

Bivariate Correlation Matrix (Waves 5-8): Summed Character and Peer Relationship Scales (N=55)

Variables	Wave 5				Wave 6				Wave 7				Wave 8			
	1	2	Mean	SD	1	2	Mean	SD	1	2	Mean	SD	1	2	Mean	SD
1. Summed Character Scales	1.00		177.25	35.39	1.00		182.31	37.61	1.00		182.75	34.30	1.00		182.21	37.76
2. Summed Peer Relationship Scale	0.46**	1.00	38.19	11.04	0.34**	1.00	39.38	8.57	0.34**	1.00	37.96	10.07	0.47**	1.00	35.60	11.65

** $p < 0.01$

Note: Scale 1 range from 0 to 240.
Scale 2 range from 0 to 48.

Table 4.19

Bivariate Correlation Matrix (Waves 5-8): Summed Character and Parental Involvement Scales (N=55)

Variables	Wave 5				Wave 6				Wave 7				Wave 8			
	1	2	Mean	SD	1	2	Mean	SD	1	2	Mean	SD	1	2	Mean	SD
1. Summed Character Scales	1.00		177.25	35.39	1.00		182.31	37.61	1.00		182.75	34.30	1.00		182.21	37.76
2. Summed Parental Involvement Scales	0.61**	1.00	119.21	25.77	0.54**	1.00	103.42	25.38	0.54**	1.00	99.11	27.54	0.59**	1.00	88.11	34.56

** $p < 0.01$

Note: Scale 1 range from 0 to 240.
Scale 2 range from 0 to 144.

Table 4.20

Bivariate Correlation Matrix (Waves 5-8): Summed Character and Adult Mentor Scales (N=55)

Variables	Wave 5				Wave 6				Wave 7				Wave 8			
	1	2	Mean	SD	1	2	Mean	SD	1	2	Mean	SD	1	2	Mean	SD
1. Summed Character Scales	1.00		177.25	35.39	1.00		182.31	37.61	1.00		182.75	34.30	1.00		182.21	37.76
2. Summed Adult Mentor Scale	0.44**	1.00	39.89	13.49	0.21**	1.00	39.76	13.16	0.26**	1.00	39.82	13.62	0.39**	1.00	37.74	15.21

** $p < 0.01$

Note: Scale 1 range from 0 to 240.
Scale 2 range from 0 to 60.

Analysis by Wave

Multiple regression analyses conducted at each wave revealed a significantly predictive effect of peer relationships, parental involvement, and adult mentors on character at each wave. The results indicated the three predictors explained 49.4% of the variance of character at Wave 5 ($R^2 = 0.494$, $F(3, 546) = 178.026$, $p < 0.001$), 31.8% of the variance in Wave 6 ($R^2 = 0.318$, $F(3, 546) = 84.764$, $p < 0.001$), 28.6% of the variance in Wave 7 ($R^2 = 0.286$, $F(3, 546) = 72.856$, $p < 0.001$), and 41.1% of the variance in Wave 8 ($R^2 = 0.411$, $F(3, 546) = 126.903$, $p < 0.001$). At Wave 5, peer relationships ($\beta = 0.313$, $p < 0.001$), parental involvement ($\beta = 0.449$, $p < 0.001$), and adult mentors ($\beta = 0.171$, $p < 0.001$) were found to be significant predictors of the participant's character. In Wave 6, peer relationships ($\beta = 0.181$, $p < 0.001$) and parental involvement ($\beta = 0.499$, $p < 0.001$) were found to be significant predictors of the participant's development of character while adult mentors was not. In Wave 7, only parental involvement ($\beta = 0.516$, $p < 0.001$) was found to be significant. Wave 8 was similar to Wave 6 with peer relationships ($\beta = 0.263$, $p < 0.001$) and parental involvement ($\beta = 0.466$, $p < 0.001$) having a significant impact on the development of the participant's character (refer to Table 4.21).

Multiple regression analyses were also used to test if the influence of peer relationships, parental involvement, and adult mentors at Waves 5, 6, 7, and 8 were significantly predictive of the character score of the participants at Wave 8. Results indicated the three predictors explained 25% of the variance in Wave 5 ($R^2 = 0.25$, $F(3, 546) = 60.777$, $p < 0.001$), 24.3% of the variance in Wave 6 ($R^2 = 0.243$, $F(3, 546) = 58.391$, $p < 0.001$), 32.1% of the variance in Wave 7 ($R^2 = 0.321$, $F(3, 546) = 86.202$, $p < 0.001$), and 41.1% of the variance in Wave 8 ($R^2 = 0.411$, $F(3, 546) = 126.903$, $p < 0.001$). At Wave 5 and 6, peer relationships (Wave 5, $\beta = 0.443$, $p < 0.001$; Wave 6, $\beta = 0.233$, $p < 0.001$) and parental involvement (Wave 5, $\beta = 0.117$, $p < 0.01$; Wave 6, β

= 0.378, $p < 0.001$) were found to be significant predictors of the participant's character while adult mentors was not. In Wave 7, only parental involvement ($\beta = 0.578$, $p < 0.001$) was found to be significant. Wave 8 was similar to Waves 5 and 6 with peer relationships ($\beta = 0.263$, $p < 0.001$) and parental involvement ($\beta = 0.466$, $p < 0.001$) having a significant impact on the development of the participant's character (refer to Table 4.22).

Table 4.21

Summary of Multiple Regression Analysis of Waves 5 through 8 for Variables Predicting Character of Adolescents at each Wave

Variables	Wave 5			Wave 6			Wave 7			Wave 8		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Peer Relationships	1.01***	0.10	0.31	0.79***	0.17	0.18	0.12	0.16	0.04	0.85***	0.12	0.26
Parental Involvement	0.62***	0.05	0.45	0.74***	0.06	0.50	0.64***	0.06	0.52	0.51***	0.04	0.47
Adult Mentors	0.45***	0.09	0.17	-0.15	0.11	-0.05	-0.02	0.11	-0.01	0.07	0.10	0.30
<i>R</i> ²		0.49			0.32			0.29			0.41	
<i>F</i>		178.03***			84.76***			72.86***			126.90***	

*** $p < 0.001$

Table 4.22

Summary of Multiple Regression Analysis of Variables Predicting Character of Adolescents using the Wave 8 Character Variable

Variables	Wave 5			Wave 6			Wave 7			Wave 8		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Peer Relationships	1.52***	0.13	0.44	1.03***	0.18	0.23	0.11	0.17	0.03	0.85***	0.12	0.26
Parental Involvement	0.17**	0.06	0.12	0.56***	0.06	0.38	0.79***	0.06	0.58	0.51***	0.04	0.47
Adult Mentors	0.12	0.12	0.04	-0.10	0.12	-0.03	-0.18	0.12	-0.06	0.07	0.10	0.30
<i>R</i> ²		0.25			0.24			0.32			0.41	
<i>F</i>		60.78***			58.39***			86.20***			126.90***	

** $p < 0.01$; *** $p < 0.001$

Analysis Including Control Variables

I conducted a four step hierarchical multiple regression analysis for predicting character at Wave 8 for parental involvement, peer relationships, and adult mentors ($N = 55$). The control variables for the models were sex, race, and location at Waves 5, 6, 7, and 8. An additional control variable added was character. Character at Wave 5 was added in the Wave 5 and 6 models, character at Wave 6 was added in the Wave 7 model, and character at Wave 7 was added in the Wave 8 model. Character was added as a control variable in these models to allow the variance from the previous waves to be isolated.

Parental involvement was entered in the first step due to the daily interactions parents have with their children and the influence the parents have on the social and cognitive development of their child. Peer relationships was entered in step two because Moore and Halle (2001) indicate the peer relationships help refine social interaction of the adolescent. Adult mentors were entered in step three, followed by sex, race, location, and character as the control variables in step four.

For Wave 5, the hierarchical multiple regression revealed at step one, parental involvement ($R^2 = 0.064$, $F(1, 548) = 37.487$, $p < 0.001$) contributed significantly and added to 6% of the variance of predicting character at Wave 8. Adding peer relationships ($R^2 = 0.249$, $F(2, 547) = 90.670$, $p < 0.001$) in step two increased the variance of predicting character at Wave 8 to 24.9% and was significant. In step three, adult mentors ($R^2 = 0.250$, $F(3, 546) = 60.777$, $p = 0.319$) was added, was not significant, and changed the variance of predicting character at Wave 8 to 25%. In step four, sex, race, location, and character at Wave 5 ($R^2 = 0.446$, $F(7, 542) = 62.216$, $p < 0.001$) was added which increased the variance of predicting character at Wave 8 to 44.6% and was significant.

The hierarchical multiple regression for Wave 6, revealed at step one, parental involvement ($R^2 = 0.195$, $F(1, 548) = 132.759$, $p < 0.001$) contributed significantly and added to 19.5% of the variance of predicting character at Wave 8. Adding peer relationships ($R^2 = 0.242$, $F(2, 547) = 87.310$, $p < 0.001$) in step two increased the variance of predicting character at Wave 8 to 24.2% and was significant. In step three, adult mentors ($R^2 = 0.243$, $F(3, 546) = 58.391$, $p = 0.416$) was added and slightly changed the variance of predicting character at Wave 8, but was not significant. In step four, sex, race, location, and character at Wave 5 ($R^2 = 0.511$, $F(7, 542) = 80.957$, $p < 0.001$) was added which increased the variance of predicting character at Wave 8 to 51.1% and was significant.

For Wave 7, the hierarchical multiple regression revealed at step one, parental involvement ($R^2 = 0.318$, $F(1, 548) = 256.018$, $p < 0.001$) contributed significantly and added to 31.8% of the variance of predicting character at Wave 8. Adding peer relationships ($R^2 = 0.319$, $F(2, 547) = 127.838$, $p = 0.770$) in step two decreased the variance of predicting character at Wave 8 to 31.9% and was not significant. In step three, adult mentors was added ($R^2 = 0.318$, $F(3, 546) = 86.202$, $p = 0.129$), was not significant, and slightly increased the variance of predicting character at Wave 8 to 31.8%. In step four, sex, race, location and character at Wave 6 ($R^2 = 0.566$, $F(7, 542) = 103.464$, $p < 0.001$) was added which increased the variance of predicting character at Wave 8 to 56.6% and was significant.

Finally, for Wave 8, the hierarchical multiple regression revealed at step one, parental involvement ($R^2 = 0.349$, $F(1, 548) = 293.921$, $p < 0.001$) contributed significantly and added to 34.9% of the variance of predicting character at Wave 8. Adding peer relationships ($R^2 = 0.410$, $F(2, 547) = 190.242$, $p < 0.001$) in step two increased the variance of predicting character at Wave 8 to 41% and was significant. In step three, adult mentors was added ($R^2 = 0.411$, $F(3,$

546) = 126.903, $p = 0.461$), was not significant, and slightly increased the variance of predicting character at Wave 8 to 41.1%. In step four, sex, race, location and character at Wave 7 ($R^2 = 0.705$, $F(7, 542) = 184.958$, $p < 0.001$) was added which increased the variance of predicting character at Wave 8 to 70.5% and was significant. The results are displayed in Tables 4.23 through 4.26. Figure 4.1 displays the standardized beta's across waves in a bar graph of the independent variables.

To review the possibility of Type 1 Error, the Durbin-Watson value was calculated. The Durbin-Watson value was 2.178 at Wave 5, 1.953 at Wave 6, 2.153 at Wave 7, and 2.024 at Wave 8 which converged close to 2.0, therefore the probability of Type 1 Error is minimal (Rutledge & Barros, 2002).

Table 4.23

Hierarchical Multiple Regression Analyses Predicting Character at Wave 8 for Parental Involvement, Peer Relationships, Adult Mentors, Sex, Race, Location, and Character at Wave 5 (N = 55)

Predictor Variables	Wave 5				
	<i>B</i>	<i>SE B</i>	β	R^2	<i>F</i>
Step 1				0.064***	37.49***
Parental Involvement	0.37***	0.06	0.25		
Step 2				0.249***	90.67***
Parental Involvement	0.20***	0.06	0.14		
Peer Relationships	1.52***	0.13	0.45		
Step 3				0.250	60.78***
Parental Involvement	0.17**	0.06	0.12		
Peer Relationships	1.52***	0.13	0.44		
Adult Mentors	0.12	0.12	0.04		
Step 4				0.446***	62.22***
Parental Involvement	-0.16**	0.06	-0.11		
Peer Relationships	0.72***	0.13	0.21		
Adult Mentors	-0.10	0.11	-0.04		
Race	-1.99***	0.55	-0.12		
Sex	10.09***	1.99	0.18		
Location	-1.44**	0.55	-0.10		
Character at Wave 5	0.54***	0.05	0.51		

** $p < 0.01$; *** $p < 0.001$

Table 4.24

Hierarchical Multiple Regression Analyses Predicting Character at Wave 8 for Parental Involvement, Peer Relationships, Adult Mentors, Sex, Race, Location at Wave 6, and Character at Wave 5 (N = 55)

Predictor Variables	Wave 6				
	<i>B</i>	<i>SE B</i>	β	<i>R</i> ²	<i>F</i>
Step 1				0.195***	132.76***
Parental Involvement	0.66***	0.06	0.44		
Step 2				0.242***	87.31***
Parental Involvement	0.54***	0.06	0.36		
Peer Relationships	1.01***	0.17	0.23		
Step 3				0.243	58.39***
Parental Involvement	0.56***	0.06	0.38		
Peer Relationships	1.03***	0.18	0.23		
Adult Mentors	-0.10	0.12	-0.03		
Step 4				0.511***	80.96***
Parental Involvement	0.59***	0.06	0.40		
Peer Relationships	-0.07	0.17	-0.02		
Adult Mentors	-0.11	0.10	-0.04		
Race	-3.16***	0.53	-0.19		
Sex	14.05***	1.89	0.25		
Location	-2.84***	0.49	-0.20		
Character at Wave 5	0.38***	0.04	0.35		

*** $p < 0.001$

Table 4.25

Hierarchical Multiple Regression Analyses Predicting Character at Wave 8 for Parental Involvement, Peer Relationships, Adult Mentors, Sex, Race, Location at Wave 7, and Character at Wave 6 (N = 55)

Predictor Variables	Wave 7				
	<i>B</i>	<i>SE B</i>	β	R^2	<i>F</i>
Step 1				0.318***	256.02***
Parental Involvement	0.77***	0.05	0.56		
Step 2				0.316	127.84***
Parental Involvement	0.76***	0.06	0.56		
Peer Relationships	0.05	0.16	0.01		
Step 3				0.318	86.20***
Parental Involvement	0.79***	0.06	0.58		
Peer Relationships	0.11	0.17	0.03		
Adult Mentors	-0.18	0.12	-0.06		
Step 4				0.566***	103.46***
Parental Involvement	0.05***	0.06	0.37		
Peer Relationships	0.54***	0.14	0.14		
Adult Mentors	-0.36***	0.10	-0.13		
Race	-2.93***	0.51	-0.17		
Sex	8.22***	1.80	0.15		
Location	-2.54***	0.46	-0.18		
Character at Wave 6	0.38***	0.03	0.38		

*** $p < 0.001$

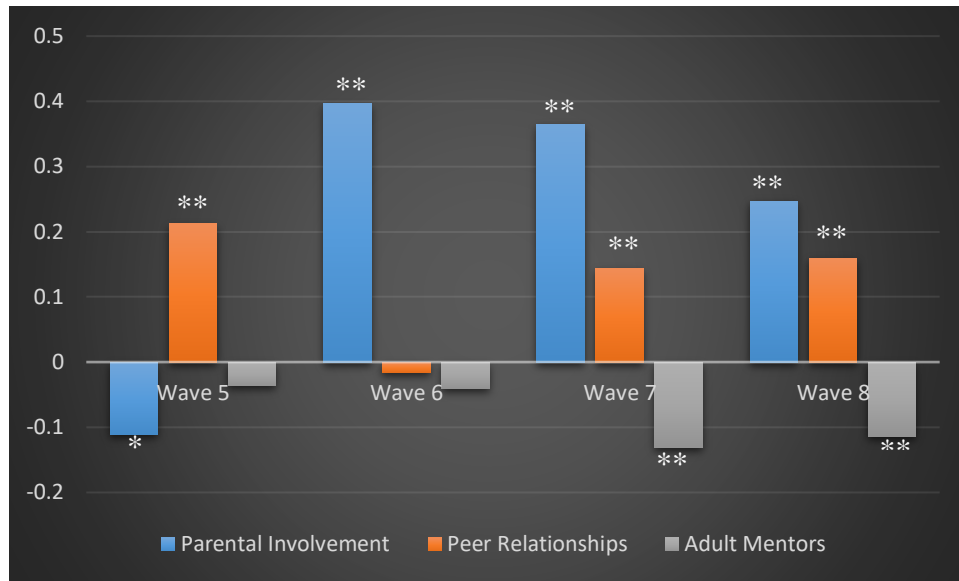
Table 4.26

Hierarchical Multiple Regression Analyses Predicting Character at Wave 8 for Parental Involvement, Peer Relationships, Adult Mentors, Sex, Race, Location at Wave 8, and Character at Wave 7 (N = 55)

Predictor Variables	Wave 8				
	<i>B</i>	<i>SE B</i>	β	R^2	<i>F</i>
Step 1				0.349***	293.92***
Parental Involvement	0.65***	0.04	0.59		
Step 2				0.410***	190.24***
Parental Involvement	0.52***	0.04	0.48		
Peer Relationships	0.88***	0.12	0.27		
Step 3				0.411	126.90***
Parental Involvement	0.51***	0.04	0.47		
Peer Relationships	0.85***	0.12	0.26		
Adult Mentors	0.07	0.10	0.03		
Step 4				0.705***	184.96***
Parental Involvement	0.27***	0.03	0.25		
Peer Relationships	0.51***	0.10	0.16		
Adult Mentors	-0.28***	0.07	-0.11		
Race	-2.06***	0.41	-0.12		
Sex	-1.21	1.49	-0.02		
Location	-1.70***	0.37	-0.12		
Character at Wave 7	0.68***	0.03	0.62		

*** $p < 0.001$

Figure 4.1 Standardized Beta's of Independent Variables Across Waves



* $p < 0.01$; ** $p < 0.001$

When the control variables (sex, race/ethnicity, location, and character) were added in the multiple hierarchical regression analysis, the variance decreased to 44.6% at Wave 5 when compared to 49.4% with the multiple regression analysis. Wave 6 the variance was 51.1% with the control variables included and 31.8% with the multiple regression analysis without the control variables. The variance increased again with the control variables added in Wave 7 from 28.6% in the multiple regression to 56.6% when the control variables were added. Finally, in Wave 8, the variance increased from 41.1% (multiple regression) to 70.5% with the control variables added. At all four waves, the variance was significant for the multiple regression and hierarchical multiple regression analyses. Throughout Waves 5, 6, 7, and 8, race and location were negative and significant and sex was positively significant in Waves 5, 6, and 7. The character control variable was positively significant throughout all four waves.

5. Summary, Conclusions, and Recommendations

Discussion

My study examined individual character development among youth in their high school years by focusing on the predictive validity of three elements of the adolescent microsystem (i.e., peer relationships, parental involvement, adult mentors). I analyzed questionnaire results from the 4-H Study of PYD to gain a measure of how parental involvement, peer relationships, and adult mentors influenced youth differently for freshmen, sophomore, junior, and seniors in high school. More specifically, I sought to answer these research questions:

- 1) To what degree do parental involvement, peer relationships, and adult mentors impact adolescent's development of character in youth?
- 2) How does parental involvement, peer relationships, and adult mentors impact adolescent's development of character over time (freshmen to senior in high school)?

Results reveal parental involvement significantly predicts youth's self-assessed character at each of the freshman, sophomore, junior, and senior years. Peer relationships are predictive at the freshman, sophomore, and senior years while adult mentors are predictive at only the freshman year.

The second research question examined the effect of parental involvement, peer relationships, and adult mentors on the development of character over time (freshmen to senior in high school), that is, character during the senior year. Similar to the first research question, the hierarchical multiple regression analysis revealed parental involvement to be significant across all four years in this study. Peer relationships were significant during three of the four years, specifically freshman, junior, and senior years. However, adult mentors are negatively

significant during the junior and senior years suggesting that youth may have struggled some with other adults in their lives.

When predicting character during the senior year, the amount of variance explained by parents, peers, and adult mentors changed each year across all four years [Wave 5 (freshman) = 25%; Wave 6 (sophomore) = 24%; Wave 7 (junior) = 32%; Wave 8 (senior) = 41%] suggesting each year may bring unique opportunities and/or challenges. However, adult mentors had minimal impact during this timeframe. When control variables of race, sex, location, and character at the previous wave were included, the percentage of variance predicting character during the senior year dramatically increased with a difference between 19.6% and 29.5%. Clearly gender, location, and race have specific roles in character development.

Parental Involvement. Parents significantly affect individual character development each year during high school and over time, which is consistent with the findings of Berkowitz and Grych (1998) who found parents to provide various levels of support to their children as they interact. Moore and Halle (2001) suggest the interaction between a parent and child influences the development of the child socially. These results support Bronfenbrenner's (1986; Bronfenbrenner & Morris, 1998) bioecological model that the elements (individual) that are most close to the youth have the potential for the greatest effect. Between early childhood and young adolescence, youth spend a significant amount of time with his or her parent or parents as they are not yet able to be gainfully employed outside of the home nor, in many states, old enough to drive. As youth age, they gradually spend more time with their peers face-to-face, on the phone, texting, and even through social media. Moore and Halle (2001) found while some parents feel peers have a negative influence on their child, greater variance is explained by the parental presence than that of peers. While these results are generally supportive of Lickona (2001) and

the components of character: moral knowing, moral feeling, and moral action, they do not tease apart specifically how each of these elements impact knowing, feeling, and action.

Consequently, further research is warranted. For example, Berkowitz and Grych (1998) indicate parents assist youth in developing their capacities for self-control, which is a characteristic of Lickona's theory. Bowers and colleagues (2012) found youth who perceive their parents as being highly involved in their lives during their sophomore year in high school have significantly higher scores on the mean of all five Cs of PYD, which includes character. During the junior year, youth reported the same results; however, competence is not found to be significant. As seniors in high school, youth whose parents are both highly involved and of the permissive parenting style scored the highest on character, confidence, competence, and connection in general. Finally, youth who have the personal quality of higher intentional self-regulation are found to have self-reported positive character changes (i.e., integrity, moral compass, and socially conscious). This evidence strongly suggests that parents instill aspects of morality within their children and their children are attending to these lessons. Parents, however, share this role with peers. What is the effect age-mates have on the character of youth?

Peer Relationships. To date, there is limited research on the specific relationship between peers and individual character development utilizing the positive youth development framework. However, results from this study suggest that there is a strong predictive relationship between peers and parents during the high school years. From late childhood to early adolescence, research documents that youth spend less time with family their time spent with peers increases (Larson & Richards, 1991). Friendships serve as another avenue of support outside of the family and provide intimacy and emotional security, in good times and bad (Mooney, Laursen, & Adams, 2007; Moore & Halle, 2001). Hershberg, DeSouza, Warren,

Lerner, and Lerner (2014) indicate a committed focus on time and resources should be made to assist youth to connect to their peers, particularly during times of educational context transition. Lerner (2007) confirms adolescents pick their friends based on similar interests and values. The significance peer relationships explain in character over time in my study is consistent with Schonert-Reichl's (1999) findings that "peer relationships and friendships adjustment both affect moral reasoning directly and indirectly" (p. 270). Hartup (1996) concluded that friendships during adolescence are developmentally significant: friends are viewed as a daily cognitive and social resource. Supportive relationships between individuals who are socially competent have advantages developmentally. However, researchers cannot ignore the potential and dynamic impact of social media and the advancement and availability of technology among youth.

As previously discussed, teens (age 13-17) engage with their closest friends and other peers in various ways, through texting, social media, and other technological venues (Pew Research Center, 2015b). During the data collection for this study, the Pew Research Center (2007b) found teens using a multitude of communication outlets to communicate with their friends: 39% use a landline telephone to call friends; 35% use a cell phone to call friends; 31% spend time with their friends in person; 28% use instant messaging; 27% send text messages; 21% use social media messaging; and 14% send email messages.

However, in eight years, the change in engagement with social media is dramatic. On a typical day, 30 text messages are sent or received by teens who own a cell phone (Pew Research Center, 2015a). On average, females send 23 more text messages than males on a daily basis. While school offers a space for personal engagement with close friends, the primary methods of communications among teens includes 49% text messaging; 20% social media outlets; 13% phone call; and 6% video games.

The social media platforms have grown in number and evolved in complexity. According to the Pew Research Center (2015a), Facebook (average of 145 friends) is used by 71% of teens on social media, followed by Instagram (52%; average of 150 followers), Snapchat (41%), Twitter (33%; average of 95 followers), and Google+ (33%). Fifty-seven percent of teens indicated that they had met a new friend through online outlets, with online gameplay and social media being the most common settings (Pew Research Center, 2015b).

While character is predicted by interaction with peers, the data set did not lend itself to differentiate the impact of social media compared to face-to-face engagement in peer relationships on character. However, we know peer relationships continue to change as technology changes and as society changes. Consequently, any further research must consider if and how the form of engagement makes a difference (if any) on character development.

Adult Mentors. The non-significant results of adult mentorship in the presence of parental interaction and peers is inconsistent when compared with the prior research in which adult mentorship was studied singularly (Zand et al., 2009). While Berkowitz (2011) found if a positive relationship develops between an adolescent and a mentor, it leads to the adolescent modeling the character strengths of the mentor. My study shows, when in the presence of parents and peers, the engagement with adult mentors is not predictive or negatively predictive of character development in high school seniors. Lerner (2007) proposes that adult mentors are resources and assets to youth according to the PYD framework. While it seems intuitively contradictory, we might consider several explanations. First, we should ask if the youth understood what an adult mentor is, therefore, did they understand the questions asked of them in this section of the survey. For example, the terms teacher, custodian, minister, or leader may be more familiar terminology than mentor. Secondly, it may be that youth had several adult

mentors to which they avail themselves and when asking the adult mentors for input on a situation, youth may have conflicted feedback from the adult mentors, unable to discern to which mentor they should reference. Additionally, it is possible that youth may not have been able to identify any adult mentors to which to turn. The Positive Youth Development Framework is comprised of five C's in addition to character (competence, confidence, connection, caring, and contribution). While Lerner (2007) states adult mentors are assets to youth, it may be that adult mentors contribute more heavily to one or more of the other C's when compared to character. Finally, it is possible the impact of the adult mentor is truly not yet visible to the youth, that is, the guidance provided will not manifest itself in youth's thinking and behavior sometime after the senior year.

Adult mentors are often leaders among youth development programs, which allow for youth to interact with one another, effectively set goals, have fun, and socialize (Larson, 2007). Structured youth development programs allow for a more favorable environment with a variety of ways for youth to experience positive character development. Researchers asked in a study with 2,280 high school juniors from 19 high schools, whether or not the students experienced “a diverse set of learning experiences in different daily contexts” (Larson, 2007, p. 279). Results revealed 40% of the participants who were in a youth development program reported they “became better at sharing responsibility” (p. 279) compared to 20% of the students who indicated they learned this during class, most likely from the adult leader who frequently became mentors in their roles. Additionally, youth who were in a youth development program reported a lower number of negative peer dynamics and influence than in other friend interaction settings. Through teamwork, youth learn the value of helping others and being helped, receiving feedback and giving feedback, and the opportunity to lead others and the opportunity to follow (Larson,

2007). Each of these skills may be facilitated by the adult leaders/mentors. Larson (2007), highlights from his research that youth learn from their experiences an ability to see a situation from another persons' perspective and gain "growing trust leading to the development of collective norms" (p. 285) consistent with moral feeling (Lickona, 2001). Consequently, empirical evidence exists to suggest adults in these programs are offering mentoring opportunities; however, in the presence of peers and parents, mentors are not adding additional value.

Impact of Control Variables

Results of my study contribute to the scholarship on character by indicating that a highly influential period for character development occurs during adolescence. Youth gender, race, location, and character as control variables at the previous wave, explains additional variance beyond that of parents, peers, and adult mentors. The importance of these variables needs much more research and because the population was very homogeneous, I was unable to tease out the true significance of each variable. There were more females than males in the sample, and in each model, females always rated character higher than males, therefore there is moderation by gender with females scoring higher than males. Race has a negative but significant relationships with character. However, due to the small sample size, further analysis is not reliable. Based on the results in my study, youth in the most rural area have lower character scores when compared with the youth in the highest populated area. However, this is said with caution because the location variable was divided into eight categories and due to the small sample size, further analysis cannot occur.

Schonert-Reichl (1999), found for both sexes that the leadership nominations the students received were positively and significantly related to moral reasoning, an aspect of character.

“For girls, moral reasoning was related significantly to prosocial behavior” (p. 263). Prosocial behavior for females was significantly related to moral reasoning. In comparison to boys, moral reasoning was negatively and significantly related to withdrawn behavior and positively significantly related to antisocial behavior. “Peer relationships and friendships adjustment both affect moral reasoning directly and indirectly” (p. 270). Social behaviors mediated between peer acceptance and moral reasoning (Schonert-Reichl, 1999).

Implications for the Youth Practitioner

In recognition of the strong influence of peers on character, youth development program practitioners must continue to encourage the teamwork and teambuilding because these activities require youth to examine questions of social norms and expected behaviors. Youth tend to select peers who have the same values as they have, therefore peer-to-peer interaction is important as it relates to character development (Lerner, 2007). Because of this peer-to-peer interaction, peer mentoring is a strategy for character development which practitioners should seek to develop in their programming, directly or indirectly.

The youth leader’s role to intentionally provide balance between encouraging youth and providing structure and support (Larson, 2007). While the findings from my study suggest the role of the adult mentor does not stand out in comparison to peers and parents, the influence may be observed, as noted, in the other strengths and/or later during emerging adulthood.

Consequently, youth leaders must remain intentional about provision of experiences that encourage character development. Practitioners should provide youth with freedom to grow and experiment with their own ideas in a safe environment. Being there to help youth talk through their ideas, help them think through risk management, help them consider the reality of the situation or idea, etc., are all important aspects of an adult volunteer/practitioner. “Within the

context of adult structure and support, youth readily become active producers of this developmental change” (Larson, 2007, p. 290). Additionally, the results from my study suggest that practitioners should work closely with parents to help understand the importance of family culture, and to be as consistent as possible in expectations. Consistent with Lickona (2001), my results suggest parents play a crucial role in the development of youth’s character. Additionally, parental interaction supports cognitive, and emotional (Lickona, 2001), and prosocial behavior (Park, 2004). Practitioners should also vigilantly continue to educate themselves on parenting and the influence it has on character development of adolescents.

To reiterate the findings from Moore and Halle (2001), Berkowitz and Grych (1998), Seevers, Hodnett, and Van Leeuwen (2011), and Park (2004), parents should be encouraged to be involved in their high school adolescent’s life. Having a positive relationship with parents, being an engaged participant in an activity with parents, and having a positive, emotional connection are all components of positive youth development (Moore & Halle, 2001). Parents provide various levels of support to their children for the skills youth are developing and continuing to develop through guidance and feedback (Berkowitz & Grych, 1998). Seevers, Hodnett, & Van Leeuwen (2011) compared parental support of members of one youth development organization with the parental support of non-members and found that members were more likely to discuss important items with their parents/guardians more frequently than those who were not members. Character can be taught through education, parenting, and interaction with society. Youth development organizations should continue to emphasize character education in their programs.

Implications for the Researcher

As suggested, additional research is needed to tease out the specific influence of the adult mentor(s) related to context and time, specifically as it relates to the development of character of high school adolescents. As shown in my study, these elements work synchronously within the youth's context, and that, in the presence of peers and parents, adult mentors' influence is diminished; therefore, further research is essential to understand the tone of the relationship between the parents and the adult mentor on character, particularly when inconsistency may exist in expectations between these adults. Additionally, while my study indicates the importance of parents and peers on the character development of high school adolescents, additional research is needed to differentiate the unique aspects of parents compared to peers. The vast array of technology and social media venues should also be included as a component not only between peers, but also between peers and their parents. How does technology influence character development?

Limitations

Due to the small sample size, generalizing the results of this study is limited and replication of these analyses are encouraged using other data sets. However, while limited, the longitudinal nature of the sample does allow us to predict with some accuracy the effect of early life experiences later in life. Socioeconomic status is not included in this study because of the expansive drop in sample size that did not allow for reliable interpretation of results. The addition of socioeconomic status would not only recognize the literature on poverty and economic status on development, but would also allow a more detailed examination of the relationship between SES and character over time. In particular, research by Erickson and

colleagues (2009) provides evidence to suggest that more affluent teens are more likely to have mentors than less affluent.

I suggest analyzing separately the four scales of character synthesized for these analyses for a more focused examination of the specific aspect or components of character.

Using a secondary data set for my study had several advantages and challenges. It benefited from these advantages: it was cost effective (Bullock, 2007; Castle, 2003; Coyer & Gallo, 2005; Windle, 2010), a convenient method of collecting data (Windle, 2010), and it saved time (Coyer & Gallo, 2005; Windle, 2010). Using a secondary data set for my study alleviated the time it would have taken to locate collection sites and to collect the data itself (Coyer & Gallo, 2005), especially with longitudinal studies (Bullock, 2007; Greenhoot & Dowsett, 2012). Greenhoot and Dowsett (2012) pointed out using secondary data may be one of the only opportunities early career researchers may have to address longitudinal research questions, which was an advantage in my study. Using this secondary data set also allowed me to use the experienced skills of primary data collecting researchers (Castle, 2003). Using a secondary data set omitted the challenge of finding participants and managing parental consent and allowed access to data without compromising the confidentiality of the participants (Coyer & Gallo, 2005). While the 4-H Study of PYD helped me to “identify the individual and ecological bases of healthy, positive development among diverse adolescents,” (Lerner et al., 2005, p. 18) the PYD study concentrated on the 4-H Youth Development Program and did not use random selection, which limited the external validity leading to attrition. The use of secondary data sets allowed me to “efficiently tackle significant and often-challenging research questions that replicate, reinterpret, or expand on key findings in the field” (Greenhoot & Dowsett, 2012, p. 5).

Secondary data also has challenges. I considered the flaw or “lack of a theoretical framework, inadequate information about reliability and validity of the measures, inconsistency between the instruments and the conceptual and operational definitions of the variable, and sample selection biases” (Coyer & Gallo, 2005, p. 62). I considered that Windle (2010) indicated the importance of gathering as much information as possible regarding the process of data collection and the “demographic data should be carefully compared with any population to which the results will be applied” (p. 323).

I agree that one of the major disadvantages of using secondary data is that the data was collected for another purpose (Castle, 2003; Coyer & Gallo, 2005) and that the researcher has no control over the process of data collection (Castle, 2003). By using secondary data, my study was dependent on the primary researcher’s decision on the data collection (i.e., population studied, sampling design, measures and their definitions) (Castle, 2003). This lent to missing data (Windle, 2010), which was compensated for by using multiple imputation. Coyer and Gallo (2005) discussed the importance for the researcher using secondary data to know the definitions of the variables included in the data set and to be sure they are similar in nature to what he or she will be analyzing; otherwise unsimilar variables could lead to problems for the research study. My research study mirrored definitions, questions, etc. of the secondary data set I used. Greenhoot & Dowsett (2012) indicate while using secondary data may be a time saver when it comes to collecting data, it is important that the researcher not underestimate the amount of time it may take to familiarize himself or herself with the secondary data set. I dedicated extensive time to becoming familiar with the data set and understanding the waves of the Impact of 4-H Youth Development Study and the data set definitions. I ran numerous data analyses to help ensure the reliability and validity of the questions being analyzed.

Since a secondary data set is just that, secondary, it is important for me to remember using the secondary data set “has no control over *who* was sampled, *what* constructs were measured, or *how* they were measured” (Greenhoot & Dowsett, 2012, p. 5). The data should allow us to answer the research questions “even if the data set measures the desired constructs, the measurement instruments selected by multidisciplinary teams that designed the project may not be those that the secondary researcher would have selected him or herself” (p. 6). The theoretical framework guides selection of variables and definition of constructs. Upon my review, I determined that the research questions and hypotheses of my study lent to a good fit for this secondary data set.

Another limitation of using secondary data is the opportunity to discuss in detail the methodology behind the data collection (Church, 2001). Due to limitations with journals (i.e., word count), usually journals include a summarized version of methodology. “There is considerable information in the original data that cannot be recovered from the summary measures reported in the published article” (Church, 2001, p. 40). This limitation was overcome for my study since an article was published by the researcher who collected the original data and that article has been cited in this study. I highlighted my manipulation of this secondary data set in Chapter 3.

Conclusions

Parents, peers, and adult mentors all affect the development of an adolescent’s character during the high school years simultaneously but not equally. Bronfenbrenner (1986; Bronfenbrenner, & Morris, 1998) reminds those interested in youth development that the context in which adolescents live influences not only their development, but in turn, the community in which they live. Adolescence is a highly plastic and vulnerable period of character development

(Aoki, Romeo, & Smith, 2017). During adolescence, youth experience differential levels of peer pressure, stress of earning strong grades, deciding in which social circles to be a part of, exploring possible career paths including colleges and majors, and experimenting with a broader range of life-styles possibly including drugs and alcohol. Adolescents desire connectedness and community, but they also want to be recognized for their individuality. Therefore, it is imperative that youth development programs and practitioners incorporate opportunities for and encourage parental involvement within their programs. My research study validates the essential role of parents in character building. While parents may indicate they do not have time to help or even take a leadership role, they can engage with youth in other venues in meaningful ways.

Peer relationships are important in the context of the microsystem as well. As adolescents age, they are spending more and more time with their peers. Peers can be influential in character development as suggested by the results of my research study. However, parents are found to be consistently influential overtime. Adolescents and their peers have different levels of relationships in different contexts. Adolescents should be encouraged to invite their friends to various youth development programs in which they are involved. This means that the youth development programs and practitioners will need to keep an open mind by letting non-members (if applicable) attend and participate their programs, events, and activities. Because building relationships is key to youth development programs, why not continue to help adolescents build relationships with their close friends who may not be able to be a part of the specific youth development program?

Additionally, adult mentors have their place in the context of the microsystem, but more research is needed to identify the aspects of the mentorship between and non-parent adult and the adolescent which are vital to the adolescent's character development. Based on information

from my research study, we need to ask ourselves why mentors do not show up as being positively significant. Is it because parents are involved and adolescents need less help from other adult in their lives? Did the participants understand what an adult mentor meant? I recommend a closer look be taken at the questions researchers used to measure multiple adult mentors that generated the data set I used for analysis. Both practitioners and researchers should be consulted for review of the questions. The majority of youth development practitioners are adult mentors themselves, and they spend a great deal of time with adolescents. Therefore, they may have viable suggestions for improving the questions to measure the impact of adult mentors.

Future research suggestions would also include an expanded participation base as this study was made up of primarily Caucasian participants from more rural areas. Additionally, further analysis of the level of parental involvement with their high school adolescents to help in understanding specific ways parents impact character development of adolescents. Future research should also take into account the socioeconomic status of the adolescent's family.

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A. IRB Approval Letter



University Research Compliance Office

TO: Bronwyn Fees
FSHS
119N Justin

Proposal Number: 8255

FROM: Rick Scheidt, Chair
Committee on Research Involving Human Subjects

DATE: 04/12/2016

RE: Proposal Entitled, "A Comparative Study of the Impact of Peer Relationships, Parental Influence, and Adult Mentors on the Character Development of Adolescents Who Do and Do Not Participate in the 4-H Program"

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written - and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, 45 CFR §46.101, paragraph b, category: 4, subsection:

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.