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# THE MEDIATING EFFECT OF PARENTAL INVOLVEMENT ON PEER INFLUENCE AND BELONGINGNESS ON ADOLESCENT EDUCATIONAL ASPIRATIONS

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THE MEDIATING EFFECT OF PARENTAL INVOLVEMENT ON PEER INFLUENCE AND  
BELONGINGNESS ON ADOLESCENT EDUCATIONAL ASPIRATIONS

By

Thavy Van Garst

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University of the Pacific  
Stockton, CA

2022

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By

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## DEDICATION

This dissertation is dedicated to my grandmother and parents, Tha Van and Pheap Ros, for traveling the path unknown by leaving their homeland of Cambodia to a new land unbeknownst to them. The long and arduous journey they traveled allowed my siblings and I to pursue the American dream, an opportunity to pursue higher education. I am forever grateful to my parents for their unwavering support and commitment to working tirelessly to provide us with a nurturing environment. Without my grandmother and parents, I would not have grown into the person I am today. Thank you for teaching me the value of resiliency and perseverance so that I may accomplish this dream of mine.

*With a grateful heart, thank you mom and dad for your tireless spirits.*

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THE MEDIATING EFFECT OF PARENTAL INVOLVEMENT ON PEER INFLUENCE AND  
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Abstract

By Thavy Van Garst

University of the Pacific  
2022

Parental involvement has been found to be a significant influence in determining whether adolescents are more likely to succeed academically (Georgiou & Tourva, 2007). Amongst other influences, parental involvement has been shown to impact the ability to resist negative peer influence. Additionally, having a sense of belongingness influences the probability that an adolescent will aspire to achieve higher educational aspirations (Bouchard & Berg, 2017). However, researchers have yet to examine the combination of the importance of belongingness and the impact of positive peer influence on adolescents' educational aspirations. The present study aimed to investigate whether parental involvement had a significant effect on peer influence and belongingness on adolescents' educational aspirations after controlling for gender and socioeconomic status. This study analyzed data collected as part of the NICHD-SECCYD comprehensive longitudinal study. Specifically, the effects of peer influence and belongingness on educational aspirations were analyzed in AMOS27, using a path analysis model with parental involvement as a predictor variable. Although the results did not support that sense of belongingness has a significant influence on educational aspirations for self-concept in English and math, it did have a significant influence on self-concept. Furthermore, positive peer influence did not have a significant influence on educational aspirations for self-concept in English, math and sports. Additionally, results did not support sense of belongingness and peer

influence as a mediator between parental involvement and educational aspiration. Nevertheless, findings supported that positive parental involvement does have a significant influence on educational aspirations.

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## CHAPTER 1: INTRODUCTION

### **Background**

Various studies have researched the association between students' academic outcomes and whether parental involvement increased the likelihood of adolescents having higher educational aspirations. Researchers posited that adolescents who have parents involved in the educational process have better academic attainment than those adolescents who do not have parental involvement (Hansen & Gonzalez, 2014). Researchers such as Duncan, Featherman, and Duncan (1972), have identified the importance of educational and occupational attainment since the 1970s. Research studies conducted by Orfield and Paul (1994) and Schneider and Stevenson (1999) suggested that parental involvement heavily influences high school graduation rates for adolescents, particularly teenagers from all racial/ethnic and socioeconomic backgrounds. The graduation completion rates from 2000 to 2016 for Hispanic students 18-24 years old increased from 64 to 89 percent, while African American and Caucasian students' completion rates increased from 84 to 92 percent and 92 to 94 percent, respectively (National Center for Education Statistics, 2019).

Parental involvement has been shown to influence educational aspiration and help increase high school graduation rates, allowing adolescents to aspire to achieve higher education outcomes by applying to colleges and universities (Kao and Tienda, 1998). Although Kao and Tienda (1998) discovered that many adolescents aspired to achieve higher education, research indicated that in 2004 approximately 29 percent of young adults ages 25-29 received a Bachelor's degree or higher, which unfortunately signified that there is disproportionality when it comes to achieving higher education aspirations among all racial/ethnic group (Fox, Connolly &

Synder, 2005). The most recent data retrieved from the National Center for Education Statistics (NCES) indicated that about 62 percent of students who sought a bachelor's degree in a 4-year in 2012 completed the degree at the same institution within six years. Additionally, graduation rates were higher for females than the male population (65 vs. 59 percent). This suggested an increase in college attainment since 2004 (NCES, April 2020). Furthermore, researchers found that adolescents who had positive educational pathways increased occupational attainment, influencing local economic conditions such as unemployment rate, average annual salary, and productivity (Bureau of Labor Statistics (BLS).

Moreover, research suggested that adolescents who felt a sense of belongingness and had positive peer relationships were less likely to engage in risk-taking behavior, leading to higher educational aspirations (Bouchard & Berg, 2017). Igra and Irwin (1996) define "*risk-taking behavior*" as engaging in precocious or risky behavior, reckless, homicidal, suicidal behavior, and delinquency. According to the American Civil Liberties Union (2021), adolescents who participated in risky behaviors were more susceptible to being suspended or expelled.

Adolescents exhibiting risky behaviors had a higher chance of being funneled out of the public school system and into the juvenile and criminal justice system, creating a disparity among adolescents (ACLU, 2021). An individual imprisoned for over 6.5 years in Missouri costs taxpayers approximately \$22,187 per year, amounting to \$144,215 for spending 6.5 years in prison (ACLU Missouri, 2018), creating a financial crisis within the community. Adolescents who are incarcerated are less likely to find employment, live in poverty, have poor mental health, and engage in substance abuse (Barnett et al., 2017). Therefore, it was essential to study variables that influence adolescents' educational aspirations during the pivotal stage of educational attainment.

## Statement of the Problem

The development of identity is considered to be a primary task of adolescence as youths attempt to understand their role in society and culture (Grotevant & Cooper, 1985; Blatt & Blass, 1996; Cleveland & Reese, 2005; Deci & Ryan, 2000). Adolescents often question their values and beliefs when experiencing conformity or the urge to adjust in accordance with social circumstances (Grotevant & Cooper, 1985). During this phase, adolescents were more susceptible to peer influence, leading to irrational decision-making and participation in risky behaviors. An increase in irrational and risk-taking behaviors may negatively influence educational aspirations (Steinberg, 2007). Parental involvement was identified as an essential component in developing higher educational aspirations (Georgiou & Tourva, 2006). Fox, Connolly, and Snyder (2005) posit that higher education aspiration leads to adolescents aspiring to attain a college degree or higher level of education (i.e., graduate studies, professional programs, etc.).

Although there was research investigating the impact of parental involvement on educational aspiration, the research is mixed. Not all research provides a consistent picture of parental involvement in schooling or parental influence on adolescents' educational aspirations (Hill & Taylor, 2004). Additionally, while research suggested that negative peer influence had a deleterious effect on educational aspirations and attainment, there is limited research on whether positive peer relationships influence educational aspirations in a positive direction. For example, adolescents who associate with peers who engage in potentially harmful activities are prone to have higher levels of depression (Prienstein, 2007). Adolescents who may or have already engaged in potentially dangerous activities are more susceptible to exhibit antisocial behavior and substance abuse (Barry & Wentzel, 2006, Urberg, Luo, Pilgrim, & Degirmenciogul, 2003).

Researchers have yet to investigate whether positive parental involvement mediates the effect of belongingness, which may lead to higher education aspirations during adolescence. The premise of belongingness theory posits that adolescents engage in supportive and meaningful relationships, which can either promote student engagement in the case of positive peers or promote engagement in risky behavior in the case of negative peers. Adolescents who are part of positive peer groups are more likely to achieve academic goals and have high educational aspirations; conversely, adolescents who identify as belonging to negative peer groups are less likely to have higher educational aspirations (Baumeister & Leary, 1995).

### **Description of the Study**

A summary of the methodology used in this study is outlined in Chapter 3. Data were collected as part of the NICHD-SECCYD comprehensive longitudinal study. Specifically, the effects of peer influence and belongingness on educational aspirations were analyzed in AMOS27 using a path analysis model; the variables examined in the present SEM analyses included Socioeconomic Status (control), Gender (control), Parental Involvement (predictor), Resistance to Peer Influence (mediator), Belongingness (mediator), and Educational Aspirations (outcome). The three variables utilized to represent Educational Aspirations are Self-concepts in sports, math, and English.

### **Significance of the Study**

The study results may help researchers discover the various variables that affect the educational aspirations of adolescents. The research brought attention to the needs of adolescents who lacked parental involvement in schooling, which allows educators and mental health professionals to enhance their knowledge in helping adolescents achieve higher levels of educational aspirations (Schneider and Stevenson, 1999). Subsequently, the research was helpful

for parents, adolescents, and educators (Sansgiry), acknowledging the importance of parental involvement, positive peer influence, and sense of belongingness and that many of the variables highly influence the trajectory of adolescents' future outlook after achieving higher educational aspiration.

### **Research Questions**

The following research questions were addressed in the study:

1. Does positive peer influence lead to higher educational aspirations in adolescence after controlling for gender and socioeconomic status?
2. Do adolescents' who experience higher levels of belongingness have higher educational aspirations after controlling for gender and socioeconomic status?
3. Does parental involvement mediate the effect of peer influence and belongingness on adolescents' educational aspirations after controlling for gender and socioeconomic status?

### **Hypotheses**

It is hypothesized that students who report higher levels of positive peer influence will have higher educational aspirations when controlling for socioeconomic status and gender.

It is hypothesized that adolescents who experience higher levels of belongingness will have higher educational aspirations as compared to peers that do not experience high levels of belongingness when controlling for SES and Gender.

It is hypothesized that parental involvement will mediate the effect of peer influence and belongingness on educational aspirations when controlling for socioeconomic status and gender.

### **Overview**

The remainder of this dissertation discussed the applicable literature and summarized the methodology of the study. The review of literature delineates positive parental involvement in schooling. Its relation to an adolescent's educational aspiration; positive peer influence; sense of belongingness, as well as theoretical frameworks that support the premise that positive parental

involvement is associated with high educational aspirations. The methodology section outlined the study's hypothesis, research design, the instrumentation utilized from the NICHD-SECCYD database, a description of study variables, and statistical procedures. The results included statistical assumptions as well as Structural Equation Modeling path analysis. Lastly, the research paper discussed the findings and professional and educational implications for psychoeducational intervention.

## CHAPTER 2: LITERATURE REVIEW

### **Educational Aspirations and Academic Outcomes**

It is agreed among researchers that educational aspirations highly influence academic outcomes (Crede, Wirthwein, McElvany, & Steinmayr, 2015). The term ‘aspiration’ is defined as having a strong desire to achieve something high or great (Walberg, 1996). Researchers have posited that having high educational aspirations will help guide what students learn in school, how they prepare for adult life, and eventually, what career path is chosen (Walberg, 1996). Having high educational aspirations is pivotal to adolescents' future outlook, as the decisions made during the adolescent years determine future academic outcomes and job opportunities (Crede et al., 2015). Many researchers associate educational aspirations with adolescents' beliefs and goals (Crede et al., 2015). However, researchers such as Beal and Crockett (2014) are aware that many driving forces encourage adolescents to achieve higher educational aspirations, but it is contingent on other underlying factors.

Researchers like Beal and Crockett (2014) postulate that local norms and opportunities heavily influence educational goals as well. In their research, they discovered “that adolescents who reside in rural areas have lower educational aspirations as compared to those who live in urban areas” (p.4). This may be attributed to disparity in socioeconomic status and limited job opportunities requiring higher levels of education, which essentially affects adolescents' educational and occupational goals (Beal & Crockett, 2014). Furthermore, there is an implication that adolescents exposed to negative environments may have fewer opportunities for achieving educational attainment (Beal & Crockett, 2014). Overall, adolescents face many obstacles and challenges during this developmental phase. In fact, this is a time when

adolescents begin to cultivate their identities within their social context (Grotevant & Cooper, 1985). When adolescents begin to formulate their identities and feel a sense of belonging within their social context, it helps them organize, establish, and develop educational goals early on during the educational process. This allows individuals to have higher academic outcomes leading to better career opportunities and higher educational aspirations (Beal & Crockett).

Comparatively, Khattab (2015) predicates that adolescents with high educational aspirations have higher academic outcomes than individuals who lack educational aspirations. Individuals who have a higher level of self-esteem (perception of importance, worth, skillfulness, etc.) are inclined to feel worthy, have a stronger belief in their abilities, and are able to set clear goals for themselves, thereby motivating them to have higher educational aspirations. Conversely, research has also shown that having high aspirations without being able to achieve them may negatively impact overall well-being by “causing disappointment, frustration, and arguable social withdrawal” (Kattab, 2015 p. 732). Kattab (2015) goes on to argue that an individual's aspiration is not the sole identifying factor that influences high educational aspirations. There are other contributing factors such as positive parental involvement, negative peer influence and sense of belongingness all contribute to positive academic outcomes (Kattab, 2015).

Geckova, Tavel, van Dijk, Abel, and Reijneveld (2010) agreed with Khattab (2015) that there are other factors associated with educational aspirations among adolescents. Their study aimed to address the effort to explore the association between socioeconomic status, family background, healthcare, school-related factors, social/emotional support, and how institutionalized cultural capital such as formal education affects adolescents' educational trajectory (Geckova et. al, 2010). Their findings suggest that adolescents that require more

exposure to the academic world are those that are not receiving appropriate instructional guidance to help them succeed academically (Geckova et. al, 2010). Nevertheless, if adolescents receive support from people within the school system and there is parental involvement, the experiences adolescents are exposed to in school will stimulate educational aspirations within the educational setting (Geckova et. al, 2010). Ultimately, adolescents who lack higher educational aspirations are more prone to drop out of school, face homelessness, engage in risky behaviors, and face financial hardship (Geckova et. al, 2010).

Adolescents who consistently value the importance of education and have a strong sense of identity (e.g., strongly committed to their goals, have high self-esteem, and believe in themselves) are assumed to have higher educational aspirations. Additionally, positive parental involvement, particularly parents who are engaged in their students' education, affects the goals that their children set for themselves (Gonida & Cortina, 2014). This encourages students to persevere and commit to obtaining higher education.

### **Positive Parental Involvement and Educational Aspirations**

The definition of parental involvement encompasses many factors and represents numerous behaviors that may differ in various environments. According to Bowlby's attachment theory, the need to establish and sustain relationships is a crucial part of adolescents' development (Baumeister & Leary, 1995). When children have parents who are supportive of their students' learning versus being overly controlling, it facilitates the trajectory of the students' educational aspirations (Baumeister & Leary, 1995). Singh, Bickley, Trivette, Keith, Keith, and Anderson (1995) conducted a study on the four components of parental involvement that affect eighth-grade student achievement. These four components included "parent aspirations for children's education, parent-child communication about the school, home

structure, and parental participation in school-related activities" (p. 299). The authors argue that research in this area is limited, and the findings associated with the topic are inconclusive, therefore there is no definite definition as to what "parental involvement entails" (Singh et. al 1995).

Nevertheless, there are researchers who agree that having high educational aspirations is also contingent on specific practices within the home or school which can include parental desires, attitudes, beliefs, and expectations regarding their child's educational aspirations (Henderson & Mapp, 2002). Researchers such as Epstein and colleagues (1997) have posited that there are five dimensions of parental involvement. These five dimensions are paramount in determining their child's educational aspirations. The five dimensions include: helping with homework, establishing an open line of communication with the school system, volunteering at school functions, and participating in the decision-making process involving school.

Recent studies have identified that parents who are more involved and connected with their child's education are more academically driven and successful (Wang & Sheikh-Kahli, 2014). Additionally, Farrell, Henry, Mays, and Schoeny (2011) found that parental involvement in schooling also affects the child's ability to resist negative peer influence. These results suggest that students and parents who have an open line of communication are less likely to participate in delinquent and aggressive activities (Flannery, William, & Vazsonyi, 1999).

Even though existing research is unclear when it comes to providing a consistent picture of parental involvement in schooling and their influences on adolescents' educational aspirations, researchers have shown that parents' participation in schooling does increase adolescents' academic outcomes by helping them to become more aware of their future outlook (Hill et. al, 2004). In particular, parents who are supportive of their children's schooling without being

overbearing increase positive academic outlooks in adolescents leading to higher educational aspirations (Grolnick & Ryan, 1989; Joussemet, Koestner, Lokes, & Landry, 2005; Karbach, Gottschling, Spengler, Hegewald, & Spinath, 2013; Pomerantz, Grolnick, & Price, 2005).

Parents not only have a positive influence on educational aspirations they also provide the foundation for positive relations. Research indicates that parents who spend more time with their children have children with lower levels of delinquency and aggression (Flannery, Williams, & Vaszonyi, 1999). It is important for researchers to recognize that multiple factors may influence adolescents' educational aspirations during this pivotal stage, such as positive peer influence and feeling a sense of belongingness.

### **Positive Peer Influence on Educational Aspirations**

While there is a considerable amount of research examining how peer influence affects risky behavior in adolescents (Smith, Xiao, & Bechara, 2012; Romer, Betancourt, Brodsky, Giannetta, Yang & Hurt, 2011), there is limited research on how positive peer relationships can affect adolescents' educational aspirations. Furthermore, research shows that the effect of a student's identity on future aspiration, the amount in which the individual contemplates his or her future, does significantly influence his or her ability to resist peer influence. According to Bandura's (1986) Social Learning Theory, adolescents tend to mimic their peer behaviors, seeking acceptance and subsequently adopting behaviors with the goal of attaining social rewards. Unfortunately, many adolescents will engage in risky behaviors to fit in. One example is when an adolescent is invited to an exclusive party, everyone is observed engaging in risky behaviors such as smoking marijuana or drinking alcohol. Due to the nature of wanting to "fit in" they may engage in risky behaviors without taking into consideration what the consequences entail even if this means jeopardizing their future educational outlook.

Additionally, many studies have shown that relationships among adolescents are important determinants as to whether or not the individual is able to resist negative peer influence (Brechwald & Prinstein, 2011).

There is a consensus that adolescents do benefit from positive peer influence within both academic and non-academic settings (Ford & Smith, 2007; Juvonen, 2006, 2007; Martin & Dowson, 2009; Patrick, 1997; Ryan, 2000; Wentzel, 1999). Liem and Martin's (2011) study indicated that both same-sex and opposite-sex peers do contribute to higher positive engagement within the academic settings; concluding that regardless of gender, adolescents who find themselves engaging in positive relationships with their peers have higher educational aspirations (Liem & Martin, 2011).

Newman, Lohman, and Newman (2007) were also interested in whether adolescents feel a sense of belongingness among certain peer groups. Unlike Liem and Martin (2011), the study conducted by Newman and colleagues explored three aspects of peer membership in adolescence. They were interested in the following aspects: 1) peer group affiliation, 2) the importance of group membership, and 3) a sense of peer group belonging. Each of the three aspects was considered influential in determining adolescent behavior problems (Newman, Lohman, & Newman, 2007)). The need to belong is a psychological construct that requires adolescents to engage in various social environments not conclusive to one particular group but in a variety of different social cliques (Kiesner, Cardinu, & Bucci, 2002; Stone & Brown, 1999, Newman, Lohman, & Newman, 2007). Research shows that the need to belong to specific groups may highly influence how adolescents behave, whether negative or positive. Adolescents are more likely to change their behaviors and image to fit in with a particular group and to gain acceptance by said group (Newman, Lohman, & Newman, 2007)).

One study found that adolescents who form positive bonds within their peer relationships are more popular and have greater social reputations (Cauce, 1996). McGuire and Weisz (1982) found that they also have higher self-esteem. Furthermore, Buhrmester (1990) found that they are easily more adjusted psychologically. Essentially, the need to belong within the social group is crucial in determining adolescents' behavior problems and how well they adapt to the social context. The more adolescents feel a sense of belonging, they are less likely to engage in maladaptive behaviors, anti-social behavior, and risky or aggressive behavior, which reduces the likelihood of feeling inadequate (Newman, Lohman, & Newman, 2007)). Adolescents who engage in positive peer relationships and view themselves as belonging to a social group feel empowered, driven, and have a sense of purpose which in turn gives them higher educational aspirations.

### **Belongingness**

Maslow (1970) posited that belongingness is a basic human need, as humans “hunger for affectionate relationships with people in general, namely, for a place in his or her group or family” (p.43). When individuals lack a sense of belonging, they may experience loneliness, rejection, friendlessness, rootlessness, and exclusion (Maslow, 1970). Society often underestimates the influence of “the neighborhood, of one’s territory, of one’s clan, of one’s own ‘kind’, one’s class, one’s gang, one’s familiar working colleagues” (Maslow, 1970, p.44). He expounded on the idea that within his hierarchy of needs, individuals must feel a sense of belongingness within their environment. This need must be met for individuals to achieve their goals and have higher aspirations (Maslow, 1970). Nevertheless, Maslow also acknowledged that there is a degree of fixity within the hierarchy of basic needs (Maslow, 2013). He explains that some individuals’ level of basic needs varies depending on whether one finds it important

than the other. For example, some individuals may find that having high self-esteem is more practical than love, which affects their level of motivation (Maslow, 2013).

Regardless, research shows that a sense of belonging within the social context is a powerful motivator that keeps adolescents engaged in the learning process (Steinberg, 2007). In a study conducted by Baumeister and Leary (1995), they predicted that a sense of belongingness has to do with whether they can form social bonds within groups. Even though their study looked at the need to belong more in the context of attachments as the fundamental premise of human motivation, it gives a glimpse into the human desire to belong within the social context.

According to Baumeister and Leary (1995), the theoretical framework of belongingness theory places emphasis on the overarching need to belong; the need for continuous interactions with other individuals, as well as the need to perceive that there is an interpersonal relationship marked by affective concern, stability, and continuation in the near future. Belongingness theory resides on the premise that individuals who are in supportive and caring relationships are more likely to be engaged in schooling (Baumeister & Leary, 1995). In addition, Baumeister and Leary (1995) postulate that belongingness theory cultivates internal motivation, which may explain why adolescents strive for positive peer interactions within the social context and academic settings. It is also critical for adolescents to build sustainable and healthy peer relationships as doing so fosters a sense of belonging and decreases the chances of low satisfaction levels; in addition, it can in turn increase self-esteem and higher educational aspirations (Baumeister & Leary, 1995).

### **Belongingness and Educational Aspirations**

Although many researchers seek guidance from the theoretical framework of Maslow's hierarchy of needs, belongingness theory does not incorporate a hierarchical significance.

However, many researchers are interested in understanding the relations between peer group members and how it may have both positive and negative outcomes associated with behavior problems in relation to group dynamics. Many argue that adolescents who lack a sense of belongingness are at a higher risk of engaging in maladaptive behaviors that are both internal and external (Newman, Lohman, & Newman, 2007). For example, adolescents who have internalizing characteristics may present as being anxious, depressed, withdrawn, or have somatic complaints (Oldehinkel, Hartman, De Winter, Veenestra, and Ormel, 2004). Conversely, adolescents who externalize tend to present as having attention problems, aggressive, non-compliant, and argumentative behaviors (Oldehinkel et al., 2007). Regardless, the risk factors are contingent on the severity of the behaviors that adolescents may exhibit based on whether they feel a sense of belonging. Adolescents who exhibit more negative behaviors are prone to have lower levels of self-concept, which may lead to a sense of inadequacy, helplessness, and the manifestation of physical and/or physiological health problems (Baumeister & Leary, 1995).

From an educational perspective, threats to belongingness (i.e., rejection, social isolation, feelings of inadequacy) have contributed to lower levels of academic retention, an increase in delinquency, behavior problems, lack of motivation/educational attainment, and mental health problems (Newman, Lohman, & Newman, 2007). Conversely, belonging to a group may provide adolescents “with a sense of definition, purpose, meaning, worth, and social control, all of which contribute to positive mental health” (Newman, Lohman, Newman, 2007, p.259).

Not only does a sense of belonging facilitate higher educational aspirations (Baumeister & Leary, 1995), but research has also studied how resilience influences adolescents' educational aspirations. Therefore, a sense of belonging is an important attribute for adolescents to embrace to be academically successful.

### **Parental Involvement on Peer Influence and Belongingness on Educational Aspirations**

Parental involvement not only fosters belongingness and higher educational aspirations but also facilitates greater academic outcomes. Furthermore, parental involvement also acts as a mediator between adolescents' educational aspirations and negative peer relationships (Flannery, Williams, & Vaszonyi, 1999). Parents who engage in positive academic involvement in their adolescents' life without being overbearing or controlling increases the chances of whether or not the adolescents will pursue higher education (Grolnick & Ryan, 1989; Joussemet, Koestner, Lokes, & Landry, 2005; Karbach, Gottschling, Spengler, Hegewald, & Spinath, 2013; Pomerantz, Grolnick, & Price, 2005).

Adolescents who feel a sense of belongingness within their peer groups are more likely to have higher levels of educational aspirations when compared to those that do not feel a sense of belongingness (Baumeister & Leary, 1995). The need to belong in a positive sustainable relationship increases the likelihood of having higher educational aspirations (Steinberg, 2007). Adolescents who belong to a positive peer group have a stronger sense of self-adequacy and will have higher educational aspirations (Steinberg, 2007). It is reasonable to expect that adolescents' ability to resist negative peer influence may mediate the relationship of higher educational aspirations. It is also arguable that significant differences exist between adolescents who have a higher sense of belonging compared to adolescents who feel a sense of inadequacy.

Therefore, it is hypothesized that adolescents who have parental involvement in schooling are more likely to have higher educational aspirations. This is an important area of research for educators to expound upon as many of these adolescents belong to a minority group who lack parental involvement in schooling. By conducting research targeting the minority group it will provide educators an overview of what programs should be implemented to help increase higher educational aspirations among these adolescents.

## CHAPTER 3: METHODOLOGY

**Sample**

This study utilized data from the National Institute of Child Health & Human Development Study of Early Child Care and Youth Development (NICHD-SECCYD), a comprehensive longitudinal study, which collected comprehensive information on 1,364 children from birth (1991) to age fifteen (2007). During the study, the number of participants slightly decreased at each phase due to various factors at each point during the study. Nevertheless, most participants remained in the study through the 16 years. The NICHD-SECCYD study was collected from ten sites across the United States. These sites are Charlottesville, VA; Irvine, CA; Lawrence, KS; Little Rock, AR; Madison, WI; Morganton, NC; Philadelphia, PA; Seattle, WA; and Wellesley, MA.

The first phase took place during infancy, the second phase took place in early childhood, the third phase was in middle childhood, and the fourth phase was in middle adolescence. The number of children involved in each phase of the study is shown below:

Table 1  
*Population Samples*

<b>Year</b>	<b>Children's Ages or Grade</b>	<b>Number of Children (and Their Families)</b>
1991-1994	Phase I, ages 0-3	1,364 children participated in the Study
1995-1999	Phase II, through 1st Grade	1,226 children participated in the Study
2000-2004	Phase III, through 6th Grade	1,061 children participated in the Study
2005-2007	Phase IV, through 9th Grade	1,009 children participated in the Study

Data in this study was selected from phase four when the individuals were 15 years of age (adolescence). The study consisted of a diverse range of participants, including minority ethnic backgrounds, working parents, single parents, parents with formal education, and families residing in low socioeconomic environments. However, the data did not include mothers who are under the age of 18, children with disabilities or children who resided in the hospital for more than seven days after birth, or non-fluent English speakers. Based on the information gathered from parental questionnaires, the children in the dataset were 82 percent Caucasian (White), 1 percent Asian, Aleutian, or Eskimo, less than 1 percent American Indian, 12 percent African American, and 4 percent other. Of these listed ethnicities, 6 percent were identified as Hispanic.

The aim of the NICHD-SECCYD study is intended to provide researchers with pertinent data, which acknowledges that the differences in childcare experiences heavily influence children's emotional, social, language development, intellectual growth, physical and health development as well as various development factors in infancy through middle adolescence.

### **Instrumentation**

**Sex and socioeconomic status.** The sex of the child in the study, and the family poverty-income-to-needs ratio (used to measure the socio-economic status of the family) were selected as the control variables. These two variables were chosen because research has consistently found them to be common causes of identity, resistance to peer influence, and future outlook and planning. The ratio used to measure a family's economic situation is computed by dividing the family's total income (without federal aid) by the federal poverty threshold.

**Parental involvement in schooling.** Parental involvement in the child's schooling was measured by a 10 item questionnaire (0 = "Never", 1 = "Sometimes", 2 = "Always", and 3 = "NA" [recoded to missing before creating composites]) that assessed the degree to which the

child's mother and father engaged in the children's education (i.e., the degree to which they are involved in school activities, help with homework, know the student's progress in school, etc.) and home environment, as well as parental regulation. The instrument measuring parental involvement in schooling did not provide percentile rank on the internal consistency reliability or validity indices. The rationale for choosing the instrument concludes that it has been used extensively in the psychological, sociological, and educational literature. It is well-accepted with documented validity and reliability, and it covers a broad topic in a very parsimonious way.

**Resistance to peer influence.** Information regarding the child's ability to resist peer influence was obtained via the "Resistance to Peer Influence Scale" or "Peer Pressure" questionnaire (Steinberg & Monahan, 2007) at age 15. This 9-item questionnaire (1 = "Not at all true", 2 = "Not very true", 3 = "Sort of true", 4 = "Very true") measures the child's capacity to stand up to peer pressure and behave as he or she wishes. Items include "I think it's more important to be who I am than to fit in with the crowd", "It's pretty hard for my friends to get me to change my mind", "I will say my true opinion in front of my friends, even if I know they will make fun of me because of it", etc. The raw items used to create this score have modest internal reliability (Cronbach's alpha = 0.69).

**Belongingness.** At age 15, the children who participated in the study were asked to complete a 25-item questionnaire designed to assess feelings of loneliness and social dissatisfaction. This questionnaire was adapted from the Loneliness and Social Dissatisfaction Questionnaire (Asher, Hymel & Renshaw, 1984), the questionnaire included twenty-four items, sixteen of which focus on the study of a child's feelings of loneliness, feelings of social adequacy, subjective estimations of peer status, appraisals of whether important relationship provisions are being met, as well as hobbies or preferred activities. The participants were asked

to report on feelings on a five-point Likert scale ranging from 1, indicating “Not at All True” to 5, indicating “Always True” (NICHD Early Child Care Research Network, 2005). Although the NICHD researchers reversed the responses from the original Asher (1984) measure, the present study reverse-coded the responses to indicate lower values as high levels of loneliness and higher values to indicate lower levels of loneliness, thus representing “belongingness.”

The Loneliness and Social Dissatisfaction Questionnaire is a widely used measure of social distress and loneliness in school-age children and is considered to be both internally consistent (Cronbach’s  $\alpha=.90$ ) and internally reliable (split-half correlation between forms=.83; Spearman-Brown reliability coefficient=.91; Guttman split-half reliability coefficient=.91) (NICHD Early Child Care Research Network, 2005).

**Educational aspirations.** The student’s educational aspirations were measured using the How I Do in School questionnaire, which consists of 19 items. Three items, taken from the work of Cook, et.al. (1996), concern adolescents’ beliefs about their educational attainment, namely, the likelihood that they will finish high school, attend college, and finish college. Fifteen items were adapted from the Self and Task Perception Questionnaire (Jacobs et al., 2002) and assessed the adolescent’s beliefs about their abilities in math (5 items), English or reading (5 items), sports (5 items), each rated on a 7-point Likert scale from 1= “Not at all Good” to 7=“Very Good”. Sample items include “How good at SUBJECT are you?” and “How well do you expect to do in SUBJECT this year?” One final item asks adolescents for their opinions about the relative importance of academics vs. sports. This form was also used in 6th grade. The rationale for utilizing this data is to understand the underlying motivations associated with adolescents’ educational aspirations.

Self-Concept of Ability in Math is the mean of items 4-8. This score was imputed by proportional weighting. Possible scores range from 1 to 7, with higher scores indicating a more positive self-concept of ability in math. The raw items used to create this score have moderate internal reliability (5 items, Cronbach's alpha = 0.84).

Self-Concept of Ability in English is the mean of items 9-13. This score was imputed by proportional weighting. Possible scores range from 1 to 7, with higher scores indicating a more positive self-concept of ability in English. The raw items used to create this score have moderate internal reliability (5 items, Cronbach's alpha = 0.83).

Self-Concept of Ability in Sports is the mean of items 14-18. This score was imputed by proportionality. Possible scores range from 1 to 7, with higher scores indicating a more positive self-concept of ability in sports. The raw items used to create this score have high internal reliability (5 items, Cronbach's alpha = 0.94).

### **Data Analysis**

A Structural Equation Model in AMOS 27 was used to calculate the model estimations. There were 1,364 children enrolled in the NICHD SECCYD study. The Full Information Maximum Likelihood (FIML) procedure was used to estimate cases with missing data. Specifically, FIML provides more accurate estimates of parameters than traditional methods of dealing with missing data, such as pairwise or listwise deletion (Keith, 2014, p. 526). Keith (2006) recommends several steps involved in path analysis, all of which were utilized when formulating, revising, analyzing, and interpreting the results in this study:

1. Review relevant theory and research related to the topic.
2. Construct a tentative model based on previous research findings, theory, and logic.
3. Collect a sample and measure the variables in the model, or utilize a data set in which the variables are already measured from the NICHD SECCYD study.

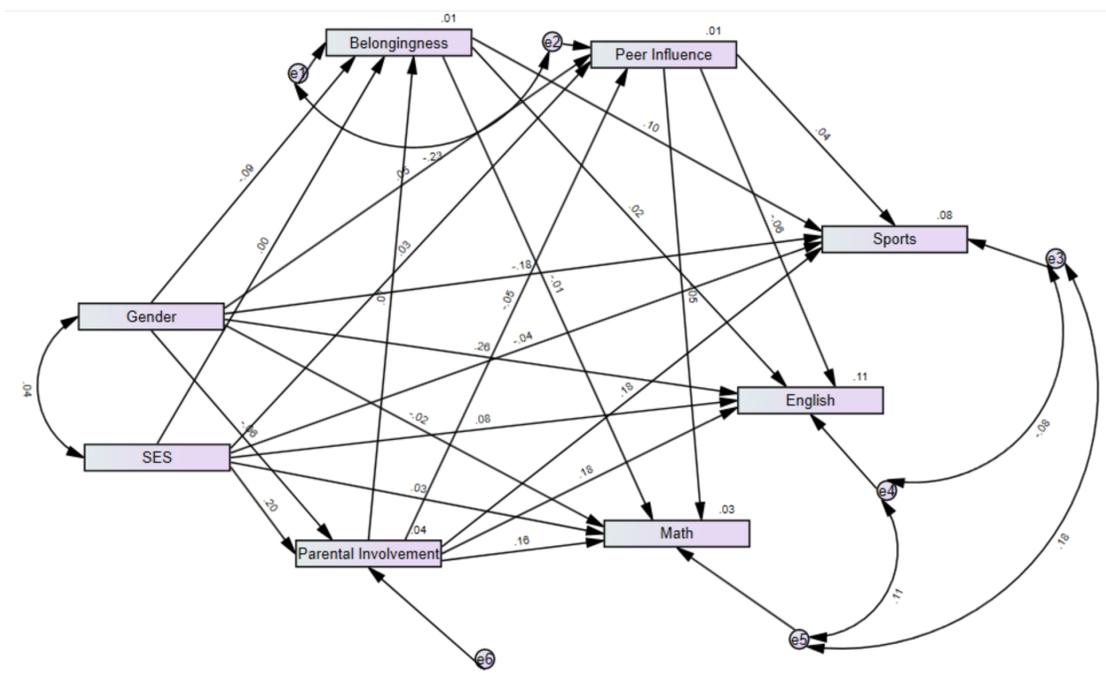
4. Check the identification status of the model.
5. Estimate the model.
6. Examine model estimates, paths, and disturbances along with fit statistics.
7. If necessary, delete statistically insignificant paths and re-estimate the model.
8. Analyze and interpret results (p.251).

Fit statistics were used to determine whether the model reasonably explains the data. The intended purpose of using AMOS 27, which is a Structural Equation Modeling program (SEM), is that competing theoretical models and specific hypotheses can be compared through fit statistics (Keith, 2006). By running the statistical data through AMOS, it produced the following fit statistics the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and the Root-Mean-Square Error of Approximation (RMSEA), these fit statistics were utilized to determine whether the model is conducive for this study and whether it should be modified or changed completely. Moreover, it answered the research questions for the study.

The intended purpose of the CFI is to provide a population estimate of the improvement in fit over the null model, and the TFI provides adjustment for parsimony to the model. To determine whether the fit of the model is appropriate, values approaching 1.0 suggest a better fit, and values over .95 suggest a good fit (Keith, 2006). For the RMSEA, it examines the fit of the model relative to the degrees of freedom (df), values below .05 are considered to be a good fit (Keith, 2006). Lastly, the study will look at descriptive statistics based on the variables presented above, which included parent involvement in schooling, socioeconomic status, gender, resistance to peer influence, belongingness, and educational aspiration.

The following model (Figure 1) was used to address the research questions and compare parental involvement and educational aspirations. This is a just-identified model consisting of

two exogenous variables (i.e., gender, SES) and six endogenous variables (i.e. parental involvement, resistance to peer influence, belongingness, self-concept in sports, self-concept in math, and self-concept in English). In addition, six disturbances (symbolized as e1 through e6) were incorporated to justify all unmeasured influences on the endogenous variables that are not explained in this model (Keith, 2006).



*Figure 1.* Hypothesized Path Model demonstrating the influence of Parent Involvement on Self-Concept in Sports, Math, and English

## CHAPTER 4: RESULTS

**Descriptive Statistics****Participants**

Participants from the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care and Youth Development (SECCYD) were used for this study. Originally, 1,364 children were included in NICHD-SECCYD. However, out of these 1,364 children, 590 participants were used in this study. Of these participants, 293 (49.7%) were male and 297 (50.3%) were female (Table 1).

Table 2  
*Descriptive Statistics for Gender*

Variable	<i>N</i>	Percentage
Gender		
Male	293	49.7
Female	297	50.3

**Variables**

The variables examined in the present SEM analyses included Socioeconomic Status (control), Gender (control), Parental Involvement (predictor), Resistance to Peer Influence (mediator), Belongingness (mediator), and Educational Aspirations (outcome). The three

variables that are utilized to represent Educational Aspirations are Self-concepts in Sports, English, and Math. Descriptive statistics are reported in Table 3.

Table 3  
*Descriptive Statistics for Additional Variables*

Variables	<i>N</i>	Minimum	Maximum	Mean	Standard Deviation
Belongingness	590	16	75	26.68	8.95
Peer Influence	590	18	36	28.71	3.71
Socioeconomic Status	590	.00	9.84	3.05	2.6
Parental Involvement	590	.00	2.00	1.37	.40
Self-Concept (English)	590	1.00	7.00	5.63	1.04
Self-Concept (Math)	590	1.00	7.00	5.1	1.15
Self-Concept (Sports)	590	1.00	7.00	5.4	1.5

### **Structural Equation Modeling (SEM)**

Amos software was used to analyze the data once it was demonstrated that the data met all assumptions required for SEM procedures. The SEM model addressing the research question was just identified.

### **Unstandardized and Standardized Effects**

**Effect on Self-concept in Sports.** Gender had a large significant unstandardized effect on self-concept in sports ( $b = -.546$   $p < .001$ ) indicating that adolescent males have higher self-concepts in sports than females. Parental Involvement also had a large

unstandardized effect on Self-concept in sports ( $b = .665, p < .001$ ). Children of parents who are more involved have higher self-concepts in sports. Conversely, Peer Influence did not have a significant unstandardized effect on Self-concept in sports ( $b = .014, p = .383$ ). Additionally, Belongingness did have a significant unstandardized effect on Self-concept in sports ( $b = .017, p = .014$ ) conversely, Socioeconomic status did not have a significant effect ( $b = -.026, p = .266$ ). The unstandardized and standardized coefficients for these variables are in Table 4.

Table 4  
*Effect on Self-concept in Sports*

	<i>Standardized</i>	<i>Unstandardized</i>
<i>Effect on Self-concept in Sports</i>		
SES	-.04	-.026
Gender	-.18	-.546
Peer Influence	.04	.014
Belongingness	.10	.017
Parental Involvement	.18	.665

\*Significant at  $p < .05$

\*\* Indirect effect through a mediator

**Effect on Self-concept in Math.** Parental Involvement had a large unstandardized effect on Self-concept in Math ( $b = .457, p < .001$ ). Children whose parents are more involved have higher self-concepts in math. Conversely, the following variables did not have a significant unstandardized effect on Self-concept in Math: Socioeconomic status ( $b = .014, p = .461$ );

Gender ( $b = -.050$ ,  $p = .597$ ); Peer Influence ( $b = -.016$ ,  $p = .227$ ), and Belongingness ( $b = -.001$ ,  $p = .855$ ). These findings suggest that socioeconomic status, gender, peer influence and belongingness do not influence adolescents' self-concept in Math. The unstandardized and standardized effects for these variables are in Table 5.

Table 5  
*Effect on Self-concept in Math*

	<i>Standardized</i>	<i>Unstandardized</i>
SES	.03	.014
Gender	-.02	-.050
Peer Influence	-.05	-.016
Belongingness	-.01	-.001
Parental Involvement	.16	.457

\*Significant at  $p < .05$

\*\* Indirect effect through a mediator

**Effect on Self-concept in English.** Parental Involvement had a significant unstandardized effect on Self-concept in English ( $b = .466$ ,  $p < .001$ ) indicating that children who have more involved parents have higher self concept in English. Gender also had a significant unstandardized effect on self-concept in English ( $b = .534$ ,  $p < .001$ ) indicating that adolescent females have higher self-concepts in English than males. Conversely, socioeconomic status ( $b = .032$ ,  $p = .043$ ); peer influence ( $b = -.017$ ,  $p = .133$ ), and belongingness ( $b = .003$ ,  $p = .537$ ) did not have significant unstandardized effects on Self-concept in English. These findings suggest that socioeconomic

status, peer influence and belongingness do not influence adolescents' self-concept in English.

The unstandardized and standardized effects for these variables are in Table 6.

Table 6  
*Effect on Self-concept in English*

	<i>Standardized</i>	<i>Unstandardized</i>
SES	.08	.032
Gender	.26	.534
Peer Influence	-.06	-.017
Belongingness	.02	.003
Parental Involvement	.18	.466

\*Significant at  $p < .05$

\*\* Indirect effect through a mediator

**Sobel's Statistic and Significance of Magnitude of Mediation.** Belongingness was not found to mediate the relationship between parental involvement and educational aspiration (i.e. Self-concept in sports, math, and English). After Sobel statistics analyses were performed (Baron and Kenny, 1960), the mediational paths were not statistically significant (see Table 7).

Table 7  
*Sobel's Statistics and Significance of Magnitude of Mediation for Parental Involvement on Belongingness on Educational Aspiration.*

	<i>Sobel (t)</i>	<i>Std. error</i>	<i>p-value</i>
<i>Parental Involvement to Belongingness to Educational Aspiration</i>			
Self-concepts in Sport	1.42087386	0.0014007	0.15535343
Self-concept in Math	1.39564415	0.00098234	0.16282168
Self-concept in English	1.42241329	0.00098284	0.15490631

\*Significant at  $p < .05$

Peer influence also did not significantly mediate the relation between parental involvement and self-concept in sports, math, and English. After Sobel statistics analyses were performed (Baron and Kenny, 1960), the Sobel tests did not indicate any significant mediations with parent involvement as the predictor, peer influence as the mediator, and self-concept in sports, math, and English as the outcomes (see Table 8).

Table 8

*Sobel's Statistics and Significance of Magnitude of Mediation for Parental Involvement on Peer Influence on Educational Aspiration.*

	<i>Sobel (t)</i>	<i>Std. error</i>	<i>p-value</i>
<i>Parental Involvement to Peer Influence on Educational Aspiration</i>			
Self-concept in Sports	-0.65850461	0.00008504	0.51021394
Self-concept in Math	0.7761140	0.00008264	0.43768168
Self-concept in English	0.83957016	0.00008099	0.40114944

\*Significant at  $p < .05$

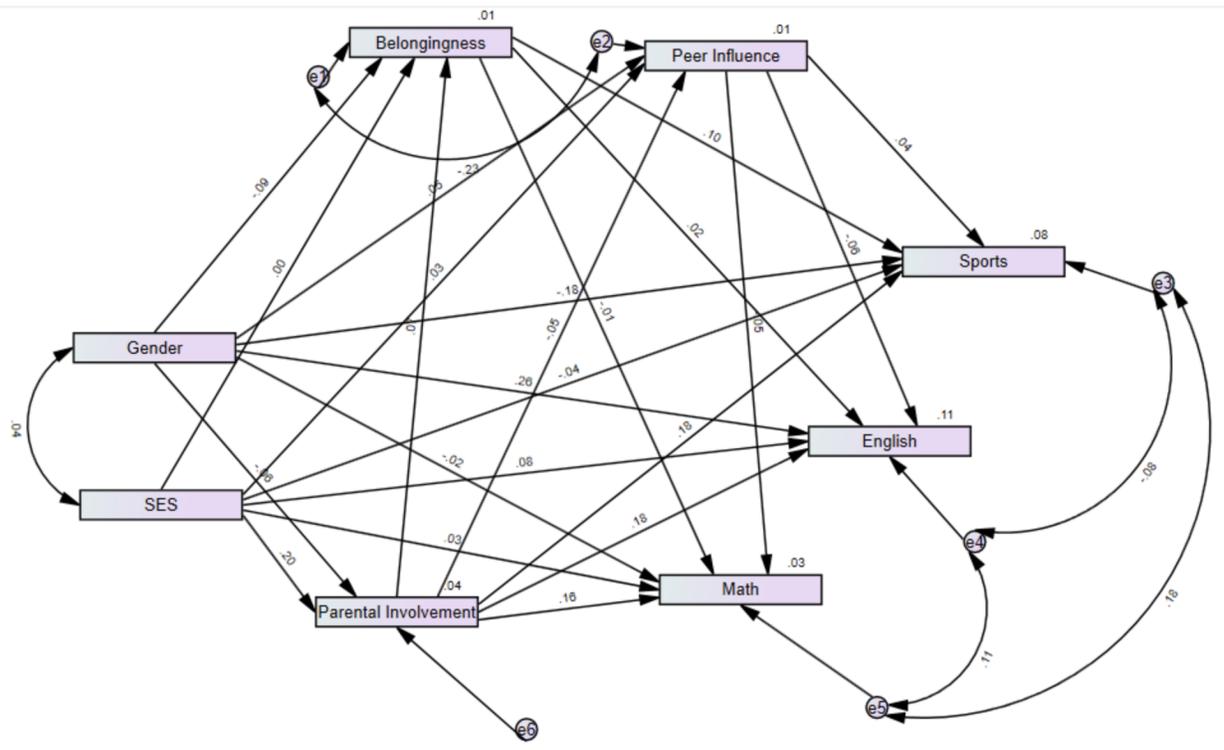


Figure 2. Path Model demonstrating the influence of Parent Involvement on Self-Concept in Sports, Math, and English

## CHAPTER 5: DISCUSSION

### **Overall Findings**

This study analyzed data collected as part of the NICHD-SECCYD comprehensive longitudinal study to determine the influence of positive parental involvement on peer influence and belongingness and on adolescent educational aspiration in three domains (self-concept in sports, math, and English). The analyses were performed in a single group (all participants female and male), where variables were examined to determine standardized and unstandardized effects on variable outcomes. Gender and SES were used as control variables in this study, as they are predictive of a majority of the variables in the study. Parental involvement was used as a predictor variable, while Belongingness and Peer Influence were used as mediating variables. Educational aspiration (self-concept in sports, math, and English) was the dependent or outcome variable. The study explored the influence of positive parental involvement on belongingness and peer influence. It provided a deeper understanding of how impactful positive parental involvement in school determines adolescents' educational aspirations. Overall, the results of this study indicated that positive parental involvement in schooling highly influences adolescents' educational aspirations in sports, math, and English. The findings also suggest that gender highly influences adolescents' educational aspirations in English and sports but not math. Conversely, the findings suggest that socioeconomic status, peer influence, and belongingness do not influence adolescents' educational aspirations in sports, math, and English.

### **Positive Parental Involvement in Schooling**

In support of previous research, the current results found that parents who are more involved in children's schooling had a positive influence on higher educational aspirations. The

more parents are involved in school, the more motivation adolescents have for achieving higher educational aspirations regardless of socioeconomic status, gender, sense of belonging, and peer influence. Results from this study are consistent with other research indicating students who have parents who are engaged in their education were more motivated to achieve higher levels of educational outcomes, including higher educational attainment (Epstein, 1991; Gonida & Cortina, 2014; Joussemet, Koestner, Lekes, & Renee, 2005, and Karbach et al., 2013). The study supported the hypothesis, indicating that positive parental involvement did have a significant effect on adolescents' educational aspirations (self-concepts in sports, math, and English) after controlling for gender and socioeconomic status.

### **Belongingness**

Previous research suggested that humans have a predisposition for wanting to belong to a social group, which is associated with social identity theory. The premise behind social identity theory was to understand the motives within social groups and the positive aspects of belonging to such groups. Belonging to positive peer groups creates a sense of purpose, meaning, worth, and social control, allowing individuals to have better coping mechanisms during times of stress. In the event an individual is missing the feeling of belonging, they may instead feel socially isolated, rejected, or inadequate (Brewer & Weber, 1994, Baumesiter & Finkel, 2010, Lohman, Newman, & Newman, 2007). This was supported by Branscombe, who notes that social groups help maintain and enhance self-worth. For example, individuals who are prosocially oriented may seek membership within high-status quo groups because they realize companionship in such a group will bring a higher sense of satisfaction and increased self-esteem. Individuals who have intact relationships within a social group are more inclined to set specific goals, strive to achieve said goals, and succeed (Brown & Lohr, 1987 & Leary & Forsyth, 1986).

Although the study conducted by Brown and Lohr (1987) provided insight among popular and high-status quo groups, the research did not include individuals who are associated with gang memberships and are termed "delinquents and deviants." Previous research noted that individuals related to gang membership tend to commit illegal acts which can be problematic for their communities. Subsequently, for these individuals, the level of risk factors increases exponentially. Negative risk factors include poor coping skills, substance use, minor delinquency, poor academic performance, and social problems leading to uncertainty in educational outcomes (Bacchini, Dragone, Esposito, & Affuso, 2020). However, it should be noted that the same or similar mechanisms of belongingness, purpose, meaning, and social control frequently apply to youths who engage in socialized gang membership (e.g., Gibbs, 2000; Riley, 2019).

Researchers have become increasingly interested in dynamics among social groups (Baumeister & Finkel, 2010). For social psychologists, defining what it means to belong to an "intergroup" was imperative. Sheriff in 1966 defined intergroup as "whenever individuals belonging to one group interact, collectively or individually, with another group or its members, in terms of their group identification, we have intergroup behavior (p.12). An example might be when an individual from a drama group interacts with a yearbook club member. For these individuals belonging to positive peer groups helps increase higher levels of self-concept, self-efficacy, and self-autonomy, enabling them to resist the instant gratification of social rewards, and tend to focus their attention on longer-term, future-oriented goals (Lohman et al., 2007 & Baumeister & Leary, 1995).

Numerous research has shown that individuals are motivated to achieve higher aspiration levels when they belong to positive peer groups (Baumeister & Leary, 1995). However,

extensive research supports the assertion that positive peer groups contribute to higher levels of educational aspirations. Research suggested that adolescents who were termed "delinquents" often do not achieve such positive outcomes, particularly for youth in urban environments (Baskin, Quintana, & Slaten, 2013). This was supported by research conducted by Baskin and colleagues (2013) regarding the impact of psychological distress on adolescents' academic outcomes. Their study sought to understand the significance of family belongingness and gang friendships by utilizing psychological distress as a mediator variable. They found that psychological distress partially mediated the relationship between family belonging and gang friendships, implying that psychological stressors such as depression, lack of sense of belongingness, and social identity are mechanisms involved in adolescents' achievement motivation. This suggested that adolescents who have high levels of distress and have gang friendships were more susceptible to negative academic outcomes. Adolescents who have higher levels of distress had a higher risk for poor academic outcomes, particularly for urban middle school youth from ethnic minority backgrounds. The myriad challenges that these youth face adversely impact their ability to achieve desired academic results (Baskin, Quintana, & Slaten, 2013). The research conducted by Baskin and colleagues (2013) created awareness for future research to investigate the disparity in educational outcomes among adolescents from urban communities.

Collectively, based on previous research conducted by Baumeister and Leary (1995), Newman, Lohman, and Newman (2007), and Lynch, Lerner, and Leventhal (2012), understanding relationships between peer groups helps characterize how adolescents perceive themselves and their regard to higher education outcomes. The research conducted by Lynch and colleagues explored the significance of relational and behavioral components addressing

peer culture and student academic outcomes. In doing so, researchers can better understand how students collectively perceive the quality of school culture based on the general positive and negative nature of school-wide relationships among peers (Lynch et al., 2012). The results of their study supported the hypothesis that peer culture is correlated to individual students' academic performance and school engagement (Lynch et al., 2012).

In this study, it was hypothesized that adolescents who have a sense of belongingness would have higher educational aspirations. The results suggested that sense of belongingness had a significant unstandardized effect on adolescents' educational aspiration for self-concept in sports. Adolescents who are allowed to participate in sports programs feel a sense of connectedness with the select group of peers. This grants youth the opportunity to share experiences and common interests with one another, which provides them with a sense of belonging (Coplan & Findlay, 2008). Furthermore, participation in sports helps promote a sense of social competence, acceptance, and achievement through the group context (Hagerty & Williams, 2002). Conversely, sense of belongingness did not have a significant unstandardized effect on adolescents' educational aspirations (self-concept in math, and English). This may be attributed to several factors, including limited support for Maslow's theory. Although Maslow's hierarchy of needs theory has been widely accepted for over 30 years, there has been little empirical evidence to support this theory (Wahba & Bridwell, 1976). Another possible explanation for the negative association between identified belongingness and educational aspirations is that participants who rated themselves as having lower levels of belongingness may be less likely to spend time engaging or focusing on academic tasks (Lohman et al., 2007). Finally, the research on belongingness and delinquency implies that the relationships between

belongingness and academic achievement may be more complex than was measured in the current study (even though delinquents were not part of the population sample).

Surprisingly, belongingness was not found to mediate the relationship between parental involvement and educational aspiration (i.e., self-concept in sports, math, and English). A plausible reason why mediation was not significant in this study is that the pathway to educational aspirations is established much earlier, and while parental involvement may remain important, especially in establishing the initial pathway, other correlates, such as previous academic achievement and friendships across the years account for more variance in adolescence (see Sroufe et al., 2005).

Regardless, previous research conducted by Baumesiter and Leary (1995) supports the importance of maintaining sustainable and positive peer relationships. It cultivates a sense of belongingness for adolescents who may lack positive parental support. Also, future research may examine this effect in different populations because sense of belongingness did not have a significant effect utilizing the population sample of this study. Additionally, other variables such as psychological stressors (e.g., anxiety, depression, poor sense of inadequacy), parent-child relationships, gang affiliation, and social competence may lend additional insight into whether these variables have unique influences on belongingness and educational outcomes.

### **Positive Peer Influence**

There has been research examining how peer influence affects risky behaviors in adolescents. Yet, there is limited research on whether positive peer influence can positively or negatively influence adolescents' educational aspirations. According to Bandura's (1986) social learning theory, adolescents tend to conform to societal trends by mirroring their peer behaviors, fitting in, and subsequently adopting negative or positive behaviors to attain relationships.

Additionally, there is consensus from researchers such as Ford and Smith (2007), Juvonen (2006), Martin and Dawson (2009), and Parick (1997), suggesting that adolescents do benefit from positive peer influence. The current study sought to determine whether positive peer influence leads to higher educational aspirations in adolescents after controlling for gender and socioeconomic status. After the analysis was run, the study did not support that positive peer influence significantly affects adolescents' educational aspirations. Again, other variables that were not included in this study and which occur earlier in the developmental trajectory may be responsible for the lack of findings for adolescents. Having positive friends is a protective factor for teens, but, as Sroufe et al. (2005) note, "it misses the point that having such associates is itself a developmental outcome..." (p. 196). Early competence with peers, parental support, and prior academic achievement are all important factors that contribute substantially to future positive developmental outcomes.

Surprisingly, peer influence did not significantly mediate the relation between parental involvement and self-concept in sports, math, and English. Again, this may reflect the influence of earlier variables such as social competence at an earlier age exerting influence on peer relationships in adolescence (Egeland, Pianta, & Ogawa, 1996). An example is a study conducted by Deptula, Banks, Barnes, and Cohen (2020), in which they found that children who have high levels of peer optimism experience more success in peer social competence, leading to "greater popularity, fewer relational aggression behaviors, and fewer withdrawal behaviors" (p.1231). Conversely, children with lower levels of peer optimism reported higher levels of loneliness (Deptula et al., 2020). Early competence with peers, parental support, and prior academic achievement contributes to future positive developmental outcomes.

Although the mediational paths were found not to have statistical significance for belongingness on parental involvement and peer influence, research suggests that a sense of belonging does help facilitate the development of adolescents' educational aspirations (Cervone & Peake, 1996). Even though the results of this study did not find that positive peer influences have a significant effect or mediate the relationship between parental involvement and adolescents' educational aspirations, maintaining high-quality friendships does have positive effects on academic achievement. Consistent with past studies, when high friendship quality is not maintained, adolescents are more likely to engage in risky behaviors leading to poorer decision-making and lack of academic performance (Cervone & Peake, 1996, Newman, Lohman & Newman, 2007; Baumeister & Leary, 1995).

### **Implications for Professional Practice**

Although this study did not find all the predicted relationships between parental involvement, peer influence, belongingness, and educational aspirations, there are several implications for educators and mental health professionals working within the educational system. Consistent with previous research, this study provided evidence regarding the instrumental effect of positive parental involvement on adolescents' educational aspirations (Wang & Sheikh-Kahlim 2014). Parental involvement is an essential factor in educational attainment, but it also helps decrease the adolescent's propensity to engage in negative peer relationships (Farrell, Henry, Mays, & Schoeny, 2011). The need for continued specificity in identifying effective educational programs is beneficial for educators and mental health professionals to help students thrive academically in the school settings.

Merced City School district implements a school-based program called Advancement Via Individual Determination (AVID). The purpose of AVID is to help provide in-school academic

support for all students. Hernandez and colleagues (2011) agree that implementing educational programs helps students achieve academic success. Research has shown that AVID students graduate high school significantly higher than non-AVID students. AVID students are more equipped to understand the process of obtaining a college degree and are likely to enroll in college at a higher rate than non-AVID students following high school graduation (Todhunter-Reid; Burke; Houchens, & Howard, 2020). Educational programs such as AVID can help to cultivate students' academic outcomes (see Baumeister & Finkel, 2010). On the other hand, students who feel they don't belong to a particular group may experience high levels of stressors leading to depression, anxiety, and other mental health concerns that adversely impact educational progress. This is supported by literature from Barnett et al. (2017), noting that students who dropout of high school are more likely to be incarcerated, unemployed, live in poverty, and engage in substance abuse, creating financial hardship within the community.

Saelid et al. (2022) support that having effective mental health programs addressing social-emotional learning throughout childhood and adolescence is pivotal in helping increase educational attainment. Adolescents who have been incarcerated are less likely to find employment, live in poverty, have mental health problems, and engage in substance abuse and risky behaviors (Barnett et al., 2017). Wigelsworth and colleagues (2010) researched a school-wide preventive intervention for adolescents called "The Secondary Social and Emotional Aspects of Learning (SEAL)," which is a comprehensive, school-wide approach to promoting social and emotional regulation. The program is designed "to promote the development and application to learning of social and emotional skills and classified under the five domains proposed in Goleman's (1996) model of emotional intelligence, including self-awareness, self-regulation, motivation, empathy, and social skills (Humphrey, Lendrum & Wigelsworth,

2010). The implementation of the intervention program was piloted by teachers from 22 SEAL schools who participated in the quasi-experimental study. Data from the study was collected through observations of lessons, interviews, and communication with teachers, facilitators, and participants from the focus groups. It was collected from the target cohort via self-report surveys on an annual basis from 2008 to 2010. Volunteer teachers from each school site were tasked with teaching social and emotional learning lessons during focus groups. The lessons were organized into discrete themes, including “anti-bullying, learning to be together, keep on learning and learning about me.” Teachers and facilitators taught these lessons throughout the school year. Although the classes had discretely embedded tasks into the curriculum, the program was not considered evidence-based since it was challenging to generalize across educational settings (Humphrey et al., 2010). Also, the SEAL secondary quasi-experimental study did not show a significant impact because it was challenging to implement the program with fidelity (Humphrey, Lendrum & Wigelsworth, 2010).

Steinberg (2008) recognizes that educational interventions are not always effective and limited in success. Behavioral approaches may be more effective as interventions. Behavioral approaches such as Restorative Practices are a promising non punitive approach school districts are implementing to curb disciplinary concerns. This practice allows educators and mental health professionals to provide a supportive learning environment to students engaging in antisocial behaviors. Students who are identified as needing support are placed in a restorative circle with other students demonstrating similar behaviors. The restorative circle is led by a facilitator (i.e., school psychologists, counselors, administrators), who helps students identify conflicts and problems occurring within the educational setting. For the students participating in the restorative circles, the expectation is that students will share, listen, and engage in conflict

resolution through mediation. Restorative practice is a diverse, multi-layered concept that focuses on holding students accountable through reteaching appropriate behavior skills rather than punishment (Skrzypek et al., 2020 & Gonzales, 2012).

School-wide positive behavior interventions and supports (SWPBIS) are also another behavioral intervention implemented across 25,000 schools. SWPBIS is based on a multi-tiered system of support examining the relationship between antecedents of behaviors and consequences, focusing on teaching students' prosocial behavior to help decrease office referrals for discipline. The multi-tiered system of support consists of three tiers. Tier 1 focuses on providing universal, universal support for all students, including teaching school-wide expectations. Tier 2 is for at-risk students that require more targeted interventions to address their behavior needs; strategies used in Tier 2 include but are not limited to Check-In/Check-Out, behavior academy, or site-based counseling. Tier 3 requires more intensive behavioral support that may require a functional behavior assessment (FBA) or behavior intervention plan (BIP) targeting students' most intensive behavior (Lane et al., 2003; Horner et al., 2014, McIntosh & Goodman, 2016, Lee et al., 2021). It should be noted that SWPBIS is not a curriculum but a framework to help promote a process of identifying, developing, and implementing universal support for students to increase their academic outcomes (Horner et al., 2014).

Research has shown that after-school programs are growing in popularity and are an essential component of the infrastructure that promotes healthy development and learning among youths across the states (Whalen & Wynn, 1995). Research suggests that positive academic outcomes occur when schools, community partnerships, and parents collaborate to support students' learning (American Psychological Association, 2012). One example of a non-profit community-based program widely recognized throughout the United States is the Boys and Girls

Clubs of America. The program's mission is to ensure that all young people, particularly disadvantaged youth, reach their full potential, and become productive, caring, responsible members of society (Boys & Girls Club of America, 2022). The organization offers a range of programs from education, sports, and recreation; health and wellness; character and leadership, and programs for teens and young adults. Carruthers and Busser (2010) noted that adolescents who participated in Boys and Girls Clubs developed relationships with positive peers, demonstrated positive behaviors, and cultivated skills and abilities. Based on previous studies, students who engage in community-based after-school programs have better positive developmental outcomes, higher motivation, increased academic performance, lower incidence of problem behavior, enhanced social competence, and improved mental health. Even though the number of well-designed and rigorous studies is limited in supporting afterschool programs, this study can help policymakers make reasonable strategic steps in improving the support parents may need to help their students succeed academically outside of the classroom (Catalano et al., 1999; Eccles & Gootman, 2002; Feldman & Matjasko, 2005; Frericks, Hackett, Bregman, 2010).

According to the National Association of School Psychologists, educators and mental health professionals should ensure that all students receive appropriate intervention support in the school setting. Many school districts are currently implementing a Multi-Tiered System of Supports (MTSS) to provide inclusive programs to help students with and without disabilities receive appropriate instruction across all academic areas. Multi-Tiered System of Supports incorporates multiple tiers of instruction for academic, social/emotional, and behavioral skill development through guided core instruction, data-based decision-making, progress monitoring, mental health support (via counseling services), and collaboration with family members and

other professionals (through the Student Success Team or Academic Success Team meetings).

This allows educators and mental health professionals to provide support through prevention and intervention services via evidence-based, data-driven, and being culturally responsive are critical in helping students achieve higher academic outcomes (Greenberg; Weissberg; O'Brien; Fredericks; Resnik, & Elias, 2003).

### **Limitations and Future Directions**

The study had several limitations. First, the study was limited due to the use of the NICHD dataset. Second, the study examined data through a path analysis. As with all path analyses, the study evaluated the causal relationships between variables. The results of these statistical analyses yielded correlational relationships, which tentatively predict outcomes based on theory. More so, it is important to recognize that the estimate of the size of the effects is conditional on whether the model is accurate. Since many models might be similar or the same as the observed data, it cannot be a definitive conclusion proving that the path analysis model is entirely accurate (Grimm & Yarnold, 1995). The study may also have been more extensive if sense of belongingness and peer influence was measured during different phases of development rather than just the adolescence stage. Moreover, self-concept variables were used as outcome variables measuring educational aspirations rather than variables such as performance on achievement.

Since the study did not identify significant relationships between sense of belongingness and positive peer influence on adolescents' educational aspirations, future researchers may wish to investigate whether other variables such as family dynamics (i.e., intact family, single household family, foster youth, and English language learners) and psychological stressors (i.e., anxiety, depression, tantrum) predict educational outcomes of adolescents from a diverse

population including, but not limited to, suburban and urban communities. It may be informative to determine whether adolescents with higher educational aspirations will apply to a four-year institution and complete post-educational graduate degrees. Measuring a broad range of variables in this study has led to developing a model that helps understand the significance of positive parental involvement on adolescents' educational aspirations. However, it did not include earlier developmental variables shown in previous research to influence the pathway from parental involvement in early childhood to educational aspirations in adolescence. Future studies may wish to consider including these variables to better understand the trajectory and potential influences on adolescent academic outcomes.

Future research should include more diverse populations, including but not limited to English language learners, special education students, foster youth, and immigrants (American Psychological Association, 2012), to determine whether the findings can be generalized across a diverse population. Future research should also seek to determine the implication of mental health and its impact on adolescents' ability to overcome stressors and succeed academically. An additional limitation of this study was that self-report measures were utilized. As self-report measures were based upon perceptions, there may be differences in the perceptions versus actual behavior, threatening the study's validity. This may happen when participants answer questions on sensitive topics involving rating themselves in the areas of sense of inadequacy, low self-concept, anxiety, or depression.

### **Conclusion**

Although there are limitations in the present study, contributions were made to the area of research, analyzing the importance of positive parental involvement on adolescents' educational aspirations. It is important to note that the current study utilized latent variables to measure the

variable of interest. Latent variables regarding parental involvement directly investigate how instrumental positive parental involvement contributes to adolescents' educational aspirations. Specifically, the findings from this present study emphasize the importance of parental support for academic achievement and highlight the need for interventions for youths who do not have parental support. Surprisingly, after the analysis was ran, significant relationships were not found in this investigation between sense of belongingness in the areas of math and English. However, there was a significant relationship between sense of belongingness and self-concept in sports. Furthermore, positive peer influence did not have a significant impact on educational aspirations.

The connections between belongingness, positive peer influence, and educational aspiration may be explained by a study conducted by Lohman and colleagues (2007), indicating that factors such as peer cultures may sometimes distract adolescents from meeting the academic requirements of middle school or high school. Nevertheless, their research posited that, although peer groups may create distractions for learning, they are still relevant in the development of mental health by helping youth to stay connected and validated (Lohman et al., 2007). Intervention programs such as AVID, SEAL, Boys and Girls Club of America, and MTSS may provide support in addressing academic, social/emotional behavioral support for all students (Greenberg; Weissberg; O'Brien; Fredericks; Resnik, & Elias, 2003; Catalano et al. Whalen & Wynn, 1995; 1999; Eccles & Gootman, 2002; Feldman & Matjasko, 2005; Frericks, Hackett, Bregman, 2010). Even though Steinberg (2008) acknowledged that not all educational or community-based interventions are effective and generalizable, it is still arguably vital to provide parents with resources to help their students achieve high educational outcomes. Therefore, educators, mental health professionals, and parents should work collectively to increase learning

opportunities for students in the educational system, improving the trajectory of college attainment (Todhunter et al., 2020; Lohman et al., 2007).

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