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## Parents' Experiences Working with Their Adolescent Children on Secondary Mathematics Homework in Relation to Epstein's Framework of Involvement: A Phenomenological Study

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Rebecca Ann White  
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Concordia University–Portland

College of Education

Doctor of Education Program

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Parents' Experiences Working with Their Adolescent Children on Secondary Mathematics  
Homework in Relation to Epstein's Framework of Involvement: A Phenomenological Study

Rebecca White

Concordia University–Portland

College of Education

Dissertation submitted to the Faculty of the College of Education  
in partial fulfillment of the requirements for the degree of  
Doctor of Education in  
Transformational Leadership

Barbara Weschke, Ph.D., Faculty Chair Dissertation Committee

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Concordia University–Portland

2018

## **Abstract**

This qualitative study was conducted at a rural school located in southwest Louisiana with an enrollment of less than 800 students during the Spring of the 2017-18 academic school year (XXXXXX School Board, 2018). A descriptive phenomenological research methodology was used to investigate the experiences of parents working with their adolescent children on their secondary mathematics homework. A sample of seven parents participated in this study. The criteria used for a parent to qualify was having an adolescent child taking secondary mathematics courses during the 2017-18 school year. Data were collected using one-on-one interviews with individual participants during the summer of 2018. Eleven themes were developed including home environment, parent-child relationships, parent-initiated communication, student-initiated communication, teacher-initiated communication, parents helping at home, ability to help, self-help resources, school resources, parent leadership, and resources from the community. The results revealed parents are genuinely interested in wanting to assist their adolescent children with their secondary mathematics homework and lines of communication were open between families and the school, but most was initiated by the participant. Most of the participants do not feel comfortable helping their adolescent children with their secondary mathematics homework because they do not believe they have the necessary skills to help. Several participants were interested in becoming involved in decision making at the school level but never received information on how they could. This study may benefit stakeholders in education by helping them understand how parents view their ability to be engaged in their children's high school mathematics homework.

*Keywords:* parental involvement, parental engagement, secondary mathematics, homework

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## **Chapter 1: Introduction**

Griffin and Gallasi (2010), Grossman (2014), and Ray and Smith (2010) found parental involvement or parental engagement impacts children's attendance rates, behavior problems, social skills, and outlook on education. Hornby and Lafaele (2011) stated parental involvement has a positive impact on parents and teachers. As parents become more involved in the education system, relationships are built between parents and educators (Hornby & Lafaele, 2011). According to Hornby and Lafaele (2001), this relationship will assist parents in building their confidence level in becoming involved with education, as well as increase the morale of the teachers. Elementary-school parents tend to be more engaged in their children's education than middle and high-school parents (Child Trends, 2016). Homework help is the most common way for parents to become engaged in their children's education. One area in which students often need help is in mathematics (Child Trends, 2016). The benefits of mathematics homework include learning opportunities outside of school and highlights the importance of parents working with their children on mathematics homework (O'Sullivan, Chen, & Fish, 2014).

According to Child Trends (2016), the percent of U.S. parents of children in kindergarten through fifth grade who attended parent-teacher conferences with teachers was 91%. The percentage of parents of children in kindergarten through fifth grade who volunteered or served on a committee was 54%. In comparison, 58% of high school parents attended parent-teacher conferences with their children's teacher while only 32% volunteered or served on a committee (Child Trends, 2016). Monson (2010) conducted a study regarding parental involvement in mathematics education. The study found 47% of parents were not confident in helping their adolescent children with Algebra 1. Mapp and Warren (2011) stated the decline in parental engagement as children move into middle and high school effect not only academic success but

also lower social capabilities, attendance, college and career readiness, and family engagement at home.

This phenomenological research study focused on seven parents' experiences working at home with their adolescent children on their secondary mathematics homework. In this study, the term "secondary" referred to high school. By examining parents' experiences working with their adolescent children's secondary mathematics homework, the researcher added to the body of knowledge regarding parents' experiences as they relate to Epstein's (2001) framework of involvement including parenting, communicating, volunteering, collaborating with the community, decision making, and learning at home.

### **Background, Context, History**

During the 19th and 20th centuries, the United States led the world in innovations and discoveries in the fields of science and technology (National Research Council, 2013). People with a strong mathematical or science talent became a worldwide market (National Research Council, 2013). Math and science have increasingly grown in their importance in areas such as biology, social sciences, climate, business, and more (National Research Council, 2013). The United States was once the prominent recruiter of people strong in math and science (National Research Council, 2013). However, the United States has been surpassed by other nations, which are aggressively seeking people with these strong math and science skills and recruiting them to go abroad and work (National Research Council, 2013). Growth in the economy and the competitiveness and security of our nation rely on applications of math and science (National Research Council, 2013).

Parenting comes with responsibility, especially in education. Parents and teachers have a responsibility to ensure students receive an education that allows for learning as it pertains to

their future and promotes achievement. Since the implementation of the No Child Left Behind act in 2001, education systems nationwide began recognizing the importance of parental involvement. Education systems began creating plans to improve parental involvement in the school, at home, and in the community (Behr, 2016; Simon, 2011; Starkie, 2012). In 2015, Every Student Succeeds Act (ESSA) was signed into legislation and replaced the No Child Left Behind act (2001).

Every Student Succeeds Act (2015) reauthorizes the Elementary and Secondary Education Act (ESEA) of 1965. The ESEA ensures all students will receive an equal opportunity to receive a quality education. According to ESEA (1965), all students include those with disabilities, come from low socio-economic status, and/or who are English as a Second Language learner. ESSA (2015) continues to see parental involvement as an essential part of education. According to Blank and McGuire (2016), ESSA widened the accountability provisions of parental involvement to include engagement. The No Child Left Behind act (2001), described parental involvement as parents, schools, and students working together.

According to Goodall and Montgomery (2013), “engagement would seem to encompass more than just activity – there is some feeling of ownership of that activity which is greater than is present with simple involvement” (p. 400). Engagement is further described as parents having more commitment to engaging with their children than merely being involved in the school. The term engagement denotes a great responsibility and ownership of learning. Goodall and Montgomery (2013) created a progression model for the movement from parental involvement to parental engagement. The creation of this model was necessary to ensure the importance is understood regarding parental engagement and the schools’ difficulty in implementing parental

engagement practices is recorded. Involvement and engagement are on a continuum, therefore are interchangeable and are both important for parents (Goodall & Montgomery, 2013).

Seventy percent of children's lives are spent outside of the school system (ESSA, 2015). Studies have found as children move from elementary to high school, parents tend to be less involved (Benner, Boyle, & Sadler, 2016; Hornby & Lafaele, 2011). Cheung and Pomerantz (2011) determined that while parents who increase enrichment activities at home show positive effects on their children's education outcomes, helping with homework appeared to have an adverse effect. Benner et al. (2016), Kim and Hill (2015), and Povey, et al. (2016) determined several barriers that caused parents to decrease their involvement in the educational system as their children get older. If school systems can get parents engaged in their children's education early and maintain that same level of involvement as children move from elementary to high school, the effects will have a greater impact (Benner et al., 2016).

Parents' view of their role in the education process is significant (Hornby & Lafaele, 2011). Research has shown many benefits to academic achievement when parents become involved. Unfortunately, a parents' view of what their involvement should be in education could be a barrier to parental involvement. A parent may not believe they are required to be involved in education if they view their role as merely to drop their children off at school and let the teachers and administrators educate them (Hornby & Lafaele, 2011).

Researchers also found the students' autonomous needs to be a significant reason for parents to become less engaged in their adolescent children's education (Benner et al., 2016; Kim & Hill, 2015; Povey et al., 2016). Researchers have shown that parents' engagement tends to decrease as their children move into high school to meet the autonomous needs of adolescents (Benner, Boyle, & Sadler, 2016; Kim & Hill, 2015; Povey et al., 2016; Wang & Sheikh-Khali,

2014). Affuso, Bacchini, and Miranda (2015) stated stakeholders, including students, parents, and teachers should work together throughout all the years of education of their children. Benner et al. (2015) and Hornby and Lafaele (2011) stated school systems would see great impacts if parents would maintain the same level of involvement through all 12 years of their children's education.

Researchers found other reasons for parents to reduce the amount of assistance they provide their children with homework were ethnicity, socioeconomic background, and parents' lack of confidence with higher levels of homework (Wang et al., 2014; Wang & Sheikh-Khali, 2014). Boro (2015) revealed families whose primary language is Spanish may reduce their amount of parental involvement because schools may not have bilingual staff available to help. Povey et al. (2016) determined parents had difficulty being involved in their children's education due to time constraints from having to work or family commitments scheduled for the same time activities at school were scheduled. Bhargava and Witherspoon (2015) and Gonida and Cortina (2014) found some parents socio-economic needs are a barrier because they are not able to buy the necessary supplies their children need to complete school projects and activities; therefore, they do not get involved with their children's homework. Studies have shown when barriers are identified and removed, parents will increase their parental involvement (Bhargava & Witherspoon, 2015; Boro, 2015; Gonida & Cortina, 2014; Povey et al., 2016).

### **Statement of the Problem**

The Every Student Succeeds Act (2015) is committed to raising expectations regarding student performance and the accountability of schools across the nation. The legislation also recognized and emphasized the vital role of parental engagement in education (ESSA, 2015). PK-12th grade education systems have continued to reform the mathematics curriculum since the

passing of the ESSA in 2015. ESSA (2015) stated education systems should identify and establish effective curriculum standards and instructional practices. These effective standards and practices are vital to increasing student achievement levels and closing the achievement gap with other countries (ESSA, 2015). The Louisiana Department of Education has created a set of standards which will lay a strong foundation for students to become proficient in mathematics (K-12 Louisiana Student Standards for Mathematics, 2017). This proficiency will be achieved by standards that focus on “conceptual understanding, procedural skill and fluency, and application” (K-12 Louisiana Student Standards for Mathematics, 2017).

Little research has been conducted to determine the relationship between parents’ engagement and the new mathematics curriculum standards (Neufeld, Vashchysyn, & Chernoff, 2016). Research exists that describes what parental involvement means and the benefits of parental involvement from elementary school to high school (Griffin & Galassi, 2010; Grossman, 2014; Ray & Smith, 2010; Weiss, Lopez, & Stark, 2011). There is a significant amount of research supporting parent engagement in the general sense (Behr, 2016). There is limited research regarding the experiences of parents working with their adolescent children at home with their secondary mathematics homework (Behr, 2016). The problem is it is not known if and how parents work with their children on their secondary mathematics homework and how their involvement is related to Epstein’s (2001) six types of involvement framework.

### **Purpose of the Study**

The purpose of this study was to investigate parents’ experiences of involvement working with their adolescent children on their secondary mathematics homework related to parents’ experiences communicating with their adolescent children regarding mathematics homework, creating an environment conducive to learning, volunteering with their children’s secondary

school, making decisions for the adolescent children's education, understanding available resources and their children's needs, and collaborating with the community to find resources that would assist their adolescent children with the mathematics homework. This researcher also examined how the described parents' experiences were related to Epstein's (2001) six types of involvement framework.

### **Research Questions**

This study used two research questions as its guide. These questions brought understanding to parents' perspectives of parental involvement in their children's secondary mathematics education. Listening to parents' needs will deepen parents and educators understanding regarding the experiences of parents and possible barriers they face that may be associated with their socioeconomic status, ethnicity, or their confidence in working with high-school mathematics. The following are the research questions that guided this study:

1. What are parents' experiences working with their adolescent children on secondary mathematics homework?
2. What is the relationship between parents' experiences working with their adolescent children on secondary mathematics homework and Epstein's (2001) six types of involvement framework, including parenting, volunteering, communication, learning at home, decision making, and collaborating with the community?

The first research question was intended to examine the experiences parents have when they work with their adolescent children on their secondary mathematics homework. By answering this question, researchers can understand how parents describe their roles in the secondary mathematics homework process. Are there, for example, specific actions parents take when their adolescent children come home from school? How do parents feel when their

adolescent children tell them they have homework in their secondary math class? Understanding parents' experiences are important to teachers and administrators to ensure parents, schools, and communities are working together to meet the needs of adolescent children enrolled in secondary mathematics classes.

The second research question was intended to determine if the experiences parents have when working with their adolescent children on their secondary mathematics homework is related to Epstein's (2001) six types of involvement framework. Epstein's (2001) framework may assist teachers and administrators to develop partnerships between families and schools that benefit students' academic achievements. According to Epstein (2001), creating partnerships between families and schools will help students succeed, not only in education but later in life, as well.

### **Rationale, Relevance, and Significance of the Study**

Parent involvement or engagement is an integral part of student achievement (Peiffer, 2015). The way a parent views their abilities to assist their children with their educational activities will determine how engaged they are with their children at the secondary level. The more confident a parent feels about their abilities regarding secondary education activities, the more engaged they will be at school and home by attending school activities or working directly with their children on their homework (Peiffer, 2015). This study may be used by teachers, administrators, and other researchers who are interested in the experiences parents have in working with their adolescent children on their secondary mathematics homework. This study may also be beneficial to major stakeholders in education, including parents, students, teachers, and administrators by helping them understand how parents view their ability to be engaged in their children's high-school mathematics homework. Descriptions of the parents' experience



while working with their adolescent children on their secondary mathematics homework may help and parents built a relationship that will assist students in their academic endeavors (Epstein, 2001). This study may further develop previous research related to parental involvement with secondary mathematics students.

### **Definitions of Terms**

For this study, the following terms are defined below:

*Adolescence.* A critical time of development in children's lives when home and school should interconnect (Steinberg & Silk, 2002).

*Application.* A mathematical learning process that provides students a meaningful way to solve mathematical problems related to real-world situations. Students should understand how to effectively select the method needed to solve the problem, make sense of the solution, and build critical skills needed for thinking (K-12 Louisiana Student Standards for Mathematics, 2017).

*Blackboard.* For this study, blackboard refers to a virtual learning experience and support system.

*Communicating.* Effective forms of two-way communication between schools and homes regarding school programs and children's progress (Epstein, 2001).

*Community.* All those who are affected by and interested in quality education, not just those who have children in school but also those that influences students' learning and development (Epstein, 2001).

*Conceptual framework.* An understanding of concepts and relations in mathematics related to operations. Students should understand the importance of the concept and when it should be used (K-12 Louisiana Student Standards for Mathematics, 2017).

*Decision making.* A process wherein an awareness of a problem, influenced by information, values, and beliefs, is reduced to competing alternatives. From these alternatives, a choice is made (Epstein, 2001).

*Guardian.* Biological parent, legal guardian, or another person/caregiver including grandparent, step-parent, or person legally responsible for the child's welfare (Epstein, 2001, ESSA, 2015).

*Help.* Encouraging, listening, reacting, praising, guiding, monitoring, and discussing – not “teaching” – school subjects (Epstein, 2001).

*Homework.* Work that is completed alone, but also activities shared with others that link schoolwork to real life (Epstein, 2001).

*Learning.* Homework and other curriculum-related activities, decisions, and planning (Epstein, 2001).

*Parent engagement.* Responsibility shared by family, family members, schools, and communities to work together to improve academic outcomes for all students (ESSA, 2015).

*Parent involvement.* Commitment from the parents to actively participate in both the school and their children's education (Epstein, 2001).

*Parent leader.* School representative with opportunities and support to hear from and communicate with other families (Epstein, 2001).

*Parenting.* A parent or guardian provides an environment to support children as students (Epstein, 2001).

*Participant.* For this study, participant refers to a biological parent with an adolescent child enrolled in a secondary mathematics class.

*Phenomenology.* A philosophical model used by researchers to increase awareness and understanding of a phenomenon (Creswell, 2013).

*Procedural skill and fluency.* A student's ability to determine the necessary procedures to solve problems correctly and competently. Students should be able to calculate with speed and precision (K-12 Louisiana Student Standards for Mathematics, 2017).

*Secondary.* For this study, secondary refers to high school.

*Shared decision making.* Shared decision making is a process that includes the input of parents, teachers, administrators, community members, and students in the decisions that affect how a school or school district operates (Epstein, 2001).

*Volunteer.* Anyone supporting school goals as well as children's learning – not just at the school during the school day, but anywhere and anytime (Epstein, 2001).

*Workshop.* Making information about a topic available not just at the school building but in a variety of forms that can be viewed, heard, or read anywhere and anytime (Epstein, 2001).

### **Assumptions, Limitations, and Delimitations**

**Assumptions.** This research study was undertaken with the assumption that parents have unique experiences working with their adolescent children on secondary mathematics homework and that informed parental involvement is vital to student's success in the education system. Therefore, this study explored and described seven participants' experiences working with their children at home on their secondary mathematics homework. Another assumption undertaken in this research study was that the participants, parents of adolescent children taking secondary mathematics courses responded to interview questions honestly. This researcher thoroughly explained the responsibility the participants had in being truthful in their responses.

**Limitations.** This phenomenological study included several limitations. One limitation of this study was the use of a rural school that has a predominantly white student population as the study site; therefore, the results of this study are only applicable to populations with the same or similar composition. Another limitation of this study was the researcher of the study being the instrument to collect the data. According to Patton (2015), the researcher needs to ensure there is no manipulation of the data being collected or decide beforehand on any themes of the research based on personal knowledge. Since the researcher believes parental engagement has many positive effects, analyzing the information collected through the interviews could be influenced by researcher biases.

Another limitation of this study was the use of only one instrument to collect the data. Interviews were conducted one-on-one and relied entirely on the experiences of parents. These experiences may not be the same as other parents at different sites or other grade levels. The fourth limitation of this study was the use of only one stakeholder: the parents. This study did not include teachers and administrators. Teachers and administrators could have different experiences regarding parents working with their adolescent children on secondary mathematics homework than parents. The final limitation of this study was that parents participating in this study may not have been truthful when answering questions during the interview.

**Delimitations.** Creswell (2007) stated the goal of a phenomenological study is to gain rich descriptions of the participants; therefore, the study does not require a large sample size. This study was delimited to a sample size of seven participants. Because this study had a small sample size, it cannot be generalized to a larger population. Parents of high school mathematics students at one rural school in Louisiana also limited this study. This study was also delimited to parents of high-school mathematics students at one rural school in Louisiana. To participate in

this study, parents had to have adolescent children enrolled in secondary mathematics classes. The participants were delimited to those parents who had experience working with adolescent children on their mathematics homework. This study was delimited to the use of a rural school whose enrollment is predominantly Caucasian and/or low-income students. Only certain demographic types and geographic regions were represented. Further, this study provided data that may not hold true for all populations (Patton, 2015).

### **Chapter 1 Summary**

Researchers have determined parental involvement has a positive impact on attendance, behavior, social skills, and students' outlook in education (Griffin & Gallasi, 2010; Grossman, 2014; Ray & Smith, 2010). Not only does parental involvement impact students, but it also has a positive impact on parents and teachers, as well (Hornby & Lafaele, 2011). Relationships are built between parents and educators as parents become more involved in the education system (Hornby & Lafaele, 2011). According to Hornby and Lafaele (2001), confidence levels of parents and morale for teachers will increase as parents increase their involvement with the education system.

Child Trends (2013) noted parents of elementary-school children are more involved at the school than those parents with middle- and high-school aged children. One area in which parents can become involved when their children move into middle- and high-school is homework, especially in mathematics. O'Sullivan, Chen, and Fish (2014) discussed the benefits of math homework and the importance of parents' involvement with their children working on the homework.

Current national, state and local policies have increased the focus of the PK-12th grade education system on parental involvement. Reforms have required administrators and educators

to develop initiatives to increase parental involvement. Researchers have found that parental involvement has declined across all levels of education over the years (Benner et al., 2016; Hornby & Lafaele, 2011). According to Peiffer (2015), it is not that parents are not involved with their children, the involvement has just moved from parents being directly involved with to a more indirect approach. Understanding parents' experiences working with their children on their secondary mathematics homework may assist teachers in educating parents on the importance of communication with their adolescent children, creating a home environment that will allow learning to take place, the importance of volunteering at the secondary level, educational decisions regarding their adolescent children's future, and resources available from the school and community to assist with mathematics homework. Limited research was located that describes parents' experiences working with their adolescent children on their secondary mathematics homework and how those experiences are related to Epstein's (2001) six types of involvement. An essential part of this descriptive phenomenological study was allowing parents to have the opportunity to share their experiences working with their adolescent children with their secondary mathematics homework.

Chapter 1 presented the foundation for which the remaining chapters will develop the role parents' experiences working with their adolescent children on their secondary mathematics homework has on parental involvement in the education system. Key concepts were highlighted regarding parental involvement. The research questions used to guide this study were presented. Epstein's (2001) six types of involvement framework was established as the conceptual framework for this study. The benefits of this study to parents, teachers, and administrators were discussed. Assumptions and possible limitations and delimitations were described.

Chapter 2 of this study provides a detailed examination of the literature relating to parental involvement. The literature review will also demonstrate the connection between the parents' experiences and Epstein's (2001) six types of involvement framework. Chapter 3 defines and describes the descriptive phenomenological approach and the precise methods that were used for this study. Chapter 4 presents this study's findings and results. Chapter 5 describes this study's results, implications of the results, further research potentials, and the conclusion.

## Chapter 2: Literature Review

Results of parental engagement will have a more significant impact if school systems can encourage parents to become involved in the students' education early and maintain that same level of involvement as the child moves from elementary to middle to high school (Hornby & Lafaele, 2011). Parents tend to be less involved as students move into middle and high school (Benner, Boyle, & Sadler, 2016; Wang, Hill, & Hofkens, 2014; Wang & Sheikh-Khali, 2014). Researchers have found that the decrease in parental engagement as students move into middle and high school is based on the changing needs of an adolescent (Benner et al., 2016; Kim & Hill, 2015; Povey et al., 2016; Wang & Sheikh-Khali, 2014). Researchers stated some reasons for this decrease are ethnicity and socioeconomic backgrounds, and confidence in their abilities to assist their children in high (Wang, Hill, & Hofkens, 2014; Wang & Sheikh-Khali, 2014). Researchers indicated students have more success academically when there is support from both the school and the family (Affuso, Bacchini, & Miranda, 2015; Benner et al., 2016; Povey et al., 2016).

Since the implementation of the No Child Left Behind Act (NCLB) in 2001 and Every Student Succeeds Act (ESSA) in 2015, schools have moved to increase student academic performance to maintain the United States' competitiveness internationally. Schools have implemented parental engagement goals to achieve this mandate, especially in secondary mathematics (National Science Foundation, 2007). According to the National Science Foundation (2007), mathematics is one major area of concern for the education system. Sheldon and Epstein (2005) noted mathematics education is predominantly the teachers' and education system's responsibility while parents have little to no interaction with the instruction at all.



Therefore, there is a strong need for teachers, parents, and students to work together to raise student academic performance (Affuso et al., 2015).

This chapter presents literature about parental involvement. Topics covered in this literature review include a discussion of legislation, benefits of parental involvement, fathers in education, communication with parents, involved parents at school, involved parents at home, barriers, and school personnel responsibilities. Concordia University online library was used to locate and access the following databases for the desired literature: ProQuest Education, ProQuest Central, ERIC, JSTOR Archival Journals, Wiley Online Library, and SAGE Publications. Keywords used to search for literature included parental involvement, secondary education, mathematics, Epstein, adolescent, mathematics homework, secondary mathematics, and homework.

### **Conceptual Framework**

The conceptual framework for this phenomenological study on parental involvement stemmed from a need to understand parents' experiences while working with their adolescent children on secondary mathematics homework. This research study used Epstein's (2011) framework of involvement, including parenting, communicating, volunteering, collaborating with community, decision-making, and learning at home, as its conceptual framework. Researchers used Epstein's (2011) framework to focus on the collaboration of families, teachers, and the communities (Bocian, 2016; Farah, 2015; Grossman, 2014; Mannix-Lesh, 2013) (see Table 1). Schools interested in promoting collaboration between the education system and families could benefit from Epstein's (2001) framework.

Parents tend to be less involved as their students move into middle and high school (Benner et al., 2016; Wang, Hill, & Hofkens, 2014; Wang and Sheikh-Khali, 2014). School

systems can encourage parents to become engaged in the student’s education early to see higher impacts on academic performance (Hornby & Lafaele, 2011). The school systems can also work with parents to help them maintain that same level of involvement as the child moves from elementary to high school (Hornby & Lafaele, 2011). This study focused on parents’ experiences working at home with their adolescent children on secondary mathematics homework.

**Table 1**

*Epstein's Six Types of Involvement*

Type of Involvement	Purpose
Type 1: Parenting	Help all families create surroundings that provide support to meet the children’s needs to be students
Type 2: Communicating	Help families establish open lines of communication with schools concerning upcoming events and progress
Type 3: Volunteering	Provide opportunities for parents to help and support the school
Type 4: Learning at Home	Provide information, ideas and strategies parents can use at home to assist their children with homework and other home-based activities
Type 5: Decision Making	Provide parents the opportunity to take leadership roles in the school
Type 6: Collaborating with the Community	Utilize services offered by the community to enhance school and student programs and practices.

*Note:* Adapted from “School, family and community partnership: Preparing educators and improving schools,” by J. L. Epstein, 2001, p. 408. Copyright 2001 by Westview Press, Boulder, CO.

**Type 1: Parenting.** Students' success depends on the influences of their parents. Epstein (2001) claimed it is the family's responsibility to provide a safe and healthy environment, prepare children for all levels of school, and create a home environment that supports learning. Parents can receive parenting education and help through workshops and skill-building seminars through their children's school and other locations near them. According to Epstein (2001), it is also important for parents to talk with their children about their education as well as their future educational goals.

**Type 2: Communicating.** According to Epstein (2001), the education system is responsible for setting up communication opportunities with families to share information regarding their children's progress and upcoming programs. Communication that is two-way between parents and the school is vital to the success of students. Ways in which communication can occur are progress reports, report cards, phone calls, school message system notices, emails, text messages, home visits, and parent-teacher-student conferences. Epstein (2001) claimed parents should also be informed regarding school rating information, special programs their children may qualify for, and graduation requirements.

**Type 3: Volunteering.** Parents can become involved with their children's school by volunteering for the teachers and administrators at the school (Epstein, 2001). Parents can also volunteer at events or other performances their children participate in as well. According to Epstein (2001), schools should provide information on ways parents can be effective while volunteering in the school, whether it be in their children's classroom or on the school campus.

**Type 4: Learning at home.** Parents can become involved at home with their children by guiding and monitoring their homework activities (Epstein, 2001). Teachers provide information regarding activities parents can do with their children that will advance or even enrich the

learning experience. Schools provide parents with information regarding the skills their children will require to pass each grade level. Schools also provide parents with directions on ways to reinforce these requisite skills (Epstein, 2001).

**Type 5: Decision making.** Epstein (2001) stated parents should be an equal stakeholder in education as teachers and administrators. Therefore, parents should be invited to participate in school and community roles involving the decision-making process related to student achievement and school improvement. Parents can become involved in leadership roles through parent-teacher organizations, school building management teams, advisory councils, or other school or community committees or groups. Schools can assist parents in becoming leaders in the school and community by providing workshops regarding decision making, and communication skills (Epstein, 2001).

**Type 6: Collaborating with the community.** Schools can collaborate with community organizations, business, and other groups to enlist their support in sharing the responsibility to provide an effective education system and future success (Epstein, 2001). Schools can provide families with information regarding day care, health services, and other upcoming community programs. By sharing these types of community information with families, schools will help families provide a stronger environment at home and assist in their children's development and education (Epstein, 2001).

### **Review of the Research Literature and Methodological Literature**

Parents retain the right to decide how involved they wish to become with their children's education (Raty, Kasanen, & Laine, 2009). Pathways are opened for children to learn and interact on a social and physical level when their parents choose to work with their children on homework assignments (Ferguson, 2010). According to Ferguson (2010), children's learning is

directly affected when they learn to interact effectively with their families, communities, and schools. Vygotsky (1978) and Bronfenbrenner (1979) described this type of interaction between parents and their children in their respective zone of proximal theory and theory of ecological systems.

**Zone of proximal development (ZPD) theory.** Vygotsky (1978) described his general law of cultural development as both social and psychological. According to Vygotsky (1962), before children can internalize a purely mental function, the children must first experience the function externally. When children experience the function in a social setting, they will be able to internalize the function mentally and make a permanent connection in their development about the experience. ZPD is defined as “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with a more capable peer” (Vygotsky, 1978, p. 86). Thus, children learn best when they collaborate with someone with more experience or expertise. Children will internalize the learning or problem-solving skills necessary to solve the current and future problems when they arise during the collaboration process.

Children can work independently but only to a certain level (Vygotsky, 1978). Parents provide a higher level of knowledge for their children, making growth possible when the parents become involved and work with their children (Vygotsky, 1978). Vygotsky’s zone of proximal development supports parental involvement since the partnership between the parent and child in the learning process builds stronger thinking and communication skills. The earlier a child interacts with parents, siblings, and other people, the stronger the language development

foundation will become; therefore, parental involvement is extremely important in children's formative years before school (Oshima-Takane, Goodz, & Derevensky, 2008).

**The theory of ecological systems.** Bronfenbrenner (1979) developed a theory based on a child's interaction with his/her environment. Bronfenbrenner described three ecosystems a child interacts with: home, school, and community. Each of these ecosystems affects the development of children (Bronfenbrenner, 1979). Groups the children interact with daily fill the ecosystems, and how children interact with these groups will determine the type of reaction children will receive from them (Bronfenbrenner, 1979). Family members, classmates, teachers, and caregivers make up these groups and effective connections between the home, school, and community can have a positive effect on children's development (Bronfenbrenner, 1979; Semke & Sheridan, 2012). Semke and Sheridan (2012) noted that schools could create programs that will promote family involvement in education and partnerships between home and schools. School systems need to create effective programs and strategies that stakeholders can use to build parental involvement, parent-school partnerships, and parent-school-community partnerships (Ma, Shen, Krenn, Hu, & Yuan, 2016).

**Types of parental engagement.** Parents who become involved in their children's school will have a positive effect on their children's academic achievement (Epstein, 2007, 2011; Shute, Hansen, Underwood, & Razzouk, 2011; Wang & Sheikh-Khalil, 2014). Parents who are involved in parent-teacher organizations, the community, or are classroom volunteers have been shown to have a positive effect on their children's academic achievement in secondary schools (Shute et al., 2011). Several examples discussed by Epstein (2007) on ways parents can volunteer their time in the classroom are sharing their careers or talents, being a mentor, or being interpreters. Parents can also serve on school improvement committees to assist in developing

school mission statements or improving policies (Epstein, 2007). Involved parents increase motivation in students (Hornsby, 2012).

Research from Child Trends (2013) stated students who had more involved parents during primary and secondary schools would have a stronger desire to achieve a post-secondary education. According to Fox and Olsen (2015) and the Parental Engagement Project Taskforce (2011), schools would see an improvement in children's reading abilities by training parents to use specific tools, such as assisting their children with reading literacy. Providing the parents with these types of tools could improve children's ability to read (Sénéchal & Young, 2008). Research has also indicated when schools set high expectations for parents to be involved in the education of the children at home; the parents will set higher bars of academic expectations and future careers (Parental Engagement Project Taskforce, 2011; Toldson & Lemmons, 2013).

***Volunteering.*** Behr (2016) studied 539 parents and guardians of children from kindergarten through eighth grade in one school regarding their perceptions of practices of parental involvement. Many of the participants of the study volunteered in some way at the school (Behr, 2016). The study showed a decline in parent volunteering as the children moved from kindergarten through eighth grade (Behr, 2016). Behr found when children were in primary school; parents spent a great deal of time volunteering in the classroom versus when the children moved into seventh and eighth grades. The research showed parents volunteered less as the children grew older because notification time of needing help was too short, lack of time, work schedules, and expectations of volunteering in the future. Behr suggested future studies could focus on strategies targeted to parents volunteering in the classroom.

***Parental monitoring.*** Affuso, Bacchini, and Miranda (2015) discussed parental monitoring as a method for parents to become engaged in their children's education at home.

Affuso et al. (2015) described parental monitoring as a way for the parents to monitor and manage the activities of their children. Parental involvement in students' homework has moved to the forefront of academic achievement (Affuso et al., 2015; Gonida & Cortina, 2014). Affuso et al. (2015) observed adolescents have a higher homework completion rate when parents monitor their children while they are completing their homework. Previous researchers have suggested that when parents are involved in their children's homework, learning and achievement levels will benefit (Epstein, 2007; Epstein, 2010; Shute et al., 2011; Wang & Sheikh-Khalil, 2014).

***Parent set goals.*** Gonida and Cortina (2014), surveyed 282 fifth- and eighth-grade students and their parents to determine the correlation between the parent's goals and views for their children's academic effectiveness, strategies of parental involvement with homework, and the student's achievement. The parents completed self-report scale surveys, measuring their involvement in their children's homework, achievement goals for their children (mastery and performance), and perceptions of their children's academic efficacy. The students completed self-report scale surveys, measuring their personal achievement goals and perceived academic efficacy.

The results showed parents' goals and beliefs for their children's academic achievement and efficacy are important in determining the type of involvement the parent will use with homework (Gonida & Cortina, 2014). Gonida and Cortina (2014) stated parents would become involved at a higher level only if they believed their children can attain those levels. However, the findings also showed parents with beliefs that their children could not be successful will be more harmful regarding the involvement the parents have with their children during homework. The results further revealed if parents believe their children have low academic efficacy, the



parents will become intrusive and controlling regarding the homework. Gonida and Cortina (2014) stated this type of intrusive parenting would give the children the impression they are not trusted to complete their homework assignments, are not capable of meeting any academic challenges that may arise or cannot gain the necessary skills to succeed. As noted in this study, parent involvement in children's homework is essential; however, sometimes the type of involvement could do more harm than good (Gonida & Cortina, 2014).

*Parental involvement during adolescence.* According to Bhargava and Witherspoon (2015) and Wang and Sheikh-Khalil (2014), positive parental involvement is vital across grade levels. Adolescent children are continually negotiating with their parents for autonomy in education (Bhargava & Witherspoon, 2015). Research showed parents might reduce their involvement in homework or volunteering at school but increase their involvement in communicating the importance of education (Bhargava & Witherspoon, 2015). Bhargava and Witherspoon conducted a multi-wave longitudinal study involving 1,482 families from Maryland to determine how parental involvement strategies changed during adolescence and if these strategies varied by race, socioeconomic status, adolescents' gender, and neighborhood factors across middle and high school (p. 1705). The participants involved in the study were from African American or European American families (Bhargava & Witherspoon, 2015).

The study examined measures of family demographics, children's perceptions of parental involvement, parental involvement in school, communication between parents and children, neighborhood resources, neighborhood trust, and parental efficacy (Bhargava & Witherspoon, 2015). The researchers created surveys to gather data for this study. These surveys were completed in four waves; wave one took place at the beginning of seventh grade, wave two at the end of seventh grade, wave three at the end of eighth grade, and wave four at the end of eleventh

grade. The findings of this study indicated parents' involvement did decrease both at home and school over the period studied. This study also found parents consistently engaged in sharing the importance of academics with their children. Bhargava and Witherspoon expected race, SES, and youths' gender to be a factor in parental involvement, including that African American parents are more involved at home with their children than European American parents through all levels of education. The results showed African American parents were involved more at home than European American parents, but their involvement declined over time. The study did not show any significant associations between at-home involvement and neighborhood resources and trust, but children living in more disadvantaged neighborhoods started at a high rate of at-home involvement which also declined over time (Bhargava & Witherspoon, 2015).

**Benefits of parental engagement.** Research revealed students had higher attendance rates, lower incidents of behavior problems, stronger social skills, and a more positive outlook regarding school when their parents became involved in the education system (Griffin & Galassi, 2010; Grossman, 2014; Ray & Smith, 2010). Every Student Succeeds Act states a strong family-school relationship can lead to open communication between families and teachers regarding the best course of action to take for behavior issues (as cited in Weiss, Lopez, & Stark, 2010).

Research showed parental involvement assisted in closing the gap in achievement levels based on demographics (Bowen, Hopson, Rose, & Glennie, 2012; NEA Priority Schools Campaign, 2011). Parental involvement also showed to have a significant effect on high grade-point averages and standardized test scores, higher rates of passing each grade level, and higher enrollment in advanced and AP courses (Bowen, Hopson, Rose, & Glennie, 2012; NEA Priority Schools Campaign, 2011). Research also noted when families were involved in homework, children were more successful in class (Griffin & Galassi, 2010; Ray & Smith, 2010). Many

researchers noted Epstein's (2001) framework regarding parental involvement as a strong tool used to build the family-school relationship, especially when learning at home and communication are lacking (Bocian, 2016; Farah, 2015; Grossman, 2014; Mannix-Lesh, 2013).

**Fathers' engagement.** According to Kim and Hill (2015), research has grown relating fathers' engagement to education, but most literature still only focused on the mother. A one-size-fits-all approach to parental engagement would place equal emphasis on a mother's and father's benefits to their children (Kim & Hill, 2015). Adamsons and Johnson (2013) and Jeynes (2010) indicated the earlier a father becomes involved in the child's education, the more success the child will achieve. Preschool was the first opportunity for many children to experience a world outside the home (Kim & Hill, 2015). According to Child Trends (2016), fathers were inclined to use language with their young children that was more advanced or technical. Vocabulary was developed quickly for young children when fathers used this type of language (Child Trends, 2016). Children could explore more and have more time for rough-and-tumble play with fathers, which assist young children in building stronger social skills and autonomy (Child Trends, 2016).

Cowan, Cowan, Cohen, Pruett, and Pruett (2008), noted a positive connection between fathers being involved with their children and their cognitive, social, and emotional results as children grow to adulthood. Fathers in the United States would engage more with their children today than fathers of generations ago (Child Trends, 2016). Fathers would engage with their children by reading, telling stories, and assisting with homework (Child Trends, 2016). Parents who work outside the home could expose their children to their external workplace and colleagues (Kim & Hill, 2015). The opportunity to introduce children to strangers could lead to better communication and stronger vocabulary skills (Kim & Hill, 2015). Children would

benefit from this interaction with people and workplace environments when they enter preschool and are required to interact with other children they may not know (Kim & Hill, 2015).

Cowan et al. (2009) studied 289 couples from low-income families of Mexican American and European American heritage in an 18-month program. The study aimed to determine the effects of fathers' engagement in relation to their children's well-being. Cowan et al. conducted literature research on current fathers' engagement revealed most interventions by the father were in the form of workshops, support groups, or motivational meetings. Some governmental agencies have added components to their programs that provide interventions to fathers at home (Cowan et al., 2009).

The literature review further revealed almost all programs available for intervention were led by men who were either counselors or public speakers (Cowan et al., 2009). The proposition displayed was the relationship the father had with the child's mother predicted the father's engagement with their children (Cowan et al., 2009). In the study, the couples were divided into three groups: fathers only, couples, or one-time meeting with low-dose interventions (Cowan et al., 2009). The study measured the father-child relationship, which included a who does what daily care assessment; parents' stress levels; styles of parenting; quality and stability of the couple's relationship; disagreements concerning discipline; and behavior issues of the children (Cowan et al., 2009). The results of the study showed an increase in fathers' engagement daily with the child-care tasks, positive quality and stability of the couple's relationship, and a positive effect on children's behavior issues (Cowan et al., 2009).

Bowman (2014) conducted a phenomenological study with the purpose of gaining insight into divorced fathers' perceptions of their role in their middle and high school children's education. Nine divorced fathers participated in this study. The participants completed a

questionnaire and engaged in a semi-structured, open-ended type question interview in their homes. Bowman selected the home as the site for the interview to eliminate time constraints and to maintain the participants' level of comfort and security. Once the participants completed the surveys and interviews, they took part in a focus group to discuss common themes found in their interview and survey response. The study revealed while a father's involvement early in a child's life is important, it could be even more important during the adolescent years. The study further revealed fathers felt as if they are not treated as an equal parent by the teachers and schools when they are not the custodial parent. Bowman suggested conducting a quantitative or mixed-methods research study to show teachers how to reach out and contact divorced parents who have joint custody of the child. This type of study would give merit to the fathers' perspective of feeling unequal (Bowman, 2014). Bowman also suggested a phenomenological study to be conducted, focusing on the divorced mothers who are the custodial parent to get their perspective on the phenomenon.

According to Child Trends (2016), programs are being designed to meet the needs of fathers wanting to engage with their children. Programs have been designed to assist fathers in parenting, co-parenting, skill building, and help with searching for employment. As non-resident fathers begin utilizing these programs, co-parenting skills can be built that allow cooperation between the parents, so non-resident fathers can continue to be engaged in their children's education while living outside the home. Because government programs are designed to assist non-resident fathers in finding employment, child support can be maintained to ensure children are not living in poverty (Child Trends, 2016).

**Parent engagement through communication.** Parents who have consistent communication with their children's school and teachers have a positive effect on academic

achievement (Epstein, 2007; Kraft & Dougherty, 2013). Epstein (2007) stated communication that flows between the teacher and parents kept them involved and informed of educational programs and progress. Kraft and Dougherty (2013) and Epstein (2007) noted an increase in homework completion rates and student classroom engagement and a decrease in disciplinary referrals when lines of communication were open between teachers and parents. Kraft and Dougherty (2013) used a field experiment to evaluate student classroom engagement about frequent communication between teachers and parents and students. Students chosen randomly for the field experiment were in the sixth and ninth grades attending the summer MATCH Charter Schools and Teacher Residency program in Boston (Kraft & Dougherty, 2013).

The program lasted for 4 weeks, and the students took a mathematics class, two English classes, and a school foundations class (Kraft & Dougherty, 2013). In the study's intervention, students in the experimental group received one phone call home each day from their English teachers and a text or written message from their mathematics teachers. The phone call conversation script created for the study shared the same information daily from each teacher: how the student was progressing academically and behaving in class, upcoming assignments or assessments, and strategies the students could use to improve. Kraft and Dougherty stated the text or written messages to the parents were only to focus on strategies the students could use to improve. The methods used by Kraft and Dougherty (2013) illustrated the effectiveness of Epstein's (2001) type 2 (communicating) and type 4 (learning at home) in the six types of involvement model.

Kraft and Dougherty (2013) noted an almost immediate positive effect regarding student homework completion rates, unwanted classroom behaviors, and class participation when communication with parents was increased. Kraft and Dougherty suggested teachers should

provide parents with contact information. The information gave parents ways to contact the teacher if they or the students had any questions on homework. According to Kraft and Dougherty, these regular email communications can be beneficial to parents. The results of this field experiment showed when teachers had consistent communication with parents; there was a 40% increase in homework completion, 25% decrease in teachers having to redirect student behaviors, and a 15% increase in students participating during class time (Kraft & Dougherty, 2013).

Antonopoulou, Koutrouba, and Babalis (2010) surveyed how Greek parents viewed their role in secondary education. Four-hundred seventy-five parents of secondary students completed a survey measuring parents' perceptions of many family-school partnerships, including two of Epstein's (2011) framework of six types of involvement model of communication and collaboration between parents and school. Several perceptions emerged through the study. According to Antonopoulou et al., the parents involved in the study believed collaboration between family and school play a positive role in secondary education. Parents also believed parental involvement with the school was limited and rare with no clarity in structure or consistency. Antonopoulou et al. stated parents believed communication was limited to the adolescents' school performance. The parents received limited information about any difficulties with learning or social interaction. Finally, the parents believed their opinions were not valued by the teachers.

In Antonopoulou et al.'s study (2010), parents were given the opportunity to make suggestions regarding ways to improve the current communication and collaboration efforts in place. More than 80% of the participants suggested collaboration should be set up on a regular basis among the administration, teacher, and family, and 50.1% of the participants suggested that

the school should provide counseling services to the families regarding how the parents can become more involved in the education of their adolescent children. Additionally, 47.8% of the participants suggested schools should set up consistent, pre-arranged conferences at the school with the families to keep the parents informed on the academic performance and underlying difficulties of their adolescent children (Antonopoulou et al., 2010).

**Barriers to parental engagement.** Many factors affect parental engagement, including time, income, confidence levels, and school climate (Bhargava & Witherspoon, 2015; Boro, 2015; Gonida & Cortina, 2014; Povey et al., 2016). Several studies have shown when barriers are identified and removed, parental involvement increases (Bhargava & Witherspoon, 2015; Boro, 2015; Gonida & Cortina, 2014; Povey et al., 2016). Bhargava and Witherspoon (2015) and Gonida and Cortina (2014) found that some parents may feel their socio-economic level may be such that they cannot assist their student with projects and other assignments that require items to be purchased. The New Jersey State Parent Information & Resource Center (NJPRIC) reported that transportation is another reason why parents may not be involved in the school system (2010). Not all families have multiple cars; therefore, getting to family activities is difficult (NJPRIC, 2010). Parental involvement may rise if the school system could provide bus transportation to bring families to events that occur after school hours or schools could schedule some events to take place at a local area in the community (NJPRIC, 2010).

Boro (2015) conducted a qualitative study focusing on the barriers of parental involvement related to communication, volunteering, and decision making, three of the six types of Epstein's (2001) involvement model. The study involved 10 administrators of Title 1 charter middle schools in Los Angeles. A semi-structured interview process was used to collect data. The study focused on understanding administrators' views regarding abilities levels of parents



becoming involved, the administrators' attributes and motives which may affect parental involvement, and the administrators' perceptions of the quality of existing parental involvement (Boro, 2015).

Boro (2015) found six themes to barriers of parental involvement relating to communication, volunteering, and decision making. Some barriers noted in the study regarding communication were language barrier, messaging, and communication gap between parents and teachers. The study revealed clear and meaningful expectations and limited opportunities to volunteer were barriers to parents volunteering. Lacking structures outside of the School Site Council (SSC) was also a barrier to decision making. The study revealed while most participants viewed parental involvement important, barriers existed that needed to be eliminated to increase parental involvement. Boro discovered a need to create better communication between the parents and school. Most participants stated communications were lacking altogether, one-sided from the teachers, or that parents did not take the time to read documents sent home (Boro, 2015).

Boro (2015) revealed through the study not having bilingual staff members made communication difficult as many families in the study school spoke only Spanish. Another communication barrier noted by Boro was the number of teachers their middle school children had in the middle school program versus the one elementary teacher their children had in elementary school. This increase caused less communication because of the time it would take parents to communicate with several different teachers regularly throughout the school year. Boro determined that volunteering is low at this level because schools did not have clear expectations of how parents can volunteer or limited opportunities for parents to volunteer in the school.

The findings of the study revealed several limitations. One limitation was the perspectives discovered were from administrators. The results did not include any perspectives of staff or parents. Another limitation was the study being based on 10 urban Title 1 middle schools, and therefore, generalizations cannot be made for all urban charter middle schools. The last limitation of the study was the use of only one instrument to collect data. One-on-one interviews were used in the study, which relied solely on the perceptions of administrators at the specific sites. These perceptions may not be the same as administrators on other sites. Boro (2015) suggested further research (1) using a larger participant group to be able to make better generalizations; (2) choosing public schools to compare the results between school types; and (3) involve teachers and parents in a study to broaden the perspective of barriers to parental involvement.

Povey et al. (2016) studied 1,233 public schools in Australia regarding leadership and school climate. Since 2000, scores for students on international achievement levels have been below average, and there has been a steady decline on the Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA) (Povey et al., 2016). Povey et al. further identified approximately 2 1/2 years of schooling difference on student achievement for students listed in the highest and lowest quartiles of the socioeconomic scale. The government has recognized a difference in quality and equity across the schools exists and is interested in closing the gap (Povey et al., 2016). Povey et al. stated one way the Australian government is interested in achieving this goal is to increase parental involvement and build a stronger school-family relationship.

Povey et al. (2016) collected data from principals and presidents of parents and citizens (P&C) associations, using a survey created by the Parent Engagement in Schools (PES) project.

Six-hundred-eighteen schools participated in the study, including schools from varying socioeconomic levels (Povey et al., 2016). The survey used for the study focused on (a) perceptions of any benefits and barriers to parental involvement in the school; (b) principals' style of leadership and quality of parent relationships; (c) communication with parents, (d) different strategies' effectiveness to engage parents in the school; (e) parental involvement expectations regarding children's education; and (f) parent volunteering (Povey et al., 2016).

Povey et al.'s (2016) study identified several barriers to parental involvement. One barrier was the lack of time parents had due to work and family commitments and timing of activities at the school. In the study, 56% of the principals and 63% of the P&C presidents reported a lack of interest by the parents in becoming involved in the school. Principals and P&C presidents disagreed on whether a lack of interest or time constraints was the more significant factor in parents becoming involved in the school. The survey showed more parents with children in secondary school had less confidence or felt unwelcome than parents of children in primary school. Povey et al. found different types of barriers between parents of higher and lower socio-economic schools. Some of the barriers to parental involvement noted by principals at disadvantaged schools were (a) transportation problems; (b) time constraints; (c) lack of interest; (d) lack of trust; and (e) low confidence levels. These findings solidified the need for building stronger relationships among the principals, parent and citizens associations, and parents (Povey et al., 2016).

An important limitation of Povey et al.'s (2016) study to note is the focus on only two groups of the schools' stakeholders: principals and P&C presidents. Perceptions of parents were not included. Parents could have different perceptions than those groups studied. Povey et al. suggested future researchers should conduct a study to obtain the parents' perceptions. This

information could be used to create strategies to assist parents in becoming more involved in their children's school.

Dual-income families have been seen to be less involved in the education system than those with one parent who stays home (Boro, 2015; Hall, 2012; Povey et al., 2016). Studies have shown the older a student becomes, the less likely parents are going to become involved (Bhargava & Witherspoon, 2015; Gonida & Cortina, 2014). Some parents believed they do not have the education to be able to assist their older student with their work. Parents need to be assured that their involvement will not require them to do the homework; their involvement could be as simple as making sure the students get their homework completed.

**School personnel responsibilities for parental engagement.** Principals play a significant role in parents' engagement (Povey et al., 2016). Principals need to make sure parents feel comfortable coming to school (Povey et al., 2016). A principal's style of leadership, ability to communicate, shared expectations, and perceived attitudes help facilitate parent involvement (Barr & Saltmarsh, 2014; Mleczko & Kington, 2013; Povey et al., 2016). Povey et al. (2016) surveyed principals to gather ideas of how they get parents involved in their schools. Povey et al.'s (2016) study revealed principals expected parents to be involved in supporting learning at home, volunteering, and enforcing the school dress code policy. Principals also expected parents to become involved in fundraising activities, school events, assemblies, and running various school shops (Povey et al., 2016). Epstein (2007) stated principals could set up meetings with parents to communicate educational information such as graduation requirements. Programs that have parents engaged by having them be tour guides to new students and parents of the school have shown increased involvement (Povey et al., 2016).

Teachers need to be taught how to involve parents in education (Hornsby, 2012). Fisher and Kostelitz (2015) investigated teachers' perspective of parental involvement related to student self-efficacy. Fisher and Kostelitz (2015) found teachers tended to encourage parents to become involved in the school's PTO, chaperoning field trips, or organizing school fundraisers or activities. The study also found that teachers were amenable to parents assisting with school tasks at home but not with the actual day-to-day pedagogy of the classroom (Fisher & Kostelitz, 2015). According to Fisher and Kostelitz, (2015) college education courses for teachers need to be created with the purpose of providing the definition of parental involvement, present involvement models, providing information regarding the importance of parental involvement, and creating strategies for building communication with parents.

Hayes (2011), found teachers work to open lines of communication with the parents of their students based on their own perceptions and experiences with parental involvement. Hayes stated teachers noted the importance of approaching parents with a nonjudgmental attitude and remain respectful of the parents. The research also revealed the importance of keeping the communication positive by focusing on positive comments regarding the children (Hayes, 2011). One participant in Hayes's study stated, "I always start with positives. I want to talk positives. I want to ask you something positive...It doesn't even have to academics. Let's just talk about your child so you know that I do care about your child" (p. 78). Another participant stated, "I would definitely tell a teacher if you start a good line of communication at the beginning of the year, it will definitely help throughout" (Hayes, 2011, p. 78). Research showed parents became more involved in the education system when the teacher had a strong positive relationship with their children, had concern for the children's academic progress, and were inviting and open to

communication (Gavidia-Payne, Denny, Davis, Francis, & Jackson, 2015; Hayes, 2011; Kaplan Toren & Seginer, 2015).

### **Review of Methodological Literature**

Flick (2014) defined methodology as what the researchers' base their actions and approaches on regarding specific philosophies and notions. According to Creswell, Plano Clark, Gutman, and Hanson (2003), it is vital for researchers to use research designs because they provide the guide on ways to meticulously conduct studies which would meet specific, stated objectives. This study sought to describe the experiences parents have when working with their adolescent children on their secondary mathematics homework. This researcher used open-ended questions to gain in-depth details into the experiences parents have working at home with their children. Creswell (2013) defined quantitative research as a method to collect data using structured tools such as questionnaires or closed-ended questions. The data gathered through quantitative research is quantifiable and reported in the form of numbers and statistics. The results of quantitative research are presented using language that is objective and supports a determined hypothesis (Creswell, 2013). Therefore, using a quantitative researcher is not appropriate to describe in rich, thick detail the experiences of parents working with their children on their secondary mathematics homework.

Qualitative research was defined by Creswell (2013) as a method to investigate, describe, and understand a specific phenomenon. Qualitative research uses observations or open-ended questions that allow participants to describe in detail their experiences related to the phenomenon. Qualitative research allows researchers to analyze and interpret data to increase understanding of a specific phenomenon. Therefore, using a qualitative methodological

approach is appropriate for this study to capture the core understanding of parents' experiences when working with their adolescent children on their secondary mathematics homework.

Creswell (2013) described five methodologies researchers could use associated with qualitative research: case study, ethnography, narrative, grounded theory, and phenomenology. A phenomenological study is based on experiences from the participants' point of view. This methodology could capture the essence through understanding what and how a parents' experiences are affected by working with their adolescent children on their secondary mathematics homework.

**Case study.** A case study design aims to test a topic of interest. According to Creswell (2013), a researcher would use a case study when there are clearly identifiable cases and the researcher wants to achieve an understanding of those cases. A researcher would also use a case study to compare several case studies for similarities and differences (Creswell, 2013). According to Yin (2009), case studies answer the questions *why* or *how*. Farah (2015) was interested in filling a gap in the current parental involvement literature as it relates to the idea that Somali families are not that significant in the Western world. Farah (2015) used face-to-face semi-structured interviews to capture parents' experiences, observations of families at events held at the school, and an analysis of documents and public records of the school or the participants. This study would not benefit from using a case study because it is looking to investigate a phenomenon associated with parents' experience using strategies to become more involved in the child's secondary mathematics education.

**Ethnography study.** Another research design described by Creswell (2013) is ethnography. Ethnography is a design focused on the participants (Creswell, 2013). Researchers use this type of design to collect data by conducting observations and/or interacting with the

participants in their environment, often for years (Creswell, 2013). Creswell (2013) noted ethnographers study cultures or social groups, and when the researcher analyzes the data collected, there will be a better understanding of how the groups work. Using ethnography will give the researcher a more in-depth understanding of the problem and provide a better solution. While this type of design would benefit this study, the time frame for this study was about 12 weeks instead of the years ethnographic studies require.

**Narrative study.** Creswell and Plano (2006) described a narrative as text regarding an event or series of events that are written or spoken. The procedure used to conduct narrative research consists of gathering data from one or two participants, reporting the individual participant's stories, and ordering the meaning of those experiences (Creswell & Plano, 2006). The narrative study would not benefit this study because the data that were collected would not be based on one or two individuals and will not be reported chronologically.

**Grounded theory study.** A grounded theory study provides a theory of a process already experienced. Creswell and Plano (2006) stated the purpose of grounded theory is to provide more descriptions that go above current descriptions to generate new ideas or theories. In a grounded theory study, the participants would have previously experienced the topic of the research. Further, the researcher would provide a new theory that may assist in explaining an existing practice or provide the groundwork for future research (Creswell & Plano, 2006). While this study used Epstein's (2001) six types of involvement framework as its conceptual framework, the purpose was not to generate new ideas, theories or explain an existing practice but to add to the body of literature regarding parents' experiences working with their adolescent children on their secondary mathematics homework.



**Phenomenological study.** Creswell (2013) described a phenomenological study as a method to describe an explicit phenomenon or event experienced by a group. The researcher would conduct interviews to gain a better understanding of what the participant believes the meaning is of the phenomenon. A phenomenological study provides the researcher with the participants' motivations. Researchers who have studied the field of parental involvement revealed a need for more qualitative data regarding parents' experiences when they are involved in their children's secondary mathematics education (Donaldson-Pressman, Jackson, & Pressman, 2014; Weininger & Lareau, 2009). Using a qualitative methodological approach was appropriate for this study to capture the core understanding of parents' experiences when working with their adolescent children on their secondary mathematics homework. A phenomenological study is based on experiences from the viewpoint of each participant. The phenomenological study design chosen for this study would capture the essence through understanding what and how a parents' experiences were affected by working with their adolescent children on their secondary mathematics homework.

In-depth, semi-structure interviews were used to collect the data for this phenomenological design. Mack et al. (2011) described an interview as a tool used by investigators to gather data about participants' experiences regarding a specific topic using a semi-structured discussion. Hall (2012) studied parents' descriptions of their experiences of being involved at the high-school level. Interviews of nine parents were the primary source of data collected (Hall, 2012). Four themes were identified in the study: technology and parental involvement, economy and parent work schedules, the potential for parent growth, and parental involvement outside the school (Hall, 2012).

Aichler (2017) interviewed middle-class parents regarding their description of the emotional experience of facilitating the homework process of their elementary children, how they viewed their role in the process, and what meaning they contributed to the experience. Three interconnected themes were found to be constant for all participants: the creation of homework routines, emotional themes of stress and resistance, and parental role construction (Aichler, 2017, p. 68). The participants' emotional responses to involving themselves in their children's homework evoked the feelings of stress, resistance, confusion, and tension (Aichler, 2017).

Disu (2017) was interested in how teachers use the practice of reflection to enhance their teaching. Disu used purposeful sampling to conduct open-ended interview questions of 21 elementary-charter-school teachers who used the reflective teaching practice. Disu found when the teachers would use the reflective practice before, during, and after their lessons, they would be able to anticipate student struggles and plan their lessons accordingly, adjust the flow of the lesson to meet their students' learning needs at the moment, and become better teachers to benefit their students.

To add to the current literature, the phenomenological design was used in this study to increase awareness, information, and understanding of the phenomena associated with parents' experiences working with their adolescent children on their secondary mathematics homework and how those experiences relate to Epstein's (2001) six types of involvement framework. The phenomenological approach made it possible to understand the perspectives of parents regarding their experiences being involved in their adolescent children's mathematics education.

## **Review of Methodological Issues**

According to Tracy (2013), qualitative research's definition has different meanings. Tracy (2013) defined qualitative research as a method that covers group or one-to-one interviews, observations, and analysis. Tracy (2013) further stated qualitative research may only be one day long or may not require the researcher to delve deeply into a culture. Creswell and Plano (2007) defined qualitative research as understanding built on the inquiry process using certain methodologies that examine a specific phenomenon. With qualitative research, the results are provided using words based on the understanding of some aspect of a specific phenomenon (McCusker & Gunaydin, 2014). It is important for the researcher to withhold assumptions when interviewing participants. Open-ended questions, probing questions, listening attentively, and asking further questions will allow the researcher to gain the in-depth knowledge of the experienced phenomenon of the participants without needing to interpret some unknown fact (Merriam, 2009; Rubin & Rubin, 2012).

Merriam (2009) noted that in qualitative research the primary focus of the research is to understand the participants' meaning of the experienced phenomenon, so the final report should be detailed with in-depth descriptions. Therefore, qualitative researchers should be ready and available to spend extended time with the participants to ensure a full understanding of their experiences is gained. Disu (2017) conducted semi-structured interviews, focusing on the participants' use and view of reflective teaching practices in the pedagogical practices. This study gave the researcher limited knowledge of how each teacher interacted with students, adjusted his or her teaching to meet the students' needs, and how created a classroom environment culture of learning, management, behavior, and organization (Danielson, 2008).

Aichler (2017) used a descriptive phenomenological approach to explore the emotions parents experienced while engaging with their children during homework. In this type of design, the researcher understands the need to describe the information exactly as it was stated without adding or taking away any of the intended meaning (Giorgi, 2012). One aspect limiting this type of study is the limits set on the generalization that can be made beyond this study. The results of this study may only be effective for this study alone.

Between 2012-2018, this researcher found no qualitative study during the review of methodologies that addressed parents' experiences working with their adolescent children on their secondary mathematics homework. The phenomenological design used by many of the studies reviewed assisted in identifying measures relevant to this study: communication with parents and experiences of parental involvement at home with their children's secondary education. Since the phenomenon of experiences working with adolescent children on their secondary mathematics homework has not been studied in great length, the use of the phenomenological design as the guide for this study can provide insight for understanding its impact parents' involvement with secondary mathematics homework. This method of study will provide knowledge of parents' perspectives of being involved in their children's education through their experiences.

### **Synthesis of Research Findings**

Research conducted over the past seven years has established a connection between parental engagement and student academic success in secondary mathematics (Aligbe, 2014; Doucet, 2011; Epstein 2007; Harackiewicz, Rozek, Hulleman, & Hyde, 2012; Johnson, 2014; Ker, 2016; Shute et al., 2011). According to Every Student Succeeds Act (2015), parental engagement is defined as parents working with their children. They viewed children's mental

function and cognitive development as an experimental progression with their surrounding environments and the people in them (McLeod, 2015; Vygotsky, 1978).

According to Epstein (2007) and Kraft and Dougherty, there is a positive effect on academic achievement when parents have consistent communication with their children's school and teachers. Epstein (2007) stated two-way communication between teachers and parents kept parents involved and informed of educational programs and progress. Kraft and Dougherty (2013) stated homework completion rates increased and disciplinary referrals decreased when the teacher sent home mathematics reports. Teachers should provide parents with contact information (Kraft & Dougherty, 2013). This information would give parents ways to contact the teacher if there are any questions on homework. According to Kraft and Dougherty (2013), regular emails to parents can be beneficial in this regard.

Parents who become engaged in their children's school will have a positive effect on academic achievement (Aligbe, 2014; Doucet, 2011; Epstein, 2007; Shute et al., 2011). Shute et al. (2011) noted a positive correlation between parents who check their children's homework and academic achievement. Parents reading at home with their children provide a model to their children regarding the importance of reading and will establish an environment that promotes reading (Shute et al., 2011). Malecki and Demaray (as cited in Shukla et al., 2015) stated parents who support their children emotionally, instrumentally, and informationally helped their children adjust positively to academic challenges. Researchers also stated parents who are engaged in parent-teacher organizations, the community, or are classroom volunteers have shown to have a positive effect on academic achievement in secondary schools (Shute et al., 2011). Epstein (2007) discussed ways parents can volunteer their time in the classroom sharing their careers or talents or becoming mentors or even interpreters.

There is a positive effect on academic involvement when barriers to parental involvement are identified and removed (Bhargava & Witherspoon, 2015; Boro, 2015; Gonida & Cortina, 2014; Povey et al., 2016). Studies showed the older a student becomes the less likely the parents are going to be involved (Bhargava & Witherspoon, 2015; Gonida & Cortina, 2014). Bhargava and Witherspoon (2015) and Gonida and Cortina (2014) found that some parents may feel their socio-economic level will hinder students successfully completing projects or assignments.

Families with a lifestyle suited toward successful academic practices will have a positive impact on their children's academic achievement. Families who are involved in the education system take steps to ensure that their lifestyles are suited for success (Bhargava & Witherspoon, 2015). Shute et al. (2011) stated parents who offer an authoritative style of parenting (e.g. demanding and responsive) have a continuous, positive association with their children's academic success compared to parents who offer an authoritarian or permissive style. An involved family will have set routines that would allow for homework and studying (Bhargava & Witherspoon, 2015). Fathers becoming involved in education have been found to have a positive effect on education (Adamsons & Johnson, 2013; Jeynes, 2010; Kim & Hill, 2015). Adamsons and Johnson (2013) and Jeynes (2010) indicated the earlier a father gets involved in the child's education, the more success the child will achieve.

### **Critique of Previous Research**

Many studies related to parental involvement focused on elementary children and/or the benefits of parental involvement on academic achievement (Aligbe, 2014; Doucet, 2011; Epstein 2007; Harackiewicz et al., 2012; Johnson, 2014; Ker, 2016; Shukla et al., 2015; Shute et al., 2011). Few of these researchers explored the experiences of the parents working with their children on secondary mathematics homework. A case study was located that was relevant to

this research study. Perriell (2015) wanted to compare high school students' academic achievement in math, reading, and social studies to parental involvement.

Perriell (2015) administered a cross-sectional survey to 367 ninth-grade students and 172 parents. The survey was created to help the researcher investigate several parental involvement concepts. The first concept was how parents and students perceived parental involvement. Next, the survey assisted researchers in investigating the relationship between student academic success and parental involvement. The researchers then used answers to the survey to explore strategies and programs that can be created by administrators, teachers, and parents to improve parental involvement. Gender-specific differences of parental involvement perceived by parents was another concept covered by the survey. The last concept was school location and a student's gender affecting level of parental involvement perceived by students. This case study was insightful because it stated specific strategies parents could use to assist their children in academic achievement in mathematics and other curricula.

Al-Alwan (2014) wanted to determine how academic performance was affected by parental involvement. The participants of the study were ninth- and tenth-grade students and their parents. The participants were given surveys to complete to assess the students' engagement in school and the parents' involvement with homework, extracurricular activities, and academic progression. The study showed a positive effect on academic performance when parents were involved. In a multi-dimensional study by Cheung and Pomerantz (2012), 825 American and Chinese seventh graders were surveyed to determine if parent motivations enhanced their educational achievement. This study determined parent motivations did enhance their children's academic achievement over time. While these studies involved middle- and high-school students and found a positive effect on academic performance in some areas when

parents were involved, the studies did not involve parents' experiences working with their adolescent children on their secondary mathematics homework.

Hong, Yoo, You, and Wu's (2010) study was also beneficial. The study aimed to compare parental involvement and mathematics achievement. The study was a 6-year longitudinal study with 2,116 students from seventh through 12th grade. Hong et al. wanted to compare a parent's view of mathematics and the reinforcement of those views to a student's mathematics achievement. Hong et al. measured a parent's view of mathematics with the statements: my parents think mathematics is important, and my parents expect me to do well in mathematics. A parent's mathematics reinforcement value was measured with the statements: my parents tell me how they are when I make good grades and my parents reward me for getting good grades (Hong et al., 2010). The study revealed students had higher mathematics achievement throughout high school in relation to the parents' mathematics value while no discernable difference in mathematics achievement in relation to the parents' mathematics reinforcement was noted (Hong et al., 2010). However, no research was found that specifically addressed parents' experiences working with their adolescent children on their secondary mathematics homework.

## **Chapter 2 Summary**

Benner, Boyle, and Sadler (2016) stated parents tend to be less involved as the student moves into middle and high school. According to researchers, this decrease in involvement during the adolescent years is due to the changing needs of an adolescent (Benner et al., 2016; Kim & Hill, 2015; Povey et al., 2016; Wang & Sheikh-Khalil, 2014). The enactment of Every Student Succeeds Act (2015) assisted schools in setting goals and promoting more parental engagement in the education system. Mathematics is one major area of concern; therefore,



teachers and parents need to work together to increase parental involvement at home working with their children on mathematics homework and other academic activities (National Research Council, 2013; O'Sullivan, Chen, & Fish, 2014).

Research was explored regarding parental involvement from the parent, student and teacher's perspective. Research was also viewed regarding parental involvement both in school and at home, at all levels of education, and within all subjects. Research suggested parental involvement in their children's education has many benefits for the children, parents, and schools. When parental involvement increases, students and their schools report increased standardized test scores, higher attendance rates, fewer behavior problems in school and at home, and a more positive perspective regarding attending school. Therefore, this study focused on a phenomenological research design to collect and analyze data and provide descriptive details based on parents' experience with involvement.

This study focused on parents' experiences working with their adolescent children on secondary mathematics homework and how those experiences are related to Epstein's (2001) six types of involvement. Chapter 3 will address these research questions through a detailed phenomenological approach. Chapter 3 will provide detailed information regarding the methodology, design, and methods for collecting and analyzing the data of this study.

### **Chapter 3: Methodology**

Researchers have shown that parents' engagement tends to decrease as their children move into high school to meet the autonomous needs of adolescents (Benner, Boyle, & Sadler, 2016; Kim & Hill, 2015; Povey et al., 2016; Wang & Sheikh-Khali, 2014). Affuso, Bacchini, and Miranda (2015) stated parents, teachers, and students should work together throughout all the years of education of their children. Greater impacts will be seen in the school system if parents would maintain their level of involvement through all 12 years of their children's education (Benner et al., 2016; Hornby & Lafaele, 2011). Understanding how parents are engaged in their adolescent children's secondary mathematics homework as related to Epstein's (2001) framework, including parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community, may assist in building a strong relationship among the family, teachers, and community. This study focused on parents' experiences working with their adolescent children on their secondary mathematics homework.

Chapter 3 describes the research methodology for this study, along with the purpose and design. The research questions that guided the research for this study will be explained, as well as the population to be targeted, site of the study, and selection criteria. Also, this chapter will present the instrumentation, methods, and procedures used for data collection and analysis. This chapter also describes any limitations of the study, the credibility and trustworthiness of the procedures, and any ethical considerations present during the study.

#### **Purpose of the Study**

The purpose of this study was to investigate the experiences parents have regarding parental involvement while working with their adolescent children on their secondary mathematics homework. This researcher also examined how parental involvement was related to

Epstein's (2001) six types of involvement framework: parents' experiences communicating with their adolescent children, creating an environment conducive to learning, volunteering, making decisions for the adolescent children's education, understanding available resources, and working at home with their children on their mathematics homework.

### **Research Questions**

1. What are parents' experiences working with their adolescent children on secondary mathematics homework?
2. What is the relationship between parents' experiences working with their adolescent children on secondary mathematics homework and Epstein's six types of involvement framework, including parenting, volunteering, decision making, learning at home, collaborating with the community, and communication?

### **Design of the Study**

Mack et al. (2005) stated qualitative research methods allow the researcher to explore the "human" characteristics of a phenomenon or experience. Creswell (2013) described a phenomenological study as a method to describe an explicit phenomenon or event experienced by a group. This study employed a descriptive phenomenological research design to gain a better understanding of what the participants' experiences are regarding working with their adolescent children on their secondary mathematics homework (Giorgi, 2012). A descriptive approach allowed for the participants to provide a rich, detailed description of their experiences without the researcher adding any personal interpretations to it. According to Giorgi (2012), rich, detailed descriptions add depth to the themes of the phenomenon. This method allowed the researcher to describe the experiences in rich detail to gain a deeper understanding of the essence of the parents' experiences (Giorgi, 2012). Using this method allowed for a detailed view of the

research topic and findings while describing how parents view their ability to be involved in their adolescent children's secondary mathematics homework (Bogdan & Biklen, 2003; Creswell, 2013).

### **Research Population and Sampling Method**

**Population.** Choosing a site and the participants for a study is among some of the crucial decisions a researcher must make in a phenomenological study (Hesse-Biber and Leavy, 2011). This study involved the parents of students enrolled at one rural high school in southwest Louisiana. This district serviced approximately 60 schools enrolling pre-kindergarten through 12th grade (PK-12) during this study (XXXXXX School Board, 2018). The school district had a diverse ethnic population, including Caucasian, African-American, Hispanic, and Asian students (XXXXXX School Board, 2018). The 2010 U.S. Census showed the parish, known as counties in other states, that included the study site had a population of less than 200,000 with approximately 20% living in poverty. The study site population in the spring of 2018 was approximately 780 students in pre-kindergarten through 12th grades. The study site had approximately 700 Caucasian students and 80 students that were African-American, Hispanic, Native-American, and Asian (XXXXXX School Board, 2018) (see Table 2).

The study site's secondary population in the spring of 2018 had approximately 230 students in ninth through 12th grades (XXXXXX School Board, 2018). Of those 230 students, approximately 100 were female, and 110 were male (XXXXXX School Board, 2018). There were approximately 190 Caucasian students, 10 African-American students, 20 Hispanic students, five Asian students, and five Native-American students (XXXXXX School Board, 2018). Of the 230 students in ninth through 12th grade, there were approximately 120 students enrolled in a secondary mathematics class other than the researchers (XXXXXX School Board, 2018). Of the

120 students enrolled in secondary mathematics classes, 10 were Hispanic, five were African-American, five was Asian, and the remaining 100 students were Caucasian (XXXXXX School Board, 2018).

**Table 2.**

*Site Total Student Demographics*

<b>Gender</b>	<b>#</b>	<b>Ethnicity /Race</b>	<b>#</b>	<b>Special Programs</b>	<b>#</b>	<b>Other Student Information</b>	<b>#</b>
Male	400	Hispanic	40	504 Designation	10	Targeted Secondary Mathematics Group	120
Female	380	American Indian	10	Gifted/Talented	10	English Learner	10
		African American	30	Special Education	10	Homeless	5
		White	700	Title 1	360	Retained	25

Source: XXXXXX School Board. (2018). Site Profile.

All participants invited to participate in this study had children enrolled in one public school in Louisiana. The school has a large Title 1 population and a low diversity mixture. The sample used for this study was seven parents who have at least one student enrolled in a secondary mathematics class at one rural high school in Louisiana during this study. The sample included six females and one male, ranging in age from 40 to 54 (see Table 3).

**Sampling method.** Purposeful sampling is one of the most widely-used techniques of sampling in the phenomenological study used to identify a phenomenon (Palinkas et al., 2013). According to Creswell (2013), it is essential for the researcher to select participants who have experienced the phenomenon for in the knowledge base to be grown. This study used one of the techniques of purposeful sampling, the criterion-based sampling method. In this form, Patton (2002) stated the participants are selected based on a list of characteristics that fit the criterion.

The criterion for this study was parents of secondary mathematics students. This researcher used Patton's (2002) criterion-based sampling method because it was consistent with this study and the researcher was able to use a smaller sample to collect data purposefully.

### **Instrumentation**

This researcher used interviews with seven parents of secondary mathematics students as the data-collection instrument. Mack, Woodson, MacQueen, Guest, and Namey (2005) stated interviews are tools used by the researcher to collect data regarding a specific topic through a discussion. Creswell (2013) stated there are two essential questions a researcher should use to guide their interview questioning that will help the participants describe the experience in greater detail. The first question the researcher should answer is what experiences the participant has regarding the specific phenomenon. The second is what factors changed or altered the participants' experiences.

This researcher created interview protocols and used them to obtain detailed information regarding the participants' experiences working with their adolescent children on their secondary mathematics homework (see Appendix A). The interview questions were created using the research questions as a guide. This researcher ensured the interview questions answered Creswell's (2013) two essential questions to gain an in-depth understanding of the participants' experiences of the phenomenon. This researcher asked two volunteers who did not volunteer in this study to field test the interview questions. The two volunteers had knowledge of this study's research topic and population. This allowed the volunteers to identify any issues that could arise during the actual interviews. The findings of the field test assisted the researcher in creating interview questions that were not biased or repetitive.

During the interviews, the researcher posed questions through a non-threatening, neutral manner, used proper listening skills, and asked follow-up questions to gain more in-depth understanding (Mack et al., 2005). By using open-ended type questions, the researcher gathered more detailed information from the participants. According to Miles and Huberman (1994), researchers should record all interview conversations with the participants, so the researcher can review them later, if necessary. All interviews for this study were audio-recorded.

### **Data Collection**

The researcher obtained approval from the Concordia University–Portland Institutional Review Board (Concordia University, n.d.; see Appendix B). Once the researcher obtained CU IRB approval, the researcher emailed the school board requesting permission to conduct the study at the specific school site (see Appendix C). Once the researcher obtained school board permission, the researcher emailed the principal of the specific school site requesting permission to conduct the study at their school site (see Appendix D).

After obtaining permission, the researcher prepared a parental contact form explaining the study in detail (see Appendix E). The researcher gave copies of the parental contact form to each secondary mathematics teacher. Instructions were given to the secondary mathematics teacher to hand out a parental contact form for each student to give to their parents. The form had a section at the bottom for parents to sign stating they are interested in participating in the study and to provide an email address. Parents interested in participating in the study returned this signed section to their children's secondary mathematics teacher. The researcher collected the forms from the secondary mathematics teachers. The researcher assigned numbers to each participant as a pseudonym to maintain anonymity (e.g., P1, P2, P3...). Pseudonyms are used to protect participants' personal information and maintain confidentiality (Yin, 2011). The

researcher sent an email to the seven parents who returned the signed section of the parent letter using the email address provided. Each participant received a participant number, the written consent form, and the date and time of the one-on-one interview (see Appendix F). Table 3 shows the pseudonyms for each participant, their age, gender, race, primary home language, parents' highest level of education, number of children, number of children enrolled in secondary mathematics classes, and what secondary mathematics class.

Table 3

*Participant Demographics*

Parent	Age	Gender	Race/ Ethnicity	Primary Home Language	Parents' Highest Education Level	No. of Children	No. Enrolled in Secondary Mathematics	What Secondary Math Course
1	49	Female	Caucasian	English	Graduate School	2	1	Math 231 & 175
2	47	Female	Caucasian	English	College Graduate	1	1	Financial Literacy
3	45	Female	Caucasian	English	High School	1	1	Math 231 & 175
4	40	Female	Caucasian	English	Some College	1	1	Math 113 & 170
5	47	Female	Caucasian	English	College Graduate	2	1	Math 113 & 170
6	48	Female	Caucasian	English	Some College	3	1	Business Math
7	54	Male	Caucasian	English	High School	2	1	Math 113 & 170

The researcher conducted one interview with each participant between June and July 2018. The interviews were conducted individually and were audio-recorded. The interviews lasted no more than 35 minutes. The interview questions were open-ended to allow the participants to provide more in-depth information. The researcher used follow-up questions



during the interview to gain more details regarding the experiences of the parents relating to their engagement in their children's mathematics homework. Data collected through the audio-recorded interviews were transcribed using Happy Scribe online. The transcriptions were downloaded as a Microsoft Word document and provided to the participant for member checking. The researcher deleted the audio-recording once the participant approved the transcript.

### **Identification of Attributes**

Parent experience was the principal attribute used to outline this study. According to Hale (2009), the experiences parents have while working with their adolescent children on their secondary mathematics homework can be used to define the way in which parents become engaged with their children. Hale stated since 70% of a child's life is spent outside of school, parents need to find ways to be engaged in their adolescent children's lives. Parents engaging with children will increase their learning. Parents can contribute to the learning process by communicating about uncertainties and stressors, providing experiences that stimulate questions and imagination, and monitoring activities in which they participate. It is essential children see their parents constantly learning, being responsible, and achieving goals through hard work. Hale stated parents can encourage their children by discussing future career choices, keeping the lines of communication open for any topic, and defining the value of a good education. Parents can also make a difference by being enthusiastic about their children (Hale, 2009).

### **Data Analysis**

This researcher relied on the results of the audio-recorded, one-on-one interviews with parents to analyze the data. The researcher used bracketing to ensure any researcher bias did not influence the data collection process (Moustakas, 1994). The researcher also used a thematic

approach to analyze the data collected during the interviews. Themes emerged using the phenomenological approach. Qualitative data provided insight into the perceived experiences of the participants working with their adolescent children on homework.

The focus of this study's data analysis was descriptive instead of interpretive. According to Moustakas (1994), descriptive analysis requires the researcher to describe the participants' experiences in detail. This study relied on the researcher as the instrument to collect and analyze the data. According to Seidman (2013), when the researcher performs an interview, active listening should take place during the interview, when listening to the audio-recorded interview in the future, and when transcribing the interviews.

This researcher analyzed the data by bracketing, reading the transcripts numerous times, grouping, reducing and eliminating, clustering data, identify themes, and construct meanings of the participants' experiences (Giorgi, 2012; Moustakas, 1994). Giorgi (2012) emphasized the most important step a researcher should take first is bracketing. This researcher used bracketing to ensure this researchers biases did not affect the interpretations of the data collected. This researcher then read the transcripts repeatedly to gain an insight and understanding in the phenomenon being researched and identify common themes from the coding process. Then, this researcher regarded all responses as equal and listed them together. This researcher then read through the responses noting any statements that were relevant to the experiences of the participants. Next, data were reduced and eliminated if no significant meaning to the phenomenon was determined. This researcher then clustered the data into common categories. Then, this researcher identified themes that emerged from the categories. Finally, this researcher gave meaning to the themes by providing a description of the experiences (Moustakas, 1994).

**Coding.** According to Bogdan and Biklen (2003), the researcher codes by using the situation definition, which covers categories that will represent the participants' replies to the interview questions. During this first level of coding, this researcher disaggregated the data into first-level codes and themes. These themes were home environment, parent-child relationships, parent-initiated communication, student-initiated communication, parent helping at school, self-help resources, ability to help, school resources, parent leadership, and resources from the community. The researcher then related the themes to Epstein's (2001) six types of parental involvement of learning at home, volunteering, communication, decision-making, parenting, and collaboration with the community.

These findings provided answers to the research questions driving this study. These findings assisted the researcher in providing insight into parents' experiences working at home with their adolescent children on their secondary mathematics homework. These findings also assisted the researcher in describing how parents' experiences engaging with their adolescent children on their secondary mathematics homework is related to Epstein's (2011) six types of parental involvement.

**Descriptive analysis.** The researcher used NVivo (QSR International, 2012), a thematic data analysis program, during the coding process to gain a deeper understanding of the experiences parents have working with their adolescent children on their secondary mathematics homework (Sargeant, 2012). After the data were transcribed from the one-on-one interviews, the researcher uploaded the data into NVivo to begin the deconstruction process of the data based on theme codes (Sargeant, 2012). NVivo then interpreted the deconstructed data into emerging themes (Sargeant, 2012). The researcher will report this information in thick, rich detail in Chapter 4. The findings provided answers to the research questions regarding parents'

experiences working with their adolescent children on secondary mathematics homework and how parents' experiences working with their adolescent children on secondary mathematics homework relates to Epstein's (2001) six types of involvement framework, including parenting, volunteering, decision making, learning at home, collaborating with the community, and communication.

### **Limitations of the Research Design**

This phenomenological study had several limitations. One limitation of this study was the use of a rural school that had a predominantly Caucasian student population. This limitation made transferability difficult for populations that differ from the study site. Another limitation of this study was the researcher of this study was the instrument to collect the data. According to Patton (2015), the researcher needs to ensure there is no manipulation of the data collected or decide beforehand on any themes of the research based on personal knowledge. Since this researcher believes parental engagement has many positive effects, analyzing the information collected through the interviews may have been influenced by researcher biases.

Another limitation of this study was the use of one instrument used to collect the data. Interviews were conducted one-on-one and relied completely on the experiences of parents. These experiences may not be the same as other parents at different sites or other grade levels. Another limitation of this study was the use of only one stakeholder: the parents. The perceptions of the teachers and administrators were not included. Teachers and administrators could have different perceptions regarding parents working with their adolescent children on secondary mathematics homework than parents. Perceptions of parents were not included. Parents could have different perceptions from those groups studied. The last limitation of this

study was parents participating in the study may not have been truthful when answering questions during the interview.

### **Validation**

Creswell (2009) stated validity measures the degree to which the phenomenon is represented by the data. Validity is necessary to ensure the findings of the study can be used by researchers to support necessary changes to existing theories regarding the phenomenon in this study and others (Creswell, 2013). According to Creswell (2013), researchers should use at least two methods to maintain validity throughout the study. This researcher used several methods to validate the data collected during this study including parent interviews, member checking, rich, thick descriptions, and an external auditor.

**Parent interviews.** This researcher conducted one-on-one interviews with parents of students who were enrolled in a secondary mathematics course at the study site during this study. Each parent participated in one interview. This researcher asked open-ended questions, as well as follow-up questions to gain more in-depth information regarding the experiences of the parents related to their engagement in their adolescent children's mathematics homework. Interview questions were designed to obtain detailed information regarding the research questions. This researcher then field tested the interview questions. This researcher asked two volunteers who were knowledgeable about this study's research topic and population to identify any issues that could arise during the actual interviews. The results of the field test assisted this researcher in improving the interview questions and remove any bias or repetition in them.

**Member checking.** According to McMillan (2012), member checking allows the participants of the study to review the final transcripts of their interviews to verify accuracy. The participants of this study were provided a copy of their transcripts to check for accuracy. Upon

approval of the transcripts, the researcher requested each participant sign a review of transcript declaration of facts (Appendix H), which states the participant agrees with the researcher's transcription of their interview.

**Rich, thick descriptions.** Rich, thick description of participants' responses could allow readers to decide the validity of transferability of the study's findings. The analysis of the data contained rich, thick descriptions of parents' experiences based on Epstein's (2001) six types of involvement methods. Due to the validity of the study based on these methods and descriptions, it is possible the findings might be transferred to other areas of education focusing on parental engagement with similar characteristics.

**External auditor.** An external auditor was used as another method to establish the validity of the data. An external auditor examines the study to determine if the findings are supported by the data collected (McMillan, 2012). This researcher requested an individual who was knowledgeable in the use of phenomenological studies and was not a participant of this study to review this study looking for consistency and rationality of the research. The external auditor confirmed the accuracy of the data analysis and provided this researcher with feedback that lead to stronger, more precise findings (McMillan, 2012).

### **Credibility**

It is the role of the researcher to establish the credibility of the study by insuring accuracy of the findings by utilizing participants who have first-hand experience with the research topic. Rubin and Rubin (2012) supported this by acknowledging the importance of utilizing people in the interview process who have first-hand experience of the topic and that information gathered is only related to that experience. This researcher conducted in-depth interviews with parents of secondary mathematics students. The interview questions focused on the parents' experiences

working at home with their children on their mathematics homework and how their engagement is related to Epstein's (2011) framework of six types of involvement.

### **Dependability**

According to Creswell (2013), phenomenological studies deliver results that are subject to change. It is important for this researcher to create interview questions that coordinate with this study's conceptual framework to maintain dependability of this study (Creswell, 2007). This researcher created interview questions that were specific to allow for consistent and reliable responses from the participants. This researcher also used member checking to maintain dependability of this study (McMillan, 2012). Participants checked their transcripts for any misrepresentations.

### **Expected Findings**

Since the participants were parents of secondary mathematics students, it was expected parents wished they could assist their children more on their homework. This researcher expected the findings would show they would be less involved in their adolescent children's mathematics homework because they do not have the necessary skills to help. It was also expected the findings would show the parents do not have adequate time to sit with their children and help them with their homework. It was further expected the findings would show most participants do not monitor their children while they are doing their homework.

### **Ethical Issues**

**Conflict of interest.** As a mathematics teacher at the school site used for this study, this researcher anticipated some of the parents may have younger children who could one day be a student of the researcher. This could cause a conflict of interest in that the parents may believe their children may receive some benefit, whether it is earning better grades or favoritism in the

classroom, if they participate in the study. The researcher removed this risk by eliminating any participant who has younger children from the potential participant pool.

**Researcher's position.** In the 2017-18 school year, the researcher was a secondary mathematics teacher at the high school level of study. The researcher's role at the school was to teach Algebra 1 and Geometry classes. Parents with younger children attending the study site school and none of the researchers' students' parents were eligible for the study to avoid any conflicts of interest. The participants for this study were parents of those students who were enrolled in secondary mathematics classes with the other secondary mathematics teachers at the high school.

**Ethical standards.** Ethics holds researchers accountable to the American Psychological Association (2009). According to Resnik (2015) and Gehle (2013), conflicts of interest, participants, and privacy are protected under the American Psychological Association (2009). It is critical to follow specific standards to ensure the research is credible, reliable, and valid (Gehle, 2013). According to Resnik (2015), knowledge gained by the study is supported when these standards are followed. Participants will have confidence they will come to no harm under these standards.

Concordia University and the researcher are protected from litigation or unethical allegations when certain steps are taken to ensure federal policies are not overstepped (Gehle, 2013; Resnik, 2015). An Institutional Review Board (IRB) at Concordia University–Portland Oregon has been established to oversee research studies (Concordia University, n.d.). The CU IRB has the responsibility to grant permission and protect participants' rights when they begin research studies. The CU IRB has created procedures and forms that must be completed and



submitted to the board for review or approval before any study may involve participants (Concordia University, n.d.).

The researcher and the appropriate dissertation chair were required to sign a letter of assurance prior to this researcher conducting the study as one of the first requirements of the Concordia University's Institutional Review Board. Participants were required to sign consent forms at the beginning of the study. The CU IRB also required the researcher to submit a description and purpose of the study for review. Included in these documents, the researcher described the methodology and ethical considerations of the study. The CU IRB reviewed these documents to ensure all criteria meet federal policies. Once the CU IRB approved the study, the researcher began to collect data (Concordia University, n.d.).

**Human subject protection.** This phenomenological study was conducted in accordance with guidelines and regulations set forth by Concordia University Institutional Review Board (CU IRB) and presented minimal risk to participants (Concordia University, n.d.). CU IRB defined a human subject as an individual who is living and from whom the researcher can gather data through interviews and personal information. The researcher completed the CITI Program Training web-based training course regarding Human Subjects Research as required by Concordia University (n.d.).

**Informed consent.** Each participant signed an informed consent waiver before participating in the study. As required by CU IRB, the consent form stated the participation in this study is voluntary, confidential, and of minimal risk (Concordia University, n.d.). The consent form further stated how participants' personal information will be coded to protect their identity and kept private. Numbers were used to reference participants' names. Any documents that contain identifiable information of the participant, including name, school or district were

redacted and all identifiable information was replaced with numbers. Data collected from participants were kept locked in a filing cabinet in the researcher's classroom or on a separate hard drive with access limited to the researcher only. The consent form informed the participant that personal information will be destroyed five years after the study has concluded (Concordia University, n.d.).

**Risks.** The participants experienced minimal risks through their participation in this study. No greater risk was expected than those currently experienced in the daily lives of being a parent of a secondary mathematics student. Participation in this study was voluntary. The participants received no compensation for their participation. The findings of this study contributed to the limited research conducted regarding parents' experiences working with their adolescent children on their mathematics homework and how parents' engagement is related to Epstein's (2011) framework of six types of involvement.

**Withdrawing from the study.** All participants had the option to withdraw at any time from this study. There were no penalties for not participating. If the participant felt any negative emotions when answering questions, the researcher ceased all questions. Participants did not have to answer any questions they did not wish to answer.

**Ethical considerations.** Creswell (2013) stated issues can occur in qualitative research at any time prior to the study, when the study begins, while data is being collected, while data is being analyzed, and/or when the findings are reported and the importance of researchers to constantly review the research. Researchers must also ensure participants will face no risk of being identified or vulnerable populations are not mistreated (Creswell, 2013). Therefore, the researcher took the following steps to ensure credibility and validity were maintained through the entire research process: (1) participants were provided an informational contact form describing

the study and the role they will take; (2) privacy was maintained with the coding of personal information; (3) security was maintained by using password-protected electronic files and locked filing cabinets; (4) audio-recorded interviews were labeled with participant numbers; (5) after member checking was complete, the audio recordings were deleted; (6) names or other identifiable information were not used in any reviews, analyses, reports, or publications; (7) all research documents will be destroyed 5 years after the study was completed.

**Biases.** This researcher has been a high school mathematics teacher for over 15 years and favors parental engagement with mathematics homework at the high school level. As a parent of children who have and are enrolled in high school mathematics classes, this researcher is very passionate about parental engagement with mathematics homework. Therefore, this researcher viewed the study from both a teacher and parent standpoint with familiarity, insight, and empathy.

According to Creswell and Plano-Clark (2007), if a researcher inserts his or her own ideas into the data collected in the qualitative study, the validity will be affected. The researcher ensured a constant awareness of any biases in the study and made sure there was no insertion of any data into the study that may be personal in nature. Bracketing accomplished this.

Bracketing is when a researcher puts aside his or her own beliefs and understandings of a phenomenon, so they do not affect the study's process (Tufford & Newman, 2010). During the interviews, the researcher encouraged the participants to share their experiences with their adolescent children while working on mathematics homework and did not add any personal thoughts to the collected data (Rubin & Rubin, 2012).

### **Chapter 3 Summary**

The research design for this study was a phenomenological approach to studying parents' experiences working at home with their children on their secondary homework. The participants for this study were parents of students enrolled in secondary mathematics. Data collected in this study were qualitative, using interviews. The findings of this study may assist parents and educators understand parents' experiences working with their adolescent children on secondary mathematics homework and how their experiences are related to Epstein's (2011) framework of involvement. Chapter 4 contains a detailed description of the participants, rich, thick descriptions of the methodology and analysis, and a thorough summary of the findings of the study. Chapter 4 also contains a comprehensive presentation of the data collected and the results.

## **Chapter 4: Data Analysis and Results**

Chapter 4 provides an overview of the research questions and purpose of this study. Descriptions of the participants and the criteria for their selection will be stated. A summary of the data collected, analysis of the data and results of the interviews will be described. The summary includes statements made by participants that are significant to this study as well as themes that emerged from those statements. Lastly, a summary of the results will be provided.

According to Child Trends (2013), parents with children in elementary school tend to be more engaged than middle- and high-school parents in their children's education. The most common way parents can become engaged is at home with their children's homework. Mathematics is one area with which children tend to need the most help. O'Sullivan, Chen, and Fish (2014) stated mathematics homework highlights the importance of parents helping their children. This descriptive phenomenological study was designed to focus on parents' experiences working with their adolescent children on their secondary mathematics homework. This study also focused on the relationship between the parents' experiences helping their adolescent children and Epstein's (2001) six types of involvement framework.

Student achievement can be more successful with parental involvement or engagement (Peiffer, 2015). Parents will only engage if they are comfortable with their abilities to help their children. Parents will be more involved in secondary education if they feel they have the knowledge capable of being successful with the activities or homework. By understanding parents' experiences working with their adolescent children on their secondary mathematics homework, stakeholders, including parents, teachers, and administrators can improve current procedures and activities. Improving these procedures and activities would assist in building the confidence parents need to be involved with secondary mathematics homework.

This researcher used a descriptive phenomenological design for this study to gain a better understanding of what the participants' experiences were regarding working with their adolescent children on their secondary mathematics homework. This method allowed for a detailed view of the research topic and findings while describing how parents view their ability to be involved in their adolescent children's high-school mathematics homework (Bogdan & Biklen, 2003; Creswell, 2013). Participants' thoughts, experiences, expressions, and ideas were presented regarding their experiences working with secondary mathematics homework here.

**Research Question 1.** What are parents' experiences working with their adolescent children on secondary mathematics homework?

**Research Question 2.** What is the relationship between parents' experiences working with their adolescent children on secondary mathematics homework and Epstein's (2001) six types of involvement framework, including parenting, volunteering, decision making, learning at home, collaborating with the community, and communication?

This researcher had the role of investigating the experiences of seven parents working with their adolescent children on their secondary mathematics homework. Therefore, the descriptive phenomenological design appeared reasonable for discovering and describing the experiences of the parents as they engage with their adolescent children on their secondary mathematics homework.

### **Description of the Sample**

The selected school district is in a rural community located in southwest Louisiana. This researcher used criterion-based, purposeful sampling to select participants to be interviewed based on characteristics that fit the criterion (Patton, 2002). This researcher selected seven parents who had children enrolled in secondary mathematics classes in 2017-18 school year.

Demographics for the parents varied among participants, including age, parents' education level, number of children, and number of adolescent children taking secondary mathematics courses during this study. This researcher assigned participants a number (see Table 3). Each participant understood his or her participation in this study was voluntary and that the interviews would be audio-recorded. It was important this researcher selected participants who had experienced the phenomenon to build a rich understanding of the parents' experiences working with their adolescent children on their secondary mathematics homework (Creswell, 2013). Demographics information is also necessary to determine if this study is applicable to a larger or different population.

Participant 1 (P1) was a 49-year-old, Caucasian female. The primary language spoken at home is English. She was a single mother of two children: adult daughter and 18-year-old son. Her highest level of education earned was a master's degree in education +30 hours beyond. She was an educator and had taught middle-school English for 13 years. Her son was a senior enrolled in dual-enrollment mathematics classes during this study.

Participant 2 (P2) was a 47-year-old, Caucasian female. The primary language spoken at home is English. She was a single mother of two children: a 25-year-old son and an 18-year-old daughter. Her highest level of education was college. She was a private business owner. Her son was a junior enrolled in Financial Literacy and Business Math during this study.

Participant 3 (P3) was a 45-year-old, Caucasian female. The primary language spoken at home is English. She was married and had one daughter. Her husband was a college graduate and works outside the home. Her daughter was 18-years-old. Her highest level of education was high school. She was a stay-at-home mother. Her daughter was a senior enrolled in dual-enrollment college math classes during this study.

Participant 4 (P4) was a 40-year-old, Caucasian female. The primary language spoken at home is English. She was a single parent and had one daughter. She had completed some college. She worked outside of the home. Her daughter was a junior enrolled in dual-enrollment college math classes during this study.

Participant 5 (P5) was a 47-year-old, Caucasian female. The primary language spoken at home is English. She was married and had two children. She and her husband both had four years of college and worked outside the home. Her daughter was a junior enrolled in dual-enrollment college math classes during this study.

Participant 6 (P6) was a 48-year-old, Caucasian female. The primary language spoken at home is English. She was married and had three children: an adult son and daughter and an 18-year-old son. She was a high school graduate and had completed some college. She and her husband owned their own business. Her youngest son was a senior enrolled in Financial Literacy during this study.

Participant 7 (P7) was a 54-year-old, Caucasian male. The primary language spoken at home is English. He was married with two children: an adult daughter and a 17-year-old son. He was a high school graduate. He worked in construction, and his wife was an educator. His son was a junior enrolled in dual-enrollment college math classes.

### **Research Methodology and Analysis**

This descriptive phenomenological study sought to understand the experiences of parents while they worked with their adolescent children on their secondary mathematics homework. This study further sought to understand how those experiences were related to Epstein's (2001) six types of involvement framework. According to Creswell (2013), a phenomenological study is a method a researcher can use to describe an explicit phenomenon or event experienced by a



group. Therefore, this study used Giorgi's (2012) descriptive phenomenological research design to gain a better understanding of what the participants' experiences were regarding working with their adolescent children on their secondary mathematics homework and how those experiences correlate to Epstein's (2001) framework. A descriptive phenomenological study allowed for a description of the experiences the parents had while working with their adolescent children on secondary mathematics homework. This researcher used these descriptions without any interpretation or explanation by this researcher to gain a better understanding of parents' experiences working with their adolescent children on secondary mathematics homework.

This researcher conducted seven interviews, each lasting no more than 35 minutes and with one participant at a time, to collect the data for this study. The goal of the interviews was to explore parents' experiences working with their adolescent children on secondary mathematics homework based on interview questions designed to have parents provide a detailed description of those experiences (see Appendix B). Each participant was assigned a number to maintain anonymity. This researcher advised the parents the interviews would be audio-recorded through the consent form for future reference (see Appendix G). This researcher sent the audio-recorded interviews to the participants to allow them to check them for accuracy. This researcher read the transcripts and coded them based on the research questions of the study. The data analysis process revealed descriptions of the participants' experiences of the phenomenon and the themes that emerged. Therefore, the analysis provided the core of the participants' experiences working with their adolescent children on their secondary mathematics homework and if those experiences were related to Epstein's six types of family involvement.

**Bracketing.** Bracketing occurs when a researcher puts aside his or her own beliefs and understandings of a phenomenon, so they do not affect the study's process (Tufford & Newman,

2010). Creswell and Plano-Clark (2007) stated the validity of the study would be affected if this researcher asserts his or her ideas into the data collected. This researcher conducted bracketing before and after the interviews. This researcher constantly ensured any biases were noted and separated from the data and used bracketing to ensure these biases regarding parental involvement in secondary mathematics homework did not influence data collected (Moustakas, 1994).

**Interviews.** Two essential questions should be used to guide interview questioning that will help participants describe their experience in rich detail: 1) what experiences does the participant have regarding the specific phenomenon; and 2) what factors changed or altered the participants' experiences (Creswell, 2013). This researcher used Seidman's (2013) approach to active listening and Moustakas's (1994) approach to descriptive analysis to explore the experiences the parents had working with their adolescent children. This researcher used these methods to collect data based on seven in-depth interview questions. Interviews averaged 23 minutes. These interviews allowed this researcher to examine the experiences the participants had while working with their adolescent children on their secondary mathematics homework.

Parent interview guides were used to obtain detailed information regarding the participants' experiences working with their adolescent children on their secondary mathematics homework (Appendix B). The use of open-ended questions allowed this researcher to obtain rich, detailed information from the participants. Researchers should record interviews, so this researcher can review them later, if necessary (Miles & Huberman, 1994). All interviews for this study were audio-recorded. This researcher informed the participants of this in the consent form.

Upon completion of the interviews, this researcher transcribed the audio-recordings through an online transcription service. This researcher read over the transcripts while listening

to the audio-recording to verify accuracy. This researcher removed any identifying information from the transcripts. This researcher deleted all audio files upon completion of the transcription process. This researcher emailed the transcripts to the participants. The participants then used member checking with their transcripts. Member checking allows participants to review their transcript and make any necessary changes they deem appropriate. These corrections could include, correcting wording, providing more detailed clarification, or changing statements they made. Participant 1 (P1) clarified some of the statements made during the interview and Participant 6 (P6) made corrections to some transcription errors. The remaining participants accepted the transcripts as transcribed.

### **Data Analysis Procedures**

The focus of the study's data analysis was descriptive instead of interpretive. According to Moustakas (1994), descriptive analysis requires the researcher to describe the participants' experiences in detail; therefore, this study relied on this researcher as the instrument to collect and analyze the data. This researcher used active listening during the one-on-one interviews, when listening to the audio-recorded interview, and when transcribing the interviews (Seidman, 2013). Data collected in this study were analyzed by bracketing, reading the transcripts numerous times, grouping, reducing and eliminating data, clustering the data, identifying themes, and giving meaning to the themes (Moustakas, 1994).

First, this researcher regarded all responses as equal and listed them together. This researcher then read through the responses noting any statements that were relevant to the experiences of the participants. Next, data were reduced and eliminated if no significant meaning to the phenomenon was determined. This researcher then clustered the data into common categories. Then, this researcher identified themes that emerged from the categories.

Finally, this researcher gave meaning to the themes by providing a description of the experiences (Moustakas, 1994). Giorgi's (2012) method stated the researcher should perform bracketing to ensure interpretations are not affected by any biases the researcher has regarding the phenomenon and read the transcripts repeatedly to gain an insight and understanding in the phenomenon being researched and identify common themes from the coding process. Giorgi (2012) emphasized the most important step a researcher should take is bracketing. This researcher used bracketing to ensure this researchers biases did not affect the interpretations of the data collected.

**Coding.** This researcher coded the data by using the situation definition, which covers categories that represent the participants' answers to the interview questions (Bogdan & Biklen, 2003). NVIVO (QSR International, 2012) is a data analysis program that allows researchers to analyze data collected during a qualitative study. NVIVO classifies collected data into categories and themes. This researcher used NVIVO for this study to gain a deeper understanding of the parents' experiences working with their adolescent children on their secondary mathematics homework (Sargeant, 2012).

During the first level of coding, this researcher disaggregated data into codes based on the participants' responses. This researcher read the transcripts giving meaning to the participants' answers to the interview questions. This researcher grouped the participants' responses under corresponding interview questions so all responses to the same question could be reviewed at one time. Phrases such as "email contact," "internet search," and "didn't know how to help" were noted during the first level of coding. This researcher reviewed the codes and established patterns that were common throughout the data.

The common patterns identified clustered around emerging themes. This researcher then grouped the clustered data based on the emerging themes. An example of the clustered coded data was: “internet search,” “school website,” “textbook,” “bought books,” and “emailed teacher.” This researcher then noted an emerging theme from this cluster as “self-help resources.” The themes that emerged through the coding process were the home environment, parent-child relationships, parent-initiated communication, student-initiated communication, parent helping at school, ability to help, self-help resources, school resources, parent leadership, and resources from the community. This researcher related these themes to Epstein’s (2001) six types of involvement of parenting, communication, volunteering, learning at home, decision-making, and collaboration with the community. These findings assisted this researcher in providing insight into parents’ experiences working at home with their adolescent children on their secondary mathematics homework and assisted this researcher in describing how parents’ engagement is related to Epstein’s (2001) six types of parental involvement.

**Descriptive analysis.** The focus of the study’s data analysis was descriptive instead of interpretive. According to Moustakas (1994), descriptive analysis requires the researcher to use details to describe the participants’ experiences. The focus of the descriptive analysis was on the parents’ experiences working with their adolescent children on their secondary mathematics homework. Data collected in this study were analyzed using bracketing, reading the transcripts numerous times, grouping, reducing and eliminating, clustering data, identify themes, and construct meanings of the participants’ experiences (Giorgi, 2012; Moustakas, 1994).

First, this researcher provided the participants with a copy of their transcripts, so they can conduct member checking. Member checking is a critical step in the research process because participants will verify the information is accurate. Next, this researcher performed bracketing to

set aside any biases this researcher had regarding parental involvement in secondary mathematics homework. Once the participants confirmed the accuracy of their transcripts, this researcher reviewed the participants' transcripts numerous times to obtain a perception of the parents' experiences working with their adolescent children on their secondary mathematics homework (Giorgi, 2012; Moustakas, 1994). This step was required since the study was built on the meanings of the participants' experiences (Giorgi, 2012). Then, this researcher began to code the transcripts. Using phenomenological research analysis principles, words or phrases that were used by the participants to answer questions during the interviews were listed as level 1 coding (Moustakas, 1994). This researcher created a table while coding based on significant statements acquired from the responses of the participants. This table allowed this researcher to determine which comments, statements, or experiences were unique to a few participants and which were shared by most (see Appendix I).

Next, this researcher reduced and eliminated data that did not have significant meaning to the experiences of the participants while they worked with their adolescent children on their secondary mathematics homework (Moustakas, 1994). This step allowed this researcher to focus only on the data that were directly related to the phenomenon of the study. Next, this researcher clustered data into common categories (Giorgi, 2012; Moustakas, 1994). These categories were created based on descriptions from the participants that were directly related to experiences parents had while working with their adolescent children.

The phenomenological method sought to describe an explicit phenomenon or event experienced by a group (Creswell, 2013). This researcher wanted to identify the experiences of parents as they worked with their adolescent children on their secondary mathematics homework and how those experiences related to Epstein's (2001) six types of involvement. Finally, this

researcher used the categories derived from the participants' descriptions and identified themes that emerged from the categories, and constructed meanings of the participants' experiences (Giorgi, 2012; Moustakas, 1994). During the analysis of the data, 11 themes emerged, providing information regarding how the participant believed he or she was able to help his or her children with the secondary mathematics homework, what the home environment was like where the children were doing their homework, school or self-help resources to which parents had access, the relationship between the parent-and-child communication skills, whether the parent helped at the school, any leadership roles the parents undertook at the school, and the parents' ability to access resources provided by the community.

**Research question 1.** The first research question was what are parents' experiences working with their adolescent children on secondary mathematics homework? The purpose of this question was to gain insight into the parents' experiences when they worked with their adolescent children on secondary mathematics homework. As this researcher compiled and analyzed research for this study, parents' experiences were grouped into themes of their ability to help, the home environment, school and self-help resources available at home, their relationship with their children, communication with teachers, the way the parent helped at school, parent leadership opportunities, and resources available from the community.

**Research question 2.** The second research question was what is the relationship between parents' experiences working with their adolescent children on secondary mathematics homework and Epstein's (2001) six types of involvement framework, including parenting, volunteering, decision making, learning at home, collaborating with the community, and communication? The purpose of this question was to determine if parents' experiences had a relationship with Epstein's (2001) six types of parental involvement framework. Through

further data analysis, this researcher related the 11 themes that emerged to the six types of Epstein's involvement framework as seen in See Appendix J.

### **Summary of the Findings**

The participants' common answers were important in understanding the phenomenon of this study: parental involvement working with their adolescent children on their secondary mathematics. The findings summarized not only the experiences the parents had but also how those experiences were related to Epstein's (2001) framework. This study's conclusion revealed the essential ideas of parents' experiences working with their adolescent children on their secondary mathematics homework. The themes identified in the study were the home environment, parent-child relationships, parent-initiated communication, student-initiated communication, teacher-initiated communication, parent help at school, ability to help, self-help resources, school resources, parent leadership, and resources from the community. Each of these themes is a direct reflection of experiences parents have while working with their children on their secondary mathematics homework and are directly connected to Epstein's (2001) six types of parental involvement framework.

### **Presentation of the Data and Results**

The researcher conducted this study to investigate the experiences of parents as they work with their adolescent children on their secondary mathematics homework. This researcher conducted seven one-on-one interviews and audio-recorded each. During the data analysis procedure, 11 themes emerged from the participants' answers to the interview questions. The experiences the participants described of working with their adolescent children on secondary mathematics homework provided an understanding of what resources they have available to help with secondary mathematics homework. The participants' experiences also provided a



description of what communication they have with their adolescent children regarding school and homework and what types of communication they have with their child's mathematics teacher.

The participants described what methods the secondary mathematics teacher provided to assist them in being engaged with their adolescent children's secondary mathematics homework and how they volunteered at the secondary level. The participants further described what opportunities they have had to influence policies at the school level. Participants also discussed how they collaborated with the community to find resources to assist their children. This researcher was then able to relate each identified theme to Epstein's (2001) six types of involvement: parenting, learning at home, communicating, collaborating with the community, decision making, and volunteering.

During the coding and analysis of the transcripts, this researcher acquired several significant statements from the participants that assisted in determining the categories and themes of the study (See Appendix I). Five of the seven participants stated there was not a structured home environment for their children to complete their homework. When the participants were asked what they asked their children when they came home, six participants stated questions like what homework do you have, how was your day, or what is this grade? One participant stated she cooked supper or watched the news while the child did homework. When the participants were asked if they became involved in the ATP/PTO at their school, three participants stated they did get involved, while one stated she did not. When this researcher asked what type of communication the participants had with their child's secondary mathematics teacher, two participants stated they had teacher-initiated emails, texts, or phone calls; three

participants stated they had only parent-initiated email communication; two participants stated they had no communication with the teacher; and their children took care of communication.

When the participants were asked where they found resources to help their adolescent children with their secondary mathematics homework, one participant stated she found resources through the teacher's website located on Blackboard, one participant stated she found resources through the school website, and three participants found resources by searching the internet.

When this researcher asked if the secondary mathematics teacher provided resources or how else they helped the parents, one participant stated she saw no way for the teacher or school to help her and one participant stated the mathematics teacher does not provide resources for parents to help their children at home. When asked if they felt they were able to help their children with their secondary mathematics homework, four participants stated they were able to help their children, while three stated they were not.

Six of the seven participants stated they were able to find tutors to help their children with their mathematics homework. Five of the seven participants stated they did not volunteer in their child's classroom/school when their child was in high school. When asked if there was any communication regarding opportunities to influence policies at the school/district level, six of the seven participants stated they never received any communication. Three of those six participants stated they would be interested in influencing policies.

This researcher noted several significant statements shared by individual participants. One participant stated parent sessions would be helpful to teach parents how to do the mathematics their adolescent children were doing (P4). One parent stated her daughter was an adult and took care of her own business and that they learned one way and the students are taught another (P3). The parent further stated if the students would have been taught the way the parents

learned, they could've helped better than the new way (P3). One parent believes the school should provide a pamphlet at the beginning of the year that contains resources for the course and that parents need to just be involved in everything their children do (P7).

### **Type 1: Parenting.**

Parenting influences the success of a child in education. Epstein (2001) stated a parent's responsibility is to create an environment that is safe, supportive, and healthy and understand what is required of their children at each level of education. Providing an environment that is quiet for studying, communicating with children and schools, and looking to a successful future are some ways parents can create an environment at home that will encourage education. According to Bronfenbrenner (1979), the home environment students live in is a vital tool in the learning process. Students interact with three types of ecosystems during their adolescent year: home, school, and community. Each of these will have a significant effect on a student's academic performance (Bronfenbrenner, 1979). Two themes that emerged from the parents' descriptions of their experiences were the home environment and parent-child relationships.

**Theme 1: Home environment.** Parents should provide an area where students can work that is free from distraction (Epstein, 2001). With a structured home environment, students will learn to manage their time between homework, chores, and other activities (Epstein, 2001). When this researcher asked the participants where their child did their homework, five of the seven participants replied there was no set place for the children to do their homework. Three of the participants stated their children were good about coming in and doing their homework by themselves. When asked what her daughter's home environment was like for her homework time, the participant stated:

[The home environment] is not really structured. She's very trustworthy. I homeschooled her at one point for many years, like three years I think when we lived out of state, so she knows what to do. I just let her do it. I didn't structure anything and make her sit and work. She did it on her own. (P2)

Another participant echoed the same experience with her child stating, “she sat down and did what she could, and she asked for help if she couldn't do it or if she didn't understand” (P3).

When this researcher asked another participant where her daughter usually goes to do her homework, the participant replied wherever she feels comfortable which was “sometimes to the table and sometimes to the couch” (P4). She further stated her child was always good at doing her homework (P4). Another participant was asked what her daughter normally does when she comes in with homework, and the participant stated she “typically does it on her own” and will ask for help if she needs it (P3). Another participant was asked if his son had a specific place to do his homework, he mentioned his son will come in, tell them he has homework and go to his room to do it (P7). The participant further stated, “but I can trust that if he has homework to do, he's going to do it” (P7).

**Theme 2: Parent-child relationships.** Parents can build a stronger relationship with their children if they communicate regularly with their children about their education, school, and future (Epstein, 2001). Students will begin to understand the importance of education as parents begin to communicate more regarding what happened at school, if they have homework, or what do they see themselves doing after high school (Epstein, 2001). When the participants were asked what they talked about when their children came home from school, six of the seven participants said they asked their children about their day or if they had any homework. The

most common questions asked by participants were: what did you do at school; how was your day; and what did you learn.

One participant was asked if she asks her child a lot of questions when he comes home, and she replied:

Yes, because when we first started even in middle school where he was and now at his high school, I would ask him what you have for homework and he'd always say, well I don't have any. Which, in turn, was not always the truth. I had no way of checking, but then he'd get an assignment or get a grade and I would be like, where did you get that or how did you even know how to do it? There was no second backing up of what he was telling me. (P1)

Another participant was asked what she talked about with her daughter when she came home from school, and she stated:

Usually like how's your day, what did you do, was it a good day, was it a bad day, what made it good, what made it bad, how can we make it better. You know, just different things that she went through throughout the day. (P4)

When another participant was asked what kind of communication she had with her son regarding his mathematics homework, she articulated:

We always tried to ask them every day what you did in class. It was easier with the girl than it was with the boys. Boys do not relay information. Boys tend to try to pretend something didn't happen and instead of dealing with it and moving on, they just kind of pretend, oh, I don't have homework. I thought, you went to school, I know you had homework. So, I feel boys definitely need a little bit more attention. (P6)

Another participant was asked what he asked his son when he came home, and the participant said he always tried to ask him how his day was, and if he had any homework (P7).

Parenting not only involves talking to one's children about their current education but discussing the future, as well. When the parents were asked about the discussions they had with their children about their future, four participants stated they discussed what their children wanted to do when they graduated from high school. Six of the participants interviewed felt like college was the option their children were going to take. When this researcher asked P3 if she ever discussed future education, she stated, "yes, we talked about where she wanted to go to college and what she wanted to do."

One participant was asked if she has had the opportunity to speak with her daughter about college, and she explained:

Yes. Yes, we have. She is undecided about what she wants to do, and she's just completed her ACT for the second time. She's definitely college-bound, she just hasn't really decided yet. (P4)

When another participant was asked the types of conversations she had with her children about their future educational goals, she stated:

I've had several conversations with all three of them. We didn't discourage the boys from going to a 4-year college, but we recognize the fact that if they struggle that much in high school it would really be hard for them to go to a four-year college. We did go ahead and kind of push them toward something more geared toward what they are good at, which is mechanical things. My youngest son is going to be going to ABC school for welding. Once he does that, he wants to go back and actually do some electrical stuff here. (P6)

When this researcher asked one participant if he had always spoken with his children regarding their future, he responded:

Yes, yes. We have always encouraged them. We always told them we would support them in whatever decisions they made in their lives. But you know, that the more education you have, the better off you will be. We always said, I don't expect you to go to college and be a doctor. If you go to **XXXXXX** or go into an apprenticeship and get a craft, you've done better for yourself. Once you get that, you will always have it. You are not going to lose it. You never quit learning. A person learns every day. And, when a person tells you he knows everything, that's the biggest fool on the face of this earth.

(P7)

## **Type 2: Communicating**

According to Epstein (2001), families and schools need to build strong communication skills to discuss school programs and the progress of the children. There should be regular, open lines of communication through phone calls, notices, and other forms of communication (Epstein, 2001). When parents and schools communicate, parents gain an understanding of school policies and procedures, can monitor children's progress, and can respond to issues that may arise. When schools reach out to families and involve them in school activities, parents feel like they are a vital part of the school system (Epstein & Salinas, 2004). When asked what kind of correspondence and communication participants had with their child's mathematics teacher, six of the seven participants stated they had communication with their child's teacher in person, through email, text messages, or phone calls. The communication was either teacher-initiated, parent-initiated, or student-initiated.

**Theme 3: Parent-initiated communication.** There was only one participant who said the teacher never communicated with him but probably did with his wife (P7). He said there was a lot of communication when the child was in lower elementary but “as far as at this point, I can’t say teachers ever called and said I think we have a problem (P7). One participant stated, “I can go to them pretty much any time I wanted to and talk with them” (P1). She further mentioned she could talk with them about what her son needed or what he was doing in class (P1). Another participant said she had enough communication with the teacher if her daughter was struggling or if she saw that her daughter’s grades were in trouble (P2). P3 stated she did not have communication with the math teacher. She further said her daughter “was an adult and took care of her own business” (P3). Another participant stated the teacher usually only communicated with her “whenever I would email” (P4). She further stated her communication with the teacher would be an email saying her daughter didn’t understand and asked if the teacher could help her. The participant mentioned she would ask her daughter when she came home from school if the teacher helped her and her child would say yes (P4). One participant said the teacher never communicated with her (P5). This researcher asked the participant if she ever wished the math teacher would communicate with her and she stated, “no, I felt that she’s very approachable and that if I needed to use it, I could contact her via telephone or email without a problem” (P5).

When another participant was asked who initiated communication first, her or the teacher, the participant stated communication was initiated “half-and-half” (P6). She further said, “email was always a good source” but she felt “it’s just not as personal as a phone call.” When this researcher asked her what information was discussed and if there was anything else she would have liked to discuss, she stated what was discussed was “mainly what was lacking,



like not paying attention in class or missing assignments.” She said she would have preferred to receive communications early on when she was able to do something about it but honestly “when you get to high school, if they can’t learn to start taking care of some of their business themselves, mommy and daddy cannot do it for them forever” (P6).

**Theme 4: Student-initiated communication.** Two of the participants stated, while they did not have direct communication with the teacher, their children did. When asked if there was a lot of communication with the math teacher, another participant stated, her child “communicated with her math teacher, and she did it a lot” (P3). When this researcher asked another participant if her child’s math teacher ever communicated with her, she stated, “no” (P5). When this researcher asked how often she communicated with the math teacher, she replied, “once they were in high school, I usually let them do the communicating” (P5).

**Theme 5: Teacher-initiated communication.** Three of the participants stated they usually initiated the communication between them and the teacher. When one participant was asked what type of communication would benefit her, she mentioned her child’s teacher would communicate with the parents through the teacher website located on Blackboard by posting assignments and tests that are upcoming (P1). She further stated another way teachers could communicate with parents is through the grade book by posting grades but that it needed to “be done in a timely fashion” (P1).

When this researcher asked another participant how the teacher or school helped her get past her struggling, she articulated:

Oh, that's a good question. I know that her grades were monitored closely. I don't know exactly by who. Maybe it was the teacher, but they would contact me often and say you know what's going on here and sometimes I wasn't aware. She never had any major

issues going on, but they would contact me and say I see her GPA is dropped two points. So, they would constantly keep me informed. (P2)

When this researcher asked another participant if the math teacher ever communicated with her, she replied, no because her daughter took care of everything (P3). When this researcher asked a participant how often the math teacher communicated with her, she replied, “whenever I would email (P4). She further explained she would usually initiate the communication if her daughter did not understand something (P4). When this researcher asked her what type of communication was used, she replied email mostly which was best for her since she worked (P4). When another participant was asked if the math teacher ever communicated with her, she replied, “no” (P5). The participant did elaborate and stated, “I felt that she's very approachable and that if I needed to use it I could contact her via telephone or email without a problem” (P5).

When this researcher asked another participant who initiated communication first, her or the teacher, the participant stated communication was initiated “half-and-half” (P6). She further said, “email was always a good source” but she felt “it’s just not as personal as a phone call.” When this researcher asked her what information was discussed and if there was anything else she would have liked to discuss, she stated what was discussed was “mainly what was lacking, like not paying attention in class or missing assignments.” She said she would have preferred to receive communications early on when she was able to do something about it but honestly “when you get to high school, if they can’t learn to start taking care of some of their business themselves, mommy and daddy cannot do it for them forever” (P6).

### **Type 3: Volunteering**

Epstein (2011) stated parents show their support for the school system and the students when they volunteer. Volunteering is a process where parents are invited by schools to share their talents or time with students. According to Epstein (2011), it is also important for administrators to create an atmosphere where parents will feel welcomed and comfortable volunteering. Teachers and administrators should also inform parents of ways they can volunteer. When teachers and administrators have opportunities for parents to volunteer, parents will feel welcomed and appreciated (Epstein, 2011).

**Theme 6: Parents helping at school.** When the participants were asked how they volunteered at their child's school, six of the seven participants stated they do not volunteer in their child's secondary classrooms or schools. P3, P5, and P6 stated they volunteered more when their children were in elementary school. When asked how she feels parents should become involved at the school itself and not just at home, P1 stated:

They could volunteer. They can volunteer to either help tutor. They can come sit in a class, so they can learn from the teachers what the new methods that are being taught is and how to teach them. So, it's kind of like a one-on-one tutoring for the parents, as well, because it's kind of hard. You just don't remember that stuff from when you were in school or when you were in college and some people do not go to college, so they are at a disadvantage there too. Our math has advanced so much further than when we were in school. I think parents need to have some type of update, even like on a meet and greet a Math Night. If we can even host a Math Night, or something like that, so parents could come in and see what the main things are that the kids need to say to us, even how to use the calculator with the new graphing calculators.

When this researcher asked another participant if she ever volunteered in the secondary school, she stated she did not volunteer much in secondary school but did a lot in elementary school (P2). She continued by saying “secondary is when kids don’t want to see you anymore.” When another participant was asked if she volunteered more or less when her child was in elementary school versus high school, she stated, “more” (P3). When this researcher asked the participant why she did not volunteer as she did in elementary school, she responded, “because she was in sports.”

When P4 was asked if she ever volunteered at the school, she stated she “volunteered for the fall festival and usually sent stuff for teacher appreciation week.” When further asked if she had ever been in the actual classroom to volunteer, she stated, “I don’t think so.” This researcher then asked the participant how she found out about any assistance the school needed from their parents, and she replied, “the counselor will e-mail me and ask can you volunteer for these” or “can you volunteer here. Whatever she needs, I’ll always try and help out” (P4).

P5 stated, “I did that when they were younger, but I felt in high school they were fine without me.” P6 believed parents should volunteer in school if they were strong at a certain subject. She further stated,

It helps everybody. There are moms that are up at the school all the time they volunteer and at one point I was able to do that. But over the past probably 6-7 years that's not been a possibility for me either with a flexible schedule. (P6)

When the participant was asked how she thinks teachers would benefit from parents volunteering, she articulated:

Oh, if their strong suit is math and they volunteer in the math class, I think it helps the teacher. It helps the students. As long as they're not playing favorites or anything like

that, I think that's the way to go. I think that teachers are overloaded. I do not care how good the teacher is when you get to 16 kids in the class that's too much. It's not fair to the kids, it's not fair to the teacher. Everyone's going to lose. So, I think if parents could volunteer, if that's their strong point, then I definitely think that they should do it. It helps everybody. I wish I would have been stronger in math, so I could have done that. I was really strong in English and a few other subjects. (P6)

When she was asked how she could have helped as a participant in the high school mathematics classroom, she replied:

If I were more capable, I would have been able to volunteer to take on a couple of students in a little group at a time whenever you go over a lesson, and it's time for them to do their seatwork, I would not have minded one bit sitting to help them to go over it. (P6)

When this researcher asked P7 if he volunteers at the school, he replied he did not volunteer at his child's secondary school, but he had "at the school they were previously at."

#### **Type 4: Learning at Home**

Learning at home is the process of parents, or family members assisting children with school-related activities, to include homework. Parents can do more than merely check to make sure students are completing assignments from school. Parents can provide instruction when the child does not understand the topic and communicate with the child about the school day.

Teachers and administrators should provide parents with as many tools as possible to be able to assist their children with educational activities at home (Epstein, 2011). By providing resources, parents will have their resources, as well as, school resources to pull from which will build parents confidence in assisting their children with secondary mathematics homework.

**Theme 7: Ability to help.** When this researcher asked how the participants felt about helping their children with their secondary mathematics homework, four of the seven participants said they felt like they were not able to help their children with their secondary math homework. P1 stated she was an English major and was at a loss when it came to math when asked how she felt when her son came home with homework. Another participant was asked how she felt when her child said she had math homework and stated she was “frazzled because I didn’t really know how to teach it. I don’t know how to help her” (P2). Another participant said she felt “okay” when her child had math homework and that “either she or the dad would help her with it” (P3). One participant acknowledged she “was not that great” when it came to math. When this researcher asked her how she felt when her child came home with math homework and further articulated:

At times I would try to look over things with her, and if I didn't understand I've always had an open relationship with her teachers, so I'd be like, let's email your teachers or let's find somebody that knows about this and ask the questions that we need to help you get the answers and resolve the problem that you need to resolve. (P4)

One participant acknowledged she was “pretty comfortable” helping her child with the math homework and finding answers if she needed to (P5). She stated it helped that her older child was just 2-years older and had taken the same classes, so if she couldn’t help her, she told her to “go ask your brother.” P6 felt overloaded when her child came home with math homework. She acknowledged:

Some of the subjects that we had, not just math but some other subjects, it was just a lot all at one time. And he got discouraged very easy and in math. His attention span was very short so by the time he got home to do his homework, he was already feeling like he

was going into it blind. He couldn't retain what he learned that day in class and it was a real struggle. (P6)

P7 echoed some of the same concerns regarding helping his son with math homework, acknowledging:

I try to help them as much as I can. Unfortunately, it's been like 30 something years since I done a lot of this math, you know. In the skill set that I have, yes, I do use math, but more of a basic, you know and some minor algebra but not as far as calculus, geometry and all that. But like I said; fortunately, my wife is a teacher. She knows what instruments we can get. As far as books and things the tutorials for us. And then I have a sister-in-law who was a chemical engineer, so she knows a lot about the chemistry and the math side and everything else, so if we can't figure it out, he can always call her and ask her. Our daughter did that quite often when she was still in school, and it helped her a lot. You know, having that to fall back on, and like I said, I used to be good at math, but you know if you don't use something you lose right. (P7)

**Theme 8: Self-help resources.** The ability to find resources to help their children seem to be a priority for most of the parents. All seven participants stated they were able to find resources with few problems. The most common response among the participants when asked what resources they had that could help with their child's success on their math homework was the internet. Six participants stated the textbook was beneficial, along with Blackboard and the school website. One participant stated, "there are apps that you can take pictures and it will show you how to work the problem in steps" as a good resource to help with math homework (P1). Another participant was able to locate resources on the internet that would help her

daughter have success on math homework (P2). When asked if she was able to find resources necessary to help her daughter with homework, she stated:

Absolutely. YouTube. We will use Khan University often. And if she didn't understand one person, there were several teachers available, male or female that she could choose from and if one of them explained something she didn't understand, we just switched over to someone else until she understood. (P2)

One participant said the textbook was a resource that “we would read through together and try to sort it out” questions her daughter had (P4). Another participant was asked what resources she had that could help with success with her child’s math homework, she stated:

We bought books. Reference books to help him. We had the internet. My daughter-in-law was a math teacher and we knew several other people that could tutor that's what we tried right this past year and the years past. (P6)

Another participant was asked what resources they have that can help his son be successful with his math homework, and he articulated:

Fortunately, my wife is a teacher and works at the library part-time, so she knows a lot of the tutors and things that are involved here because we have had our son with a tutor in the past year or so and that helped him quite a bit right. (P7)

**Theme 9: School resources.** According to Epstein (2011), schools have a responsibility to share with families’ ideas that can support learning at home (e.g., talking to children about school, providing ideas for helping with homework), provide information regarding what is taught in the classroom, and provide ways the parents can tie the learning from the classroom to the real world. The consensus of the seven parents was there were not enough resources provided to the parents that would help them work with their children on their math homework.



All parents provided this researcher with things they wish the teacher would be doing to help them.

When this researcher asked what kind of methods/resources your child's secondary math teacher and/or their school provides you to assist you in becoming engaged in your child's secondary mathematics homework, one participant stated:

I think if they were more engaged with Blackboard or some type of interactive site, so I could see what his assignments were, or I could see what he has coming up, because in high school it kind of sloughs off. Some teachers do not give as much information as they should. So as parents, we can look and see what they needed, and we could help them that way or find help or find outside resource. (P1)

When this researcher asked another participant how the school could have better helped her to be able to help her daughter when she came home with homework, she stated: "I don't see any way the school could have. I mean I really don't. Other than giving us the options in different ways to help her right now" (P2).

When another participant was asked how the school could have better assisted her when it came to the homework, especially on concepts she did not understand, she stated, "we learned one way, and they taught a different way. If it would have been the way we learned, we could've helped her better than the new way" (P3). When asked if there were any ways the school can help parents become more engaged with one's child's math learning at home, another participant stated:

I think there probably are parents out there that don't understand like myself. I know the basic math, but when it gets into algebra and geometry, I'm not that fluent in those things. I think that if they did have a parent session once a week or once a month, the teachers

might tell the parents to come and see we can show you and what we're teaching your kids. That way if they have a problem at home you guys can work on it and you know what's going on. (P4)

When another participant was asked how she feels the school could have better helped her become more engaged with your daughter while she was doing math homework, she replied:

I guess I probably would wish that the teachers would go over their homework with them or go over problems that are similar. Either after or before the homework is given just to help them understand it for a future test or even with their homework. (P5)

Another participant had teachers' contact information when problems would arise while helping her son with his math homework. When this researcher asked her what types of strategies, if any, did the child's math teacher provide parents, as far as help for homework in the evening times, she stated:

Usually, I had an email that I could always email. I had a personal phone number that I could call and ask questions. There were resources on the school's website or other websites that could help. I'm assuming it was more like a forum that they could go to with some help. Her son was never comfortable doing or trying new things. (P6)

When this researcher asked how the school can better help parents be able to help their children when they are at home, one participant stated:

I think one thing that would be really helpful to a lot of parents is if at the beginning of the school year, if they would give out some type of pamphlet that would say, here are some references that you can use. You both can go to the library, sit down, he can work on problems, and you can look up how to show them. Websites, even. Everybody's got a computer or phone. You look it up and say, well, see this part right here. Why did you

do this that way? I'm seeing that you should do it this way. You know, just basic things that could help a parent because even like kids, parents are saying they don't want to answer because they think this will make them look stupid. (P7)

### **Type 5: Decision-Making**

Decision making is the process of creating Parent Teacher Organizations (PTO) or other school executive committees that involve the most community stakeholders, including parents (Epstein, 2001). The decision-making process is most beneficial when relationships are formed between parents and schools. This allows parents to share their ideas and experiences with other parents, as well as build their understanding of the policies and procedures of the school district. According to Epstein (2001), by incorporating parents and other community stakeholders in the school's decision-making processes, school policies will take on viewpoints that are more fitting for the population. By including these diverse stakeholders, there could be an increase in the level of partnership throughout the school.

One participant was asked if she ever had the opportunity to influence any kind of policies whether it be at the school level or even the school board level, she stated "no" (P2). When this researcher further questioned the participant by asking if any opportunities to influence any of policies were ever communicated to her so that she could participate, she said "no, not that I know of" (P2). One participant was asked if she had ever been asked to become engaged in a math program itself, such as being on any kind of committee that could have directed the direction of the curriculum or book adoptions, and she replied, "I don't think so, no" (P3). When this researcher further asked if she had ever been on any committee at the school PTA, she stated, "I don't think." This researcher then asked if the school ever communicated a

need for parents to become involved with PTA, and she said “yes, they sent notes home at the beginning of the year” (P3).

One participant was asked how the school has asked her to become engaged in the math program and she stated, “they haven’t approached me in any way.” When this researcher asked if she had ever worked with the school or school board on any kind advisory type committees, she replied, “no.” When asked if she ever participated in the PTA, she replied “I did, when they were younger” (P5). When another participant was asked if he had the opportunity to influence any of the policies relation to school level mathematics, he replied, “not that I can say” (P7). This researcher then asked him if he thought it was important that parents have a say when it comes to what their children are being taught and he stated:

Yes. I do. There is a lot of this new math that I don’t agree with simply because from my comprehension of the process, you’re not really teaching them how to do math. If you just tell them to do this and this and this but your answer isn’t right, well how did you get to that answer and they explain it, you didn’t teach them how to do it. You gotta know, that if I add one and two it should be three. (P7)

**Theme 10: Parent leadership.** Epstein (2011) stated parents should be informed of school board meetings, who the members are, and any opportunities that should come up where the family can vote and make a difference. Other than the opportunity to be a part of the PTO, six parents said they received no communication from the school of any other opportunities to influence policies at the school or school board levels. Three of the seven parents said they would have liked to have been involved in curriculum decisions.

One participant was asked how they helped influence policy at the school level, and she replied:

When I was in the classroom as an English teacher, we had to use Blackboard. We had to post our assignments, but that was at a middle school level where our principal and our administration made us. You know, we had to have updated weekly and monthly lesson plans and graded papers returned in a timely fashion. In the math department, I was a team leader, so we had to stay updated on how to use all the manipulatives, in case we had to pull and a kid that needed help in and the teacher wasn't there that day, we had to know what was going on so we could help him or send him to somebody that could. (P1)

This researcher then asked her how she feels she could have been involved in math education, she articulated, “math I would probably run away from. Art education, I’m kind of artsy or can do some artsy style. Other than that, I don’t really know what I can do” (P2).

This researcher asked another participant if she ever had the opportunity to influence policies at the school board level, the participant responded, “no ma’am, I have not” (P4). When this researcher asked how her child’s school asks parents to become engaged in the math program at the school, she stated, “I don’t think I’ve ever been asked.” When this researcher further questioned the participant asking if she would be interested, she replied: “Sure absolutely. Anything that can help kids with education and even help kids better themselves. I think that might be great for parents or anyone to get involved in” (P4).

This researcher then asked the participant what ways she would like to become engaged at the school, she articulated:

Learning more about what our kids are learning. What the changes in the curriculum are like with Eureka or common core, different things like that. Having meetings with parents once a month to engage them and show them this is what we're going to do with your kid. Asking them “if you don't understand let's set up a new session if you're

interested” because like some of those parents may understand it and then you may have a group that doesn't understand it and say OK if you don't understand let's this have another meeting or another session. Have those parents come and explain to them and you can go through what we're teaching your kids so if you do have questions now that we're here for you to ask if you don't understand it or maybe it might be something you can learn during that session. (P4)

When this researcher asked another participant if she was asked to be involved in the mathematics program, whether it be engaging in the classroom or engaging in curriculum, the participant stated “no, no” (P6). When this researcher asked the participant if she felt she would have benefited more had she been able to get more involved at the school level with curriculum decisions regarding math, she replied:

Well, I think it might have helped a little bit. Maybe I wouldn't have felt so out of place when it was time for me to help him with a few things I would have maybe had the heads up about some things. (P6)

This researcher then asked the participant if she ever had the opportunity to volunteer with the PTA, and she articulated:

Yes. As a matter of fact, we moved to the area when my oldest son started third grade there. The first six school years, very school year, I went to the PTA, paid my dues, volunteered for everything. Guess who never got called. It was very cliquish. So, until they get cliques out they're not going to get as much parental involvement as they're looking for because parents get tired of volunteering and never getting called. But it's always the same group and then that one group complains because no one else wants to

help. Well, we've given you our number, we've given you all the information needed, you just refuse to call us because we're not your friends. (P6)

### **Type 6: Collaborating with the Community**

In this type of community involvement, parents and schools look to the community for resources that could enhance practices of the school and family (Epstein, 2001). These enhanced practices would have the potential of increasing student academic success. Some resources available to parents from the community could be tutoring services, post-secondary education assistance, extra-curricular activities, and social networking.

**Theme 11: Resources from the community.** According to Epstein (2011), schools could offer parents information regarding resources the community has to offer families. Workshops could be held to provide families with information regarding health and social issues. Schools could hold meetings that will provide families with information regarding each level of education and what is expected of their children at each.

When this researcher asked one participant how she used their community for assistance, she felt like the community was not really interested in helping families but making money. She articulated:

My community is good in a lot of ways, but I don't think my community actually cared really one way or another. I mean, honestly, there were times when for both of my kids I look for tutors and that type thing and they were way too expensive and way far away from us. It was always better just to try to figure it out yourself. (P2)

When this researcher asked another participant if she felt she needed the community for help, she stated her daughter did need tutoring in her math classes and received it from the math teachers that were teaching it (P3). When this researcher asked P5 if she felt she was able to go

to the community to find resources if she needed it, she replied “typically, all my resources were through the internet.”

This researcher asked another participant if the school provided the assistance parents need, such as after-school tutoring, or did they have to go to the community to find it and she explained:

The school provided the after-school tutoring. I did not go to them for an outside source in the community for tutoring because we actually knew someone who had been really helping them a lot. Not just in math, but in some other subjects as well. (P6)

#### **Chapter 4 Summary**

Parents with students in middle and high school tend to be less engaged in their children’s education versus parents with children in elementary school (Child Trends, 2013). Parents will only engage if they feel they have the knowledge capable of being successful with the activities or homework and are comfortable with their abilities to help their children (Peiffer, 2015). Current procedures and activities can be improved by stakeholders, including teachers and administrators that will build confidence in parents to be more involved in their children’s homework by understanding the experiences parents have working with secondary mathematics homework.

An analysis of the data produced 11 themes related to parents’ experiences working with their adolescent children on their secondary mathematics homework. The findings of the study aligned with research that states as children move from elementary to high school, parents tend to be less involved (Benner, Boyle, & Sadler, 2016; Hornby & Lafaele, 2011). The findings of this study showed all seven participants’ experiences can be related to Epstein’s (2001) six types of parental involvement framework.



## **Chapter 5: Discussion and Conclusion**

The purpose of this study was to investigate parents' experiences working with their adolescent children on their secondary mathematics homework. Additionally, this study sought to determine how these experiences related to Epstein's (2001) six types of involvement framework. This study used a descriptive phenomenological research design to explore the experiences parents had working with their adolescent children on their secondary mathematics homework. The seven participants were chosen using a criterion-based, purposeful sample. These participants were chosen for their rich descriptions of their experiences regarding working on secondary mathematics homework based on having adolescent children who were enrolled in secondary mathematics classes. Participants provided insights that were detailed and descriptive regarding their experiences working with their adolescent children on their secondary mathematics homework. This chapter presents the study's results; discussions relating the results to the literature; discussions of the limitations; implications the results has for practice, policy, and theory; and recommendations for future research.

### **Summary of the Findings**

Parents' experiences working with their adolescent children on their secondary mathematics homework were explored using descriptive phenomenology (Giorgi, 2012). Through one-on-one interviews, seven participants described their experiences working on secondary mathematics homework with their adolescent children. These descriptions provided this researcher with a deeper understanding of parents' experiences working with their adolescent children on their secondary mathematics homework and how those experiences relate to Epstein's (2001) six types of involvement framework. The following research questions guided this study:

**Research Question 1.** What are parents' experiences working with their adolescent children on secondary mathematics homework?

**Research Question 2.** What is the relationship between parents' experiences working with their adolescent children on secondary mathematics homework and Epstein's (2001) six types of involvement framework, including parenting, volunteering, decision making, learning at home, collaborating with the community, and communication?

Data for the study were analyzed and 11 themes emerged based on the coding process of the transcripts: *home environment, parent-child relationships, parent-initiated communication, student-initiated communication, teacher-initiated communication; parent help at school, self-help resources, ability to help, school resources, parent leadership, resources from the community.* While the emerging themes look as if to be distinct, this researcher discovered through coding how they were all connected. In this study, this researcher gained insight into the common experiences of the participants as they worked with their adolescent children on their mathematics homework.

The results of this study revealed all parents genuinely want to become involved and assist their adolescent children with their secondary mathematics homework. Six participants discussed with their adolescent children their school day by asking them about their day, if they have homework, or if they need any help. Four participants were also concerned with their children's future and were always willing to discuss their children's future goals with them and help them attain them.

This study also revealed there were lines of communication between the participants and the school but most of the communication was initiated by the participant. Three participants stated they contacted the teachers mainly through email. These participants further stated this

email contact was focused on concerns they had regarding their children's academic progress. Two participants stated they received communication from the teachers through Blackboard or the school website. These participants further stated the information was more general in nature and not specific to their children.

This study also revealed four of the participants did not feel comfortable helping their adolescent children with their secondary mathematics homework because they did not believe they have the necessary skills to help, but they are willing to help them by finding resources, whether it be through textbooks, the internet, or tutoring. However, six of the participants explained they felt comfortable with their ability to find the necessary resources to help their children. Three participants in this study believed they did not receive adequate resources from their child's mathematics teacher that would assist them in helping with the secondary mathematics homework. Two participants stated they had ways to communicate with the math teachers if they needed assistance but would prefer having more examples or resources provided either at the beginning of the school year or with the homework that needs to be completed.

This study finally revealed three participants were interested in becoming involved in decision making at the school level but stated they did not know how. Six of the participants stated they did not receive communication from the school informing them of ways they can become involved in decision-making regarding the mathematics program. Four of the seven participants stated they did not receive communication informing them of ways they can become involved in other decision-making committees at the school or school board level. Three participants stated they received communication regarding opportunities to take leadership roles in the PTO/ATP and all three participants stated they did.

## Discussion of the Results

The purpose of this study was to explore the experiences parents have working with their children on their secondary mathematics homework and to determine how those experiences relate to Epstein's (2001) six types of involvement framework. Epstein (2001) described parental involvement as parents participating in every phase of their children's development and education from the time they are born until they are adults. According to Vygotsky (1978), children learn best when they collaborate with someone with more experience or expertise and will internalize the learning or problem-solving skills necessary to solve the current and future problems when they arise during the collaboration process. Research suggests parents tend to be less involved as their students move into middle and high school (Benner et al., 2016; Wang, Hill, & Hofkens, 2014; Wang and Sheikh-Khali, 2014).

This descriptive phenomenological study aligned with much of the research on parental involvement regarding parents' experiences working with their adolescent children on their secondary mathematics homework and Epstein's (2001) six types of involvement framework. Specifically, after reflecting on the parents' experiences of working with their adolescent children on their secondary mathematics homework, 11 themes emerged from significant statements mentioned by the participants and each of these themes are related to Epstein's (2001) six types of involvement framework: parenting - *home environment* and *parent-child relationships*; communication – *parent-initiated communication*, *student-initiated communication*, and *teacher-initiated communication*; volunteering - *parent helping at school*; learning at home – *ability to help*, *self-help resources*, and *school resources*; decision-making - *parent leadership*; and collaborating with the community - *resources from the community*.

**Type 1 - Parenting.** Epstein (2001) stated the family has some rudimentary responsibilities they must make at home to ensure the success of their children. The first is to ensure the home environment their children live in provides for their safety, well-being, and is conducive to learning. The parents should then ensure they provide their children with the necessary skills to be successful at all levels of education. Parents should also supervise their children's homework time, provide support of their children as students, and provide positive support and praise as their children plan and grow to adulthood (Epstein, 2001). Home environment and parent-child relationships were two themes that emerged, through participants' discussions regarding the type of communication they have with their adolescent children regarding education and future goals and where their adolescent children do their secondary mathematics homework.

***Home environment.*** Epstein (2001) stated parents should provide an environment for their children that is conducive for learning. This should not only be an area that is free from distraction, but also an area where the parents can monitor their children's homework completion actively. According to the findings of this study, five of the seven participants did not place a priority on creating an environment where homework tasks were completed in a specific area or where the participants needed to monitor their children while they completed their secondary mathematics homework. One participant stated, "I just let her do it. I didn't structure anything and make her sit and work. She did it on her own" (P2). Another participant shared this same view when she stated her daughter did her homework wherever she felt comfortable while another parent said her daughter "typically does it on her own" (P3).

Epstein (2011) further explained "as students become older and more mature, they should and will take increasing responsibility for their learning; nevertheless, they will need support

from the adults in their lives throughout their educational careers” (p. 276). Three participants believed they could trust their adolescent children to complete their secondary mathematics homework without supervision. This supports Gonida and Cortina’s (2014) study that found if parents become intrusive during homework, children will begin to believe they are not trusted to complete their homework or are not capable of meeting academic challenges. Indeed, participants were consistent in their interviews in that they reported the responsibility for the completion of homework and learning should be the child's as they mature to young adults. Thus, the likelihood of parents of this study site creating a distraction-free and supervised homework environment for their adolescent children to complete their secondary mathematics homework is low. Therefore, the results of this study do not support Epstein’s (2001) ideas of parenting responsibilities regarding the home environment.

*Parent-child relationships.* Epstein (2011) stated parents should support their children as students by becoming involved in their children’s education. This study found that six of the seven participants felt it was important to discuss their adolescent children’s day when they came home from school. Six participants described how they are always willing to talk to their adolescent children about their school day by asking if they have homework. One participant stated, “we always tried to ask them every day what you did in class,” while another participant stated she asked her daughter “how’s your day, what did you do, or was it a good day.” Participants were consistent in their interviews in that they reported the importance of asking their adolescent children about their day and whether they had homework or not. There is a high likelihood that parents of this study site will discuss the school day of their adolescent children daily. Therefore, the results of this study support Epstein’s (2001) ideas of parenting

responsibilities regarding support of their children as students by discussing with their adolescent children their school day.

Epstein (2011) stated parents should provide positive support and praise as their children plan and grow to adulthood. The findings of this study revealed participants felt it was important to discuss with their adolescent children their future goals. Four of the seven participants stated they talked with their children about college or job options on a regular basis and would support their children in whatever path they chose to take. One participant stated, “we talked about where she wanted to go to college and what she wanted to do” (P3). Two of the seven participants stated they were able to find resources to assist their adolescent children plan for their future education. Because the parents of this study believed some sort of higher education is important, the likelihood of parents of this study site discussing future educational opportunities with their adolescent children is high. Therefore, the results of this study support Epstein’s (2001) ideas of parenting responsibilities regarding supporting their children with their future goals.

**Type 2 – Communicating.** Epstein (2001) stated it is important to have two-way communication between families and schools. This two-way communication should be from the school to the home as well as from the home to the school. Communication can occur through phone calls, emails, text messages, progress reports, and parent conferences. The school should ensure any communication sent home to parents is clear and can be understood by families. The school should also communicate meaningful information regarding a child’s progress and upcoming events and opportunities for involvement (Epstein, 2001). Parent-initiated communication, student-initiated communication, and teacher-initiated communication were

three themes that emerged, through participants' discussions regarding the type of communication they had with their adolescent children's secondary mathematics teacher.

***Parent-initiated communication.*** Participants of this study shared that communication was important because adolescent children do not always share what goes on during the school day. Epstein (2011) explained the importance of communication being open between the home and the school. According to the findings of this study, three participants would initiate communication with their adolescent children's math teacher whenever they had questions or concerns about progress in the classroom or homework questions. One of the participants stated, "I can go to them pretty much any time I wanted to" (P1) while another participant stated if her daughter was struggling, she communicated with the teacher. Two of the seven participants further stated they had teachers' phone numbers and knew they could contact them that way if they needed to do so. Thus, the likelihood of parents of this study site communicating with teachers regarding their adolescent children's academic performance is high. Therefore, the results of this study support Epstein's (2001) ideas of communication regarding parents communicating with teachers.

***Student-initiated communication.*** Epstein (2011) stated the importance of communication between the family and the school being open and that students should ask for help whenever they need it. Epstein (2011) also stated as students become older they will become more responsible for their education. The findings of this study revealed participants in this study felt their children needed to begin taking more responsibility for their own education as they were getting older and that their children had the opportunity at any time to communicate with the math teachers if they had any issues. One participant stated, "once they were in high school, I usually let them do the communicating" (P5). Another participant believed once a child



gets to high school, they must start taking care of their own business. Two participants of this study revealed their adolescent children communicated with their math teachers if they needed to. Thus, the likelihood of adolescent students of this study site communicating with their secondary mathematics teacher regarding issues they may have are likely. Therefore, the results of this study support Epstein's (2001) ideas of communicating regarding students initiating communication with their secondary mathematics teacher.

***Teacher-initiated communication.*** Epstein (2011) stated communication should be open and flow between the school and the home. Epstein (2011) further stated the importance of the school communicating with parents any information regarding their children's progress to ensure parents are involved in their children's education. It was apparent from the findings of this study the participants felt communication regarding their adolescent children from the secondary mathematics teacher was important, especially if the teacher felt there was a concern about academic progress. Indeed, four of the seven participants were consistent in their interviews in that they reported they never received any teacher-initiated communication (email, text, or phone call) regarding their adolescent children from the secondary mathematics teacher while two participants received some communication through email. This was an unexpected finding due to some researchers finding consistent communication between schools and families has a positive effect on children's academic achievement (Antonopoulou et al., 2010; Epstein, 2007; Kraft & Dougherty, 2013).

Participants did share ways they believed the teachers could have communicated with them. One participant stated she would have liked the teacher to use Blackboard to post upcoming assignments or post grades in a timely fashion. Another participant stated she would have preferred the teacher to make a phone call to discuss her son's progress. She believed

emails were a little impersonal. Thus, the likelihood of teachers of this study site communicating with parents regarding academic progress is highly unlikely. The results of this study do not support Epstein's (2001) ideas of communication regarding parents needing teachers to provide information and resources to be able to help their adolescent children with their secondary mathematics homework.

**Type 3 – Volunteering.** Teachers and administrators should create opportunities that will allow parents to become involved in instruction at school. According to Epstein (2001), parents can become involved with their children's school by volunteering. Teachers and administrators should educate parents on ways they can support their children through volunteering and continuously recruit parents as volunteers. It is also important for administrators to create an atmosphere at the school where parents feel welcome to volunteer (Epstein, 2001). Parents helping at school was a theme that emerged, through participants' discussions regarding how they volunteered at their adolescent children's high school.

***Parents helping at school.*** According to Epstein (2011), volunteering in the school is a way for parents to become involved in their children's education. According to the findings of this study, five of the seven participants did not volunteer in the high school mathematics classroom even though they felt they could. Four of the seven participants stated they did not volunteer as much because they did not know how to do the mathematics work, or they did not have time. As one participant stated,

I definitely think parents volunteering is a good thing if their strong suit is math. I think it helps the teacher. I think that teachers are overloaded. I wish I would have been stronger in math I could have done that. I was really strong in English and a few other subjects,

though. So, I think if parents could volunteer, I definitely think that they should do it. It helps everybody I wish I would have been stronger in math I could have done that.

Two of the seven participants were consistent in their interviews in that they reported volunteering more when their children were in elementary school but decreased the amount of time volunteering as their children became adolescents and entered high school. It was apparent that volunteering in the high school classroom was not a priority to most of the participants. Three of the seven participants revealed they volunteered through the PTO/ATP by assisting at school-sponsored functions and activities. Thus, the likelihood of parents of this study site volunteering in the classroom is low as compared to parents volunteering at school-sponsored functions and activities. Therefore, the results of this study only support Epstein's (2001) ideas of volunteering regarding parent involvement in school-sponsored activities.

**Type 4 – Learning at Home.** Schools should provide information to parents related to homework policies, monitoring progress, and skills needed at each grade level suggest Epstein (2001). Administrators should provide parents with information regarding activities in the community that would benefit families with academic standards and achievements. Teachers should provide strategies to parents that can be used to monitor and help their children at home while they are completing their homework. Epstein (2001) further stated teachers should provide information on activities families can use at home with their children that coordinate with classwork and will contribute to their children's academic achievements. Ability to help, self-help resources, and school resources were three themes that emerged, through participants' discussions regarding resources they had available to assist their adolescent children with their secondary mathematics homework.

***Ability to help.*** The participants in this study were genuinely interested in helping their adolescent children with their secondary mathematics homework according to the findings of their interviews. Results of this study revealed five participants were not able to help their children. Four of the seven participants stated they felt overloaded or struggled with the secondary mathematics concepts and were not able to assist their children because they did not have the necessary knowledge to help with the concepts taught. One participant stated she felt “frazzled because she didn’t know how to help her daughter” (P2). The study also revealed two participants were unable to help because they did not understand the methods the mathematics teachers were using. Thus, while parents of this study site wanted to work with their adolescent children on their secondary mathematics homework, it is unlikely they will become involved because they do not have the necessary knowledge or skills to be successful in becoming involved.

***Self-help resources.*** According to the findings of this study, having resources available to help their adolescent children with their secondary mathematics homework is important to the participants. This study revealed six participants were willing to find resources to help their adolescent children with their mathematics homework. The participants were consistent during the interviews in that they all reported the internet was their main source for finding resources to help, including videos and tutorial sites. One participant stated, “I did know that at times we would read through the book together and try to sort it out.” Therefore, the likelihood of parents of this study site finding resources that would assist their adolescent children with their secondary mathematics homework is highly likely.

***School resources.*** This study found that it is important for teachers to provide to parents or adolescent students resources that will assist with secondary mathematics homework.

This finding is consistent with Epstein's (2011) recommendation that teachers should provide parents with information they can use to help their children with their homework. Two participants shared the need to have the school provide resources they could use to assist their children with their secondary mathematics homework. One participant stated it would be beneficial for future tests if the teacher would go over the homework. One participant stated,

I think if they [the teachers] were more engaged with Blackboard or some type of interactive so I could see what his assignments were, or I could see what he has due coming up because in high school it kind of sloughs off, like some teachers do not get as much information down as they should. So as parents, we could look and see what they needed, and we could find help or find outside resources (P1).

An unexpected finding from this study was one participant's reply of "I don't see any way the school could" when she was asked how the school could have helped her work with her adolescent children on their secondary mathematics homework other than possibly more sample problems (P2). Therefore, the results of this study do not support Epstein's (2001) ideas of learning at home regarding schools providing parents with resources that can assist parents when working with their adolescent children on their secondary mathematics homework.

**Type 5 – Decision Making.** Epstein (2001) stated families should be provided information detailing opportunities to be involved in school decision making processes and district committees. Schools should provide opportunities for parents to become a part of a committee related to student achievement and school improvement. These opportunities could include school-level and district-level committees regarding curriculum development, uniform policies, or book adoption committees. Parent leadership emerged as a theme, through the

participants' discussions of opportunities they had that helped influence policies at the school level.

***Parent leadership.*** Epstein (2011) stated schools should ensure families feel they are equal partners when it comes to decisions regarding education and academic progress of students. The results of this study revealed parents have a desire to be an active part of the decision-making processes that affect their adolescent children's education. Six of the participants were consistent during their interviews revealing they did not receive any communication from the school informing them of opportunities to make decisions regarding school- or district-level education. Three participants stated they received notes or letters at the beginning of the year asking them to participate in the PTO/ATP but mainly to volunteer in helping at different events being hosted at the school. Four participants believed being involved in decision-making committees would give them the opportunity to learn more about what their adolescent children are learning, changes in the curriculum, and what to expect at each level of their adolescent children's education; which is consistent with Epstein's (2011) recommendation that schools should provide opportunities for families to be involved in "learning and development programs related to leadership, advocacy and adult education including literacy and English language instruction" (p. 278). Due to the interest in being involved in the decision-making process of the parents of this study, it is highly likely that parents of this study site would become involved in decision-making committees if the information would have been provided to them by the school. Therefore, the results of this study do not support Epstein's (2001) ideas of decision-making.

**Type 6 – Collaborating with the Community.** According to Epstein (2001), schools and families can build a relationship by sharing resources and services provided by the

community that would benefit the students, parents, teachers, and administrators in education. Schools should provide families with information regarding resources that would strengthen academic achievement, assist in building a strong family support system, and strengthen school programs. These resources could include tutoring services, parenting classes, and educational opportunities for parents. Resources from the community emerged as a theme, through the participants' discussions of their collaboration with the community regarding resources available that would assist them in helping their adolescent children with their secondary mathematics homework.

***Resources from the community.*** According to Epstein (2011), schools should collaborate with the community to provide students and parents' information regarding "learning opportunities, community services and civic participation" (p. 280). According to the participants of this study, the main resource their community provided was tutoring services. Six of the seven participants said they found tutors through the school, other family members, or the library themselves. Two participants stated the school offered after-school tutoring that their adolescent children used. By making the connections with the community, schools will create a site that builds strong bonds between the families, school, and the community (Epstein, 2011). An unexpected finding of this study was a statement from one participant who said:

My community is good in a lot of ways, but I don't think my community actually cared really one way or another. There were times when both of my kids needed tutors and they were way to expensive and way far away from us. It was always better just to try to figure it out myself. (P2)

According to Epstein, it is the schools' responsibility to work closely with the organizations in the community, including businesses and higher education institutions to find

resources they have available and provide the information to the parents. The results of this study revealed the school provides information regarding tutoring services available from the community parents can use to assist their adolescent children. Therefore, the results of this study support Epstein's (2001) ideas of collaboration with the community regarding families, schools, and communities working together to improve student academic achievement.

### **Discussion of the Results in Relation to the Literature**

The conceptual framework used for this descriptive phenomenological study was built on Epstein's (2001) six types of parental involvement framework, where six domains define types of involvement parents can use with their adolescent children. This framework was described in detail in Chapters 1 and 2, and the six types of involvement are: parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. This study focused on the experiences parents have when working with their adolescent children on their secondary mathematics homework and how those experiences relate to all six types of Epstein's (2001) parental involvement framework.

**Parenting.** Epstein (2011) stated the older a student becomes, they should and will begin to more responsibility for their own learning and education. However, Epstein (2011) stated they will still need the support of their parents throughout all levels of their education. Research has suggested when parents are involved in their children's homework, learning and achievement levels will increase (Affuso, Bacchini, & Miranda, 2015; Bhargava & Witherspoon, 2015; Gonida & Cortina, 2014; Wang & Sheikh-Khalil, 2014). When families take time to create a lifestyle that is geared to academic practices that are successful will have a positive impact on their children's academic success. Bhargava and Witherspoon (2015) stated when families are involved in the education system, they will take the necessary steps to ensure their lifestyle is



suited for success. Bhargava and Witherspoon (2015) suggested set routines are created by involved parents that would allow for homework and studying. Affuso et al. (2015) stated homework completion rates for adolescent children will be higher if parents monitored their children while they are completing their homework. Affuso et al. provided a description of parental monitoring to be “the process of observing and supervising children’s activities and whereabouts” (p. 565). Participants of this study do not find it necessary to create a specific area that is free from distraction for their adolescent children to complete their mathematics homework. Participants of this study also do not feel it is necessary to monitor their adolescent children while they are completing their secondary mathematics homework.

Gonida and Cortina (2014) conducted a survey of fifth- and eighth-grade students and their parents to determine if there was a relationship between the “parent goals and beliefs for children’s academic efficacy, different types of parental involvement in homework, student achievement goal orientations, efficacy beliefs, and achievement” (p. 377). The study revealed parents’ level of involvement with homework is based on their goals and beliefs for their children’s academic achievement and efficacy. According to Gonida and Cortina (2014), parents who felt their children had a low level of academic efficacy would become controlling on the homework. This, in turn would lead the adolescent children to believe they are not trusted to complete their homework, not capable of meeting academic challenges when they arise, or they do not have the skills needed to be successful.

Bhargava and Witherspoon (2015) stated adolescent children seek autonomy in their education and are constantly negotiating with their parents for it; therefore, parents reduce their involvement at home and school but increase discussions with their adolescent children regarding the importance of education for their futures. Bhargava and Witherspoon (2015)

conducted a multi-wave longitudinal study involving 1482 African- and European-American families to determine how involvement changes during adolescents, and if these changes are influenced by race, SES, gender, or neighborhood. The results indicated parental involvement did decrease both at home and at school during their children's adolescent school years. The results further indicated parents consistently discussed the importance of education for their children's future. The researchers expected African-American parents to have more home-based involvement versus European-American parents. The study revealed African-American parents were involved more at home but that declined over time (Bhargava & Witherspoon, 2015).

This researcher's findings for this study revealed similar results to Gonida and Cortina (2014) and Bhargava and Witherspoon (2015). The participants of this study trusted their children to complete their homework and ask for help if they needed it. They also believed their children were capable to being academically successful and gave them the autonomy they needed to accomplish their tasks. Like the participants of Bhargava and Witherspoon's (2015) study, the participants in this study showed a decline in involvement at home and at school while their adolescent children were in high school and they did believe it was important to discuss with their adolescent children the importance of education and the impacts it can have on their future.

**Volunteering.** Research has shown there is a positive effect on academic achievement if parents would become involved in their children's school (Shute, Hansen, Underwood, and Razzouk, 2011; Epstein, 2011; Epstein, 2008; Wang & Sheikh-Khalil, 2014). Secondary schools have shown an increase in academic achievement of adolescent children when parents become involved in parent-teacher organizations, the community, or volunteer in the classroom (Shute et

al., 2011). According to Child Trends (2013), students had an increased desire in attending post-secondary school if their parents were more involved during primary and secondary school.

Epstein (2008) discussed ways parents can become involved in the classroom by volunteering their time to share about their careers or to be mentors. Parents can also become involved by serving on school improvement committees that develop mission statements for the school or improve policies (Epstein, 2008). Though the results of this study showed parents thought volunteering in the classroom would be beneficial to students, most of the participants did not volunteer.

**Learning at home.** Research stated parents can become engaged in their children's education by monitoring their educational activities at home (Affuso, Bacchini, & Miranda, 2015). Affuso et al. (2015) stated students will have a higher homework completion rate when parents monitored their children while they completed their homework. Researchers have suggested that when parents are involved in their children's homework, learning and achievement levels will benefit (Epstein, 2007; Epstein, 2010; Shute et al., 2011; Wang & Sheikh-Khalil, 2014). Research also noted children were more successful in class when families were involved in their homework (Griffin & Galassi, 2010; Ray & Smith, 2010). This study revealed most parents felt they did not need to monitor their adolescent children as they worked on their secondary mathematics homework. The participants stated they trusted their adolescent children will do what they were supposed to do.

**Communication and collaboration.** Research has shown when parents have open, two-way communication with their children's school and teachers, academic achievement will be affected positively (Epstein, 2008; Kraft & Dougherty, 2013). Kraft and Dougherty (2013) and Epstein (2008) discussed homework completion rates and student classroom engagement

increased when communication between teachers and parents were open. Two studies were located regarding the importance of communication in education. One was a field experiment conducted by Kraft and Dougherty (2013) which evaluated student classroom engagement in relation to teachers' frequent communication with parents and students and the other was a survey conducted by Antonopoulou, Koutrouba, and Babalis (2010) which explored Greek parents view of their role in secondary education in relation to communication and collaboration, two types of Epstein's (2010) six types of involvement framework.

The study conducted by Kraft and Dougherty (2013) involved sixth- and ninth-grade students attending a MATCH Charter Schools and Teacher Residency program during the summer. The study required a daily phone call and text message to the parents. The phone call was from the English teacher and the text message from the mathematics teacher. Both were scripted by the researcher. The phone call discussed how the student progressed academically and behaved that day, any upcoming assignments or assessments, and strategies the students could use to continue to improve. The text message focused on strategies the students could use to improve. Kraft and Dougherty (2013) noted an almost immediate positive effect. Homework completion rates increased by 40%, unwanted classroom behaviors decreased by 25%, and a 15% increase in class participation (Kraft & Dougherty, 2013).

In the study conducted by Antonopoulou, Koutrouba, and Babalis (2010), 475 parents of secondary students completed a survey regarding their perceptions of family-school partnerships relating to two of Epstein's (2010) six types of parental involvement framework of communication and collaboration between parents and school. The study revealed the parents believed collaboration plays a positive role in secondary education, but there were limited opportunities for parental involvement with the school. The parents stated communication was

limited to adolescents' performance and they believed the teachers did not value their opinions. Parents were given the opportunity to provide suggestions regarding ways to improve the current communication and collaboration efforts in place. Parents suggested collaboration should be set up on a regular basis between the administration, teacher and family, the school should provide counseling services to families regarding how parents can become more involved in the education of their adolescent children, and consistent, pre-arranged conferences should be set-up at the school with the families to keep the parents informed on the academic performance and underlying difficulties of their adolescent children.

Though this researcher's findings for this study showed there was communication between the parents and the teachers, most of the communication was parent-initiated only when there was a question or concern. The participants in this study believed communication and collaboration were important for their adolescent children's success; some of the participants were not aware of parental involvement opportunities; and most of the communication initiated by the school or teacher was limited to their adolescent children's academic performance or behavior issues. The results of this study concluded participants desired an increased rate of communication with teachers regarding resources they could use to help their adolescent children with their secondary mathematics homework.

**Decision-making.** Schools should provide information to parents regarding opportunities available for them to be involved in decision-making processes (Epstein, 2001). Principal's play a significant role regarding the amount and level of involvement of parents (Hopkins, 2000). The style of leadership of the principal, his or her ability to communicate effectively ideas of parental involvement, and any perceived attitudes regarding parental involvement are vital in getting and maintain parental involvement (Barr & Saltmarsh, 2014;

Mleczo & Kington, 2013; & Good & Gurr, 2009). A study by Povey et al. (2016) was located that survey principals regarding their ideas of how they get parents involved in the school. The study revealed principals expected parents to become involved by supporting learning at home, volunteering in the classroom, and making decisions on uniform policies.

### **Limitations**

Limitations are characteristics based on the design or methodology chosen that could have an impact on the interpretation of the study's findings (Price & Murnan, 2004). This study had several factors that represented limitations. One limitation of this study was that data were collected from one school site. The site used for this study was a rural school with predominantly white students enrolled. If this researcher would have used multiple sites for this study with a more diverse student population, the results could be applicable to more diverse sites.

Another limitation was the researcher of this study being the instrument to collect the data. The researcher believes parental involvement has many positive effects and this bias could influence data collected during the interviews. According to Tufford and Newman (2010), a researcher's seeming bias can sway and lead one's personal interests in explicit areas within research and affect how data are analyzed or interpreted. This perceived bias can lead to conclusions that are false or extremely subjective. This researcher used Tufford and Newman's bracketing method to remove any researcher bias. Bracketing is when researchers put aside their own beliefs and understanding of a phenomenon to ensure data is not affected (Tufford & Newman, 2010).

In this addition, this study was limited in the use of one instrument as the method to collect data. This researcher used one-on-one interviews that relied solely on parents'

descriptions of their experiences working with their adolescent children on their secondary mathematics homework. These experiences may not be the same or like parents of children who are in lower grades or at different school sites.

Another limitation of this study was the use of only biological parents. The experiences of other guardians, teachers, and administrators regarding parental involvement with adolescent children on their secondary mathematics homework were not included. The experiences of other guardians, teachers, and administrators may be different than the experiences of biological parents regarding adolescent children's parents working with them on their secondary mathematics homework.

A final limitation may have been the participants' honesty when they provided descriptions of their experiences. Some of the participants may have been uncomfortable answering the questions honestly. Participants' information was safeguarded to ensure confidentiality and this information was explained to the participants in the consent form and at the beginning of the one-on-one interviews. Due to the small sample size, some participants may have felt that it was still possible for them to be identified by peers, teachers, administrators, or other people in their community.

### **Implications of the Results for Practice, Policy, and Theory**

Prior research has examined the benefits and effects of parental involvement in the education system (Griffin & Gallasi, 2010; Grossman, 2014; Hornby & Lafaele, 2011; Ray & Smith, 2010). There are many benefits revealed by the literature regarding parental involvement on academic success, attendance rates, and future education (Griffin & Gallasi, 2010; Grossman, 2014; Hornby & Lafaele, 2011; Ray & Smith, 2010). As parental involvement increased, parent and school relationships are built that will increase parents' confidence in their abilities to

become involved in education and increase the morale of teachers (Hornby & Lafaele, 2011). Literature also indicated parental involvement is higher when children are in elementary-school versus middle and high-school (Child Trends, 2013; Griffin & Gallasi, 2010; Grossman, 2014; Hornby & Lafaele, 2011; Ray & Smith, 2010).

There has been research that has explored the experiences of parental involvement in schools (Cheung & Pomerantz, 2011; Child Trends, 2013; Doucet, 2011; Farah, 2015; Goodall & Montgomery, 2013; Perriell, 2015; Simon, 2011) and parental involvement and high school students' achievement (Al-Alwan, 2014; Antonopoulou, et al., 2010; Bhargava & Witherspoon, 2015; Costa & Faria, 2017; Epstein, 2007; Wang et al., 2014). Researchers have also studied parental involvement and mathematics achievement (Aligbe, 2014; Harackiewicz et al., 2012; Hong et al., 2010; Hornsby, 2012; Monson, 2010; O'Sullivan et al., 2014; Sheldon & Epstein, 2005; Shukla et al., 2015). Only two studies were found that focused on parental involvement and homework (Aichler, 2018; Gonida & Cortina, 2014) and one study that focused on the parents' perspectives regarding parental involvement in high school (Hall, 2012). This study added to the body of research on parents' experiences working with their adolescent children on their secondary mathematics homework.

The findings of this study may have meaningful implications for parents, teachers, and administrators. Phenomenological findings are usually not generalizable but can be transferable (Palinkas et al., 2013). This phenomenological study revealed that all seven participants had similar experiences while working with their adolescent children on their secondary mathematics homework; therefore, the results can be transferred to other similar sites with similar populations. Based on the results of the data, teachers and administrators should consider



improving current policies and procedures regarding resources provided to parents, teacher-initiated communication, volunteering, and parent leadership opportunities.

**Practice.** This study was conducted at a rural high school in southwest Louisiana. The results of this study revealed that parents are genuinely interested in helping their adolescent children with their secondary mathematics homework as well as becoming involved in the school system. The results could be applied to other rural high schools interested in assisting parents in becoming more involved with their adolescent children on their secondary mathematics homework. The importance of the participants' experiences could assist parents, teachers, administrators, and the community in building a relationship between families, schools, and the community.

**Teacher resources.** Parents and students would benefit from resources provided by the teacher regarding secondary mathematics homework. These resources would assist parents in understanding their role in the homework process as well as building their confidence in their ability to help their adolescent children. The participants stated they felt overloaded or struggled with the secondary mathematics concepts and were not able to assist their children because they did not have the necessary knowledge on the concepts or understand the methods the mathematics teachers were using. Results of the study indicated all seven participants would like to have more resources available from the teachers they can use to assist their adolescent children more when working on secondary mathematics homework.

According to the participants, teachers currently provide resources through the school or teacher's websites on Blackboard but not on a consistent basis. Based on these findings, teachers should evaluate their current procedures for providing students and parents' resources to help with homework. Participants expressed a desire to have information early in the school year

listing specific resources they can use throughout the year that will help them work with their adolescent children on their secondary mathematics homework. For example, teachers should consider creating a pamphlet or handout at the beginning of the year to provide to each student listing resources that can be used throughout the year to help with their secondary mathematics homework. The resource list would eliminate frustrations of both the parents and students trying to find resources that would help them complete homework assignments.

Another example of a resource teacher could provide is to video-record their lectures and post them to their class websites. These videos could be viewed by parents and students at home while working on their homework. This would benefit parents in building their confidence in their abilities to help their adolescent children with their secondary mathematics homework because they would be watching the teacher as the lesson is taught and learning the material and methods the teacher requires.

***Teacher-initiated communication.*** Parents would benefit from regular communication from the teacher that shares information about academic progress, upcoming assignments or behavior problems. Participants in this study expressed a desire to have more, regular communication with teachers, sharing progress of their adolescent children and upcoming assignments or assessments. Participants stated there were times when they do not know what homework their adolescent children were supposed to be completing until grades had been posted and at that point it is too late to be able to help them. Based on these findings, teachers should consider their current practices regarding communications with parents. For example, to meet parents' needs of knowing beforehand what assignments or assessments were upcoming, teachers may want to consider creating a class newsletter or weekly schedule that could include a brief description of the concepts on which the students are working, what the

homework will be, any assessments the students will be taking, and resources students and parents can use to help with assignments. These resources could be sent to parents through email and it can be posted on the school and teacher's websites.

Research showed parents will become more involved based on teacher's attitudes toward students and parents (Hayes, 2011). Teachers who build a positive relationship with students, were concerned about student's academic progress, and were open to and invited communication would find parents becoming more involved in their children's education (Gavidia-Payne, Denny, Davis, Francis, & Jackson, 2015; Hayes, 2011; Kaplan Toren & Seginer, 2015). Hayes (2011) noted it was important for teachers to approach parents with respect, be nonjudgmental regarding their children, and have communication that begins on a positive note regarding the children.

Most of the participants in this study stated teacher-initiated communication was limited to emails discussing behavioral issues or academic problems their children had experienced. The results revealed this type of communication usually came after the problem occurred. Some of the participants believed email was good for some communication but that it could be impersonal and would prefer to talk with the teachers sometimes. Based on the results, teachers should consider making regular phone calls to parents to discuss academic progress or behavior concerns. For example, teachers should consider making positive phone calls early in the school year and regular phone calls to keep parents updated on the progress of their children. These types of phone calls will promote a positive relationship with parents. By calling early in the school year, parents will build a bond with the teacher based on the idea the teacher cares for their children. This will be beneficial for the teacher when calling the parents about a behavior

issue or academic failure later in the school year. The parents will support the teacher easier because prior, positive contact had already been made and a relationship has been established.

***Volunteering.*** According to Child Trends (2013), elementary-school parents tend to be more engaged in their children's education than middle and high-school parents. Epstein et al. (2002) described volunteering as families being involved at the school to support the students and school. Epstein et al. (2002) suggested schools need to implement a variety of strategies that will recruit parents and train them to be volunteers to reveal the talents they offer that would benefit students, teachers, and administrators. The participants of this study acknowledged they volunteered more when their children were in elementary school. Most acknowledged they do not volunteer at all at their children's high school.

Based on participants' interest in becoming more involved at the high school level, teachers and administrators should look at the current volunteers in the school to recognize how many are volunteering at the high school level. Administrators could develop a plan to educate parents on the needs of adolescent children. The plan would describe in detail how they, the parents, can help provide a positive experience in the classroom or school. By educating parents on adolescents needs, parents will feel more comfortable volunteering.

This researcher further recommends teachers and administrators should begin to look at possible ways parents can volunteer in the classroom and at the school. This researcher suggests letters can be developed by the administrators describing the need for volunteers at the high school level and give them to the parents. This researcher recommends teachers should contact their student's parents and communicate specific needs they have in their classroom that parent volunteers can fill. For example, teachers can ask parents to share their work experience with

their class and how education plays a roll or work one-on-one with students working on classwork or homework.

***Parent leadership.*** According to Hornsby (2012), parents who are involved in their children's education increase students' motivation. Parents should have the opportunity to hold leadership roles in the school and district levels (Epstein, 2001). Parents could serve on school-level improvement committees that develop mission statements or improve policies (Epstein, 2007). The participants of this study expressed an interest in serving on decision-making committees but acknowledge they never received information on how they could. Parents, teachers, and administrators should be viewed as equal partners in the education of students and parents should be involved in decision-making when it comes to their children's education (NCLB, 2001). Administrators should look at current committees to find opportunities for parents to become involved. For example, parents could serve on a committee that makes decisions regarding student learning, including extracurricular activities, use of school property, and discuss current discipline practice and classroom management strategies. Administrators can create a letter outlining different committees parents can become involved in and send them to the parents to ensure parents' needs are met regarding receiving the necessary information, so they can become more involved in their children's education.

***Policy.*** The findings of this study revealed a genuine interest for parents to become involved with all aspects of their children's education. Teachers and administrators have significant influence over the involvement of the parents who have students enrolled in their schools. No Child Left Behind Act (2001) discussed the significance of parental involvement and the importance of parents being a part of school policies and practices committees. Among the emerging themes of this study were that parents do not volunteer as much when their children

are in secondary school and schools do not provide enough information regarding opportunities for parents to become involved in the decision-making process at the school or district level. Schools have a responsibility to assist parents in becoming involved in the education system. This study indicated that teachers and administrators must understand the importance of the relationship between families, schools, and the community. Administrators must create clear expectations that outline the roles the school will take regarding increasing parental involvement at school and at home. These expectations should become school policy and administrators should provide professional development explaining the importance of having parents involved in all areas of the education system. Administrators should have in-service opportunities for teachers to share effective strategies they use to assist parents in becoming involved.

This study could also be shared with district-level administrators. This research could inform the district of areas of need based on the findings of this study regarding parents' experiences working with their adolescent children. District administrators could create policies that would improve areas of concerns of the parents in this study. District administrators could also create professional development opportunities incorporating the results of this study that would educate and assist administrators, teachers, and community stakeholders regarding strategies that would increase parental involvement.

**Theory.** One of the purposes of this study was to determine if parents' experiences were related to Epstein's (2001) six types of involvement framework. The resounding answer from the participants in this study was that they genuinely wanted to be involved with their adolescent children's education both at home and at school through parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. This study's findings are closely aligned with the findings of Epstein (2001). Therefore, the results of

this study may contribute valuable information in the field of education, to provide insight into parents' experiences working with their adolescent children on their secondary mathematics homework. Further research on parents' experiences working with their adolescent children on secondary mathematics homework should be conducted to better define parental involvement at the high school level and with secondary mathematics homework.

### **Recommendations for Further Research**

In this descriptive phenomenological study, this researcher explored the experiences of seven parents who have adolescent children taking secondary mathematics classes. The primary focus of this qualitative study was to find out what parents had in common regarding working with their adolescent children on their secondary mathematics homework and how those experiences were related to Epstein's (2001) six types of involvement framework. Homework help is the most common way for parents to become engaged in their children's education. One area in which students often need help is in mathematics.

The benefits of mathematics homework include learning opportunities outside of school and highlights the importance of parents working with their children on the mathematics homework (O'Sullivan, Chen, & Fish, 2014). The findings of this study demonstrated parents genuine interest in wanting to assist their adolescent children with the secondary mathematics homework, and how those experiences are related to Epstein's (2001) six types of involvement framework. This study used one, rural school site as its source of data. This study should be extended to other school sites, including urban and suburban. By using multiple sites to conduct a similar study, the sample size would be larger, which could provide findings that could be more credible. Creswell (2013) stated phenomenological studies should include between five and 25 participants who all have experienced the phenomenon. This study fits within Creswell's

recommendation, even though the number of participants in this study were on the low end of the spectrum. A study that includes more participants could be more beneficial in describing the experiences parents have working with their adolescent children on their secondary mathematics homework and how those experiences are related to Epstein's (2001) six types of involvement framework.

This study was based on the experiences parents have when working with their adolescent children on their secondary mathematics homework. A mixed methods study could be conducted based on parents using specific tools and strategies provided by teachers to assist their adolescent children on their secondary mathematics homework. The study could focus on the effectiveness of the specific tools and strategies related to student achievement and parents' experiences using these strategies with their adolescent children.

This study used one-on-one interviews with parents of adolescent children taking secondary mathematics courses to gain an insight into their experiences as they work with their adolescent children on their secondary mathematics homework. A longitudinal study could be conducted to explore parents' experiences working with their adolescent children on their secondary mathematics homework. This could be accomplished by selecting a group of parents when their children are in upper elementary and follow them through high school to determine how and why their experiences working with mathematics homework begins to change as their children move toward graduation. This type of study would aid stakeholders, including parents, teachers and administrators in identifying when the experiences of parents working with their children on their mathematics homework begin to become challenging and determine what changes occurred in the home, school, or community that could be causing the issues.



## **Conclusion**

Parental involvement is defined as a commitment from parents to actively participate in both the school and their children's education (Epstein, 2001). The purpose of conducting this descriptive phenomenological study was to examine the experiences parents of adolescent children had while working on secondary mathematics homework. This researcher was further interested in determining how those experiences relate to Epstein's (2001) six types of involvement framework, including parenting, volunteering, communicating, learning at home, decision-making, and collaborating with the community. The methodology of the research considered the meaning of the experiences of the participants, and the common phenomenon was identified through the themes that emerged (Creswell, 2013). The data revealed 11 themes including home environment, parent-child relationships, parent-initiated communication, student-initiated communication, teacher-initiated communication, parent helping at school, ability to help, self-help resources, school resources, parent leadership, and resources from the community.

Peiffer (2015) stated parental involvement is a vital part of student achievement. The views parents have of their ability to assist their children with their academic activities will determine the amount of engagement they have with their adolescent children at the secondary level. Parents will be more engaged at school and home working with their children on their homework as they become more confident in their abilities regarding secondary education (Peiffer, 2015). The results of this study revealed parents are genuinely interested in wanting to assist their adolescent children with their secondary mathematics homework.

Participants consistently discuss with their adolescent children their school day and their future goals. Lines of communication are open but most of the communication is initiated by

participants. Participants are interested in more, regular communication from teachers regarding their children's academic progress or behavioral problems. Participants stated they wanted to help their adolescent children on their secondary mathematics homework but did not feel they were able to because they did not have the proper skill set. Participants felt comfortable finding resources on their own to help their children with their secondary mathematics homework, but also expressed the desire to receive resources from teachers that would give them the tools needed to help their children. Finally, participants revealed they were interested in becoming involved in committees that made decisions at the school and district level, but they did not receive any communication from teachers or administrators informing them of how they could become a part of this process.

This study was unique as it focused on parents' experiences working with their adolescent children on their secondary mathematics homework. Administrators at the school and district levels have these resources to use to support families working with their adolescent children on their secondary mathematics homework. This research study can also be used by parents, teachers, and administrators at all levels to make suggestions to parents regarding parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. The participants in this research study appreciated being able to share their experiences, working with their adolescent children on their secondary mathematics homework. They all believed their involvement in their adolescent children's education was important and were eager to share ideas and strategies they used to assist their children with their education.

This researcher found the results of this study to be consistent with Epstein's (2001) six types of involvement, including parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. To yield the highest possible goal of

getting parents to become more involved in their children's education and school systems, teachers and administrators need to provide parents the necessary skills and tools to be successful in working with their adolescent children on their secondary mathematics homework. The findings of this study may lead the way for future research to ensure parents of adolescent children taking secondary mathematics courses can work with them on their homework.

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## **Appendix A: Demographic Survey**

Participant # (found in email – do not put your name):

Age:

Ethnicity:

Parents' highest level of education:

Primary home language:

Total # of Children:

Total # of Children in Secondary School (e.g. 9th through 12th grade):

Total # of Children enrolled in Secondary Mathematics Classes:

What Secondary Mathematics are your children taking in 2017-2018 (e.g. Algebra I, Geometry, Algebra II)

Do both parents work outside the home?

## **Appendix B: Parent Interview Questions**

This interview is for exploring your experiences working with your adolescent children on their secondary mathematics homework and how it is related to Epstein's framework of six types of involvement. I have received your signed consent form. As a reminder, I will be recording our interview for future use. Also, all your information will be coded to maintain anonymity. Remember, you do have the option to stop this meeting or withdraw all together from the study if you so choose at no penalty to you.

Do you have any questions before we begin the interview?

The following are some basic, preliminary questions about you and your children.

### **Preliminary Questions**

1. How many children do you have?
2. How many are boys? How many are girls?
3. How many children do you have in high school (9th – 12th grade)?
4. How many of your high school children are taking secondary mathematics classes?
5. What secondary mathematics classes are your children taking?

The following questions will be more focused on your helping your children with their secondary mathematics homework.

### **Focused Questions on Mathematics Homework**

6. What resources do you have that can help with success with your child's math homework?
  - a. Probing Questions
    - i. How do you feel when your child comes home with math homework?
    - ii. How do you feel about helping your child with their mathematics homework?
    - iii. How do you feel about finding resources to help your child with their math homework?

- iv. How can the school better help you to become more engaged with your child's math learning at home?
- 7. What kind of communication do you have with your child regarding their math homework and education?
  - a. Probing Questions
    - i. What do you ask your children when they come home from school?
    - ii. What conversations have you had with your children regarding their future education goals?
- 8. What kind of correspondence and communication do you have with your child's math teacher regarding your child's performance?
  - a. Probing Questions
    - i. How often does your child's math teacher communicate with you?
    - ii. How does your child's math teacher communicate with you?
    - iii. How do you expect your child's math teacher to communicate with you?
    - iv. What information does your child's teacher communicate with you regarding your child?
- 9. What kind of methods does your child's secondary math teacher, and/or their school provide you to assist you in becoming engaged in your child's secondary mathematics homework?
  - a. Probing Questions
    - i. How does your child's school ask you to become engaged in the math program?

- ii. How have you become engaged in the math program at your child's school?
- iii. What ways would you like to become engaged in the math program at your child's school?

10. How do you volunteer with your child's school?

a. Probing Questions

- i. How often do you volunteer at your child's school?
- ii. How do you find out parent assistance is needed at your child's school?
- iii. If you do not volunteer, why?

11. What kind of ideas and strategies does your child's math teacher provide you to use at home to assist your child with their homework?

a. Probing Questions

- i. How does your child's teacher provide information regarding the assigned homework?
- ii. What supports can your child's math teacher provide you, so you can assist your child with their math homework?

12. How have you had the opportunity to help influence policy at the school level? This includes from the classroom level to PTA, to the local school advisory board.

a. Probing Questions

- i. In general education areas?
- ii. In mathematics areas?



13. How have you collaborated with the community regarding resources available to you to assist your children? This includes tutoring, health care, mentoring, etc.

a. Probing Questions

i. In general education areas?

ii. In mathematics areas?

Thank you for agreeing to participate in this study to better understand parents' experiences working at home with their secondary mathematics students.

If you decide to opt out of this study, simply email me and let me know. If you choose to allow me to use your information after opting out, your information will be maintained in confidence and secured and will be destroyed three years after this study concludes. If you choose to not allow me to use your information, I will destroy your information immediately.

If you complete the study, I will email you a copy of the final study, so you can verify I portrayed you accurately and we can collaborate to epitomize the essence of your experience of the phenomenon of your experiences using effective strategies based on Epstein's parental involvement model.

## Appendix C: IRB Approval Letter



DATE: April 17, 2018

TO: Rebecca White, ED.D.  
FROM: Concordia University - Portland IRB (CU IRB)

PROJECT TITLE: [1193292-2] Parents' Experiences Working with Their Adolescent Children on Secondary Mathematics Homework in Relation to Epstein's Framework of Involvement: A Phenomenological Study

REFERENCE #: EDD-20180202-Weschke-White  
SUBMISSION TYPE: Continuing Review/Progress Report

ACTION: APPROVED  
APPROVAL DATE: April 17, 2018  
EXPIRATION DATE: April 17, 2019  
REVIEW TYPE: Expedited Review

Thank you for your submission of Continuing Review/Progress Report materials for this project. The Concordia University - Portland IRB (CU IRB) has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission. Attached is a stamped copy of the approved consent form. You must use this stamped consent form.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of April 17, 2019.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Amon Johnson at (503) 280-8127 or amjohnson@cu-portland.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Concordia University - Portland IRB (CU IRB)'s records. April 17, 2018

## Appendix D: School Board Permission

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**From:** [REDACTED]  
**Sent:** Thursday, April 19, 2018 9:24 AM  
**To:** White, Rebecca  
**Cc:** [REDACTED]  
**Subject:** RE: Doctorate Study

Mrs. White,

If [REDACTED] is ok with your research proposal you can take this email from me as permission to move forward with your research at [REDACTED]. Good luck as you work to improve the working relationship between parents teachers and administrators.

**From:** White, Rebecca  
**Sent:** Thursday, April 19, 2018 8:19 AM  
**To:** [REDACTED]  
**Subject:** Doctorate Study

[REDACTED]

I am working on my Doctorate in Transitional Leadership and am seeking your permission to use [REDACTED] as my site for my study.

Parental involvement has become a priority of our nation's school systems, especially in high school. Parents tend to be less involved in their children's education as they move into high school. My study will focus on parent's experiences working with their adolescent children on their secondary mathematics homework and how it relates to Epstein's framework of six types of involvement model, including parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community.

It is not known if and how parents working with their adolescent children on their secondary mathematics homework relates to Epstein's framework of six types of involvement, including parenting, communicating, learning at home, volunteering, decision-making, and collaborating with community. The purpose of this proposed phenomenological research study will be to investigate the phenomenon associated with parents' experiences working with their adolescent children on their secondary mathematics homework and how their involvement is related to Epstein's (2011) framework of six types of involvement. There is a significant positive relationship between an environment that supports learning and success of students academically (Li, 2012). It is not possible for any school to educate a child without assistance from parents at home (Li, 2012). Although parental involvement has been found to be vital in the academic success of students (Hornby & Lafaele, 2011), parents tend to be less involved as their students move into secondary school (Benner et al, 2016; Kim & Hill, 2015, Povey et al., 2016; Wang & Sheikh-Khalil, 2014).

The proposed study will elaborate and add to these ideas by focusing specifically on the experiences of parents working with their adolescent children with their secondary mathematics homework.

I will be interviewing parents of high school mathematics classes as well as the secondary mathematics teachers. Information that will be obtained will improve teachers and administrators understanding of the experiences and strategies parents use to become engaged in education. The study is strictly voluntary and there is no monetary reward or student classroom benefit (grades, privileges, exemptions, etc.) from participating in this study.

Thank you for your consideration in this matter,

## Appendix E: School Site Principal Permission

From [REDACTED]  
Sent: Wednesday, April 18, 2018 9:58 AM  
To: White, Rebecca  
Subject: Re: Doctorate Study

Permission granted. Good luck!

Sent from my iPad

On Apr 18, 2018, at 9:32 AM, White, Rebecca [REDACTED] wrote:

Good morning [REDACTED]

I am working on my Doctorate in Transitional Leadership and am seeking your permission to use [REDACTED] site for my study.

Parental involvement has become a priority of our nation's school systems, especially in high school. Parents tend to be less involved in their children's education as they move into high school. My study will focus on parent's experiences working with their adolescent children on their secondary mathematics homework and how it relates to Epstein's framework of six types of involvement model, including parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community.

It is not known if and how parents working with their adolescent children on their secondary mathematics homework relates to Epstein's framework of six types of involvement, including parenting, communicating, learning at home, volunteering, decision-making, and collaborating with community. The purpose of this proposed phenomenological research study will be to investigate the phenomenon associated with parents' experiences working with their adolescent children on their secondary mathematics homework and how their involvement is related to Epstein's (2011) framework of six types of involvement. There is a significant positive relationship between an environment that supports learning and success of students academically (Li, 2012). It is not possible for any school to educate a child without assistance from parents at home (Li, 2012). Although parental involvement has been found to be vital in the academic success of students (Hornby & Lapsic, 2011), parents tend to be less involved as their students move into secondary school (Benner et al, 2016; Kim & Hill, 2015; [Povey et al., 2016](#); Wang & Sheikh-Khalil, 2014).

The proposed study will elaborate and add to these ideas by focusing specifically on the experiences of parents working with their adolescent children with their secondary mathematics homework.

I will be interviewing parents of high school mathematics classes as well as the secondary mathematics teachers. Information that will be obtained will improve teachers and administrators understanding of the experiences and strategies parents use to become engaged in education. The study is strictly voluntary and there is no monetary reward or student classroom benefit (grades, privileges, exemptions, etc.) from participating in this study.

I appreciate your favorable consideration in my request,

Rebecca White  
Doctorate Candidate

**Appendix F: Parental Contact Form**

Rebecca White  
Graduate Program  
Doctor of Education Candidate  
Concordia University–Portland  
2811 NE Holman Street  
Portland, OR 97211

Dear Parent:

Parental involvement has become a priority of our nation’s school systems, especially in high school. Parents tend to be less involved in their children’s education as they move into high school. I am interested in your experiences at home working with your child with their secondary mathematics homework.

I am contacting you to ask for your participation in my research dissertation regarding parents’ experiences working with their children on their secondary mathematics homework and how it relates to Epstein’s framework of six types of involvement model, including parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. The purpose of this study is to investigate the phenomena associated with parents’ experiences of “parental involvement” based on Epstein’s Framework of Six Types of Involvement with their children in secondary mathematics.

If you participate in the study, you will be asked to meet with me for an interview to discuss your experiences while you are working with your child on their homework for their secondary mathematics classes. Information you provide will improve teachers and administrators understanding of the experiences and strategies parents use to become engaged in education.

Your participation in this study is strictly voluntary. There is no penalty for not participating in this study and you may withdraw from the study at any time. The information obtained from you during this study will not be distributed to any other agency and will be kept private and confidential. I will be the only one who has access to any of the information throughout the research process. For questions about the study or a brief synopsis of the research once the project is complete, contact Rebecca White at [email redacted]

Thank you.

Rebecca White, Ed.D. Candidate  
Concordia University – Portland



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If you would like to participate in the study, please return this portion of the letter to your children’s mathematics teacher by 03/15/2018:

Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Email: \_\_\_\_\_

By signing and returning this form, I consent to be considered to participate in the study mentioned above.

## **Appendix G: Parental Consent Form**

**Research Study Title:** Parents Experience's Working with their Adolescent Children on Secondary Mathematics Homework in Relation to Epstein's Framework of Six Types of Involvement: A Phenomenological Study

**Principal Investigator:** Rebecca White

**Research Institution:** Concordia University–Portland, Oregon

**Faculty Advisor:** Dr. Barbara Weschke

### **Purpose and what you will be doing:**

The purpose of the study is to investigate the phenomena associated with parents' experiences working with their secondary mathematics students as related to Epstein's framework of six types of involvement. We expect approximately 10 volunteers. No one will be paid to be in the study. We will begin enrollment on 06/01/2018 and end enrollment on 07/31/2018.

To be in the study, you will be asked to meet with me for an interview to discuss your parental involvement strategies with your child at home during their mathematics. The interview will last approximately one to one-and-a-half hours.

### **Risks:**

There are no risks to participating in this study other than providing your information. However, we will protect your information. Any personal information you provide will be coded so it cannot be linked to you. Any name or identifying information you give will be kept securely via electronic encryption or locked inside a filing cabinet in my classroom. When we or any of our investigators look at the data, none of the data will have your name or identifying information. We will only use a secret code to analyze the data. We will not identify you in any publication or report. Your information will be kept private at all times and then all study documents will be destroyed 3 years after we conclude this study.

### **Benefits:**

Information provided from the study will help teachers and administrators understand and relate how parents work with their adolescent students with their high school mathematics homework as related to Epstein's (2001) framework of six types of involvement. Results of the study may also give teachers and administrators an understanding of cultural differences regarding parental involvement. Learning how parents view their ability to be engaged in their children's high school mathematics classes can help teachers and administrators improve parental engagement. Additionally, other researchers can use the results from this research study to create additional research questions and make hypothesis on similar and other topics.

### **Confidentiality:**

This information will not be distributed to any other agency and will be kept private and confidential. The only exception to this is if you tell us abuse or neglect that makes us seriously concerned for your immediate health and safety.

**Right to Withdraw:**

Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required and there is no penalty for not participating. If at any time you experience a negative emotion from answering the questions, we will stop asking you questions.

**Contact Information:**

You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Rebecca White at [email redacted]. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranch@cu-portland.edu or call 503-493-6390).

**Your Statement of Consent:**

I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

\_\_\_\_\_  
Participant Name \_\_\_\_\_  
Date

\_\_\_\_\_  
Participant Signature \_\_\_\_\_  
Date

\_\_\_\_\_  
Investigator Name \_\_\_\_\_  
Date

\_\_\_\_\_  
Investigator Signature \_\_\_\_\_  
Date



Investigator: Rebecca White; email: [email redacted]  
c/o: Professor Barbara Weschke;  
Concordia University – Portland  
2811 NE Holman Street  
Portland, Oregon 97221

## Appendix H: Review of Transcript Affidavit

**Title of Study:** Parents' Experiences Working with Their Adolescent Children on Secondary Mathematics Homework in Relation to Epstein's Framework of Involvement: A Phenomenological Study

**Principal Investigator:** Rebecca White, doctoral candidate at Concordia University

\_\_\_\_\_ I was provided a copy of the transcription of my interview and was encouraged (Initial) to review the transcription for accuracy.

\_\_\_\_\_ I was provided the opportunity to verify and/or change any of the statements I (Initial) made during the interview phase of this research study.

### Statement of Affirmation:

I affirm I have read the above information and asked any questions I had regarding them. I affirm the researcher answered any questions I had. I affirm my consent for this research study.

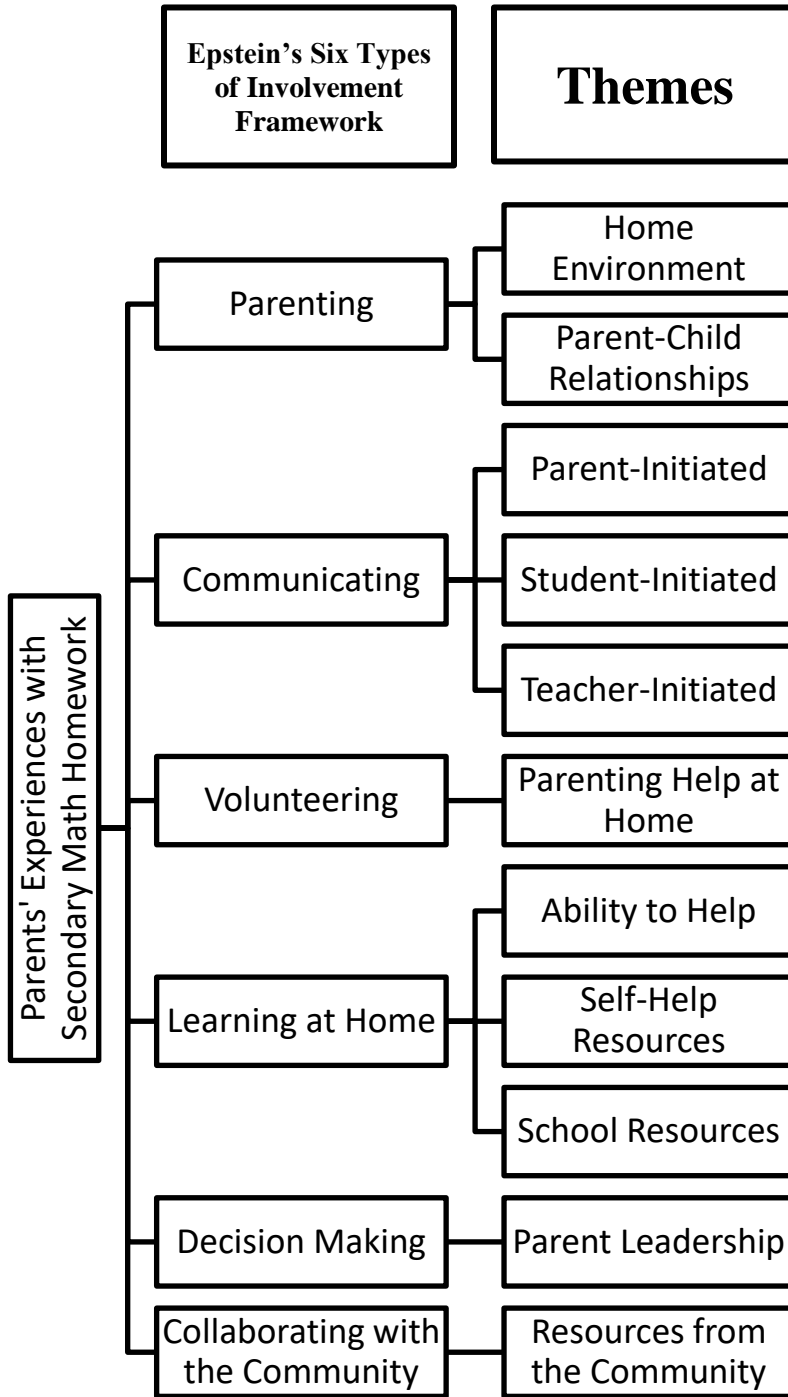
_____	_____
Participant Name	Date
_____	_____
Participant Signature	Date
_____	_____
Investigator Name	Date
_____	_____
Investigator Signature	Date



## Appendix I: Significant Statements Acquired from Participants

Significant Statements	P1	P2	P3	P4	P5	P6	P7
What homework do you have? How was your day? What is this grade?	X	X	X	X		X	X
Cooking supper or watching news while child does homework				X			
I feel like boys definitely need a little bit more attention						X	
Check planner daily in middle school for homework assignments	X						
Involved in PTO/ATP	X			X		X	
Did not get involved in PTO/ATP			X				
Student-initiated communication with teacher for help			X		X		
Teacher-initiated communication through email	X					X	
Teacher-initiated communication through texts	X						
Teacher-initiated communication through phone calls	X						
No Teacher-initiated communication		X	X	x		X	
Parent-initiated communication through email		x		X		X	
No communication with teacher, child took care of it			X		X		
Found resources through Blackboard	X						
Math teacher does not provide resources to help at home	X						
See no way for the school to help		X					
Able to find necessary resources to help with homework			X	X		X	
Found resources through school website				X			
Internet searches used to find resources	X	X			X		
Found tutors to help with homework through community	X	X	X	X		X	X
Parent able to help with secondary math homework			X		X		X
Not able to help with secondary math homework	X	X		X		X	
Did not volunteer in classroom/school when child was in high school	X	X	X	X			X
Volunteered more when child was in elementary school			X		X		X
Teacher monitored grades to assist student at school		X					
Nothing communicated regarding opportunities to influence policies		X	X	X	X	X	X
Parent would be interested in influencing policy				X		X	X
No structured home environment to complete homework, wherever child felt comfortable		X	X	X	X		X
Discussed higher education with child			X	X		X	X
Able to find resources to guide future education			X				X
Parent sessions to teach parents how to do the math				X			
She was an adult and took care of her own business			X				
We learned one way and they taught another. If it would have been the way we learned, we could've helped better than the new way			X				
School give a pamphlet at beginning of year that contains resources for the course							X
Parents need to just be involved in everything their child does							X

**Appendix J: Relationship of Categories and Themes**



## **Appendix K: Statement of Original Work**

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

### **Statement of academic integrity.**

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

### **Explanations:**

#### ***What does “fraudulent” mean?***

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

#### ***What is “unauthorized” assistance?***

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.

### Statement of Original Work (Continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University-Portland Academic Integrity Policy during the development and writing of this dissertation.
2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of the American Psychological Association*.

Digital Signature: Rebecca White

Name: Rebecca White

Date: December 16, 2018