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A STUDY OF THE RELATIONSHIP BETWEEN THE TYPE OF PARENT
INVOLVEMENT AND HIGH SCHOOL STUDENT ENGAGEMENT, ACADEMIC
ACHIEVEMENT, ATTENDANCE, AND ATTITUDE TOWARD SCHOOL

By

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Dissertation

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for the degree of

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Educational Administration

Abstract Title: A Study of the Relationship between the Type of Parent Involvement and High School Student Engagement, Academic Achievement, Attendance, and Attitude toward School.

Chairperson: Donald Robson, Ph.D.

Parents are being encouraged to be actively involved in the educational lives of their children, including the lives of their adolescent high school students. Governments in both Canada and the United States are even mandating parent involvement as a means to achieve increased student performance. Type of parent involvement in the lives of adolescent high school students and its relationship to student performance factors of student engagement, academic achievement, attendance, and attitude toward school was studied so as to provide high school administrators with the knowledge set necessary to offer advice to the parent community.

This study found that there was a relationship between some of Epstein's (2001) parent involvement types and the student performance factors of engagement, academic achievement, and attitude toward school. However, virtually no important relationship existed between the parent involvement types and student attendance. Type 3 Volunteering at school had the greatest negative correlation to student engagement, academic achievement, and attitude toward school. While Type 4 Learning at Home and Type 5 Decision Making had the strongest positive correlations to student engagement, academic achievement, and attitude toward school.

This study showed that the greatest relationship between parent involvement types and the student performance factors came from the influence that parents exert on adolescent children at home. Expectations, as well as care and concern, form a two-pronged approach that parents can use to impact the relationship between involvement type and student performance. This study was not intended or designed to show cause and effect. However, the relationship between parents' expectations, care and concern with the student performance factors of engagement, academic achievement, and attitude toward school is solid enough to be suggestive of predictability. Parents should continue to express their expectations and care and concern for their adolescent children once they enter high school. The results are also indicative that active parent volunteering within high school does not necessarily produce important correlations to student performance and as such high school administrators should be careful about assuming that encouraging this type of involvement will produce the student gains they hope to achieve.

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CHAPTER ONE: INTRODUCTION

Introduction

In today's fast-paced society, families are finding it more difficult to stay connected with their children's education (Epstein, 2001). Increasingly, in the modern family, both parents work outside of the home (Benson, 2002). In the report "Every Child Learns, Every Child Succeeds," Alberta's Commission on Learning (2003) found that often the family is led by a single parent with little or no help from extended family members. Furthermore, the extended family has become significantly less extended as mobility has increased. Parents are becoming isolated from their children and finding it difficult to keep a careful watch on what needs to be done to help them succeed in school. Many families are not even led by a parent, but by a grandparent, guardian, or some other adult (Benson, 2002).

In what is sometimes called a traditional family environment, parents, usually including a stay-at-home mother, were able to monitor the school work of their children carefully and in turn to ensure to a much greater degree than in today's nontraditional family that student performance remained high in factors such as engagement, academic achievement, attendance and attitude toward school (Deslandes & Bertrand, 2005). Parents attended parent/teacher interview sessions and found out at first hand just how productive and engaged their children were in the process of school (Weiss et al., 1998). Report cards were valued and trusted in the home as an accurate reflection of academic achievement (Guskey, 2002). Parents were able to keep in touch with the school and the life of their children in the institution, and to monitor success or lack thereof. When children came home from school, homework was completed, assignments finished, tests

studied for and snacks eaten, more often than not at the kitchen table under the watchful eye of a parent (Deslandes & Bertrand, 2005).

Just as this traditional family may have existed, it may also have been a figment of society's collective imagination. Whether it existed or not, however, there is no denying that the school-to-home connection, at least for middle class America, was in place and effective at keeping parents involved in the education process. Many parents worked closely with their children, in cooperation with the school, and marked academic success occurred (Epstein, 2001). With the changes in family life and indeed in societal makeup, schools are now finding it increasingly difficult to keep parents informed of and actively engaged in the day-to-day progress of their children (Deslandes & Bertrand, 2005). Teachers and administrators are discovering that the support they once received in getting students to do their homework is not there, because the parents are not home to insist that students complete their assignments. Even if parents are present, homework turns out to be a major issue within the home environment (Allen, 2000). A 1997 report by Public Agenda Online states, "Homework is the vortex where teacher complaints and parental pressures seem to converge. In many households, it is tinder that ignites continuous family battles and a spawning ground for mixed signals and even some resentment between teachers and parents" (p. 2).

For parents, staying connected to the day-to-day school life of their children has become difficult. Perhaps they will find it easier to stay connected through the use of technology. Many web-enabled software management programs are available, such as *Students Achieve*, *Desire to Learn*, and *Edline*. In a study of computer use in the home in 2003, Statistics Canada (2004) found that 64% of Canadian households had at least one

member who used the Internet regularly. This was a 5% increase from 2002, an increase that built on gains of 19% and 24% respectively observed in 2000 and 2001. The trend certainly indicates an increase in these numbers in future years, and a potential avenue of communication that schools can explore.

However, even if the possibility exists for increased parent involvement, a basic question arises whether there is a relationship between the type of parent involvement and high school student performance factors such as engagement, academic achievement, attendance and attitude toward school. Researchers such as Epstein (2001) and Allen (2000) claim that increased parent involvement will result in greater student engagement, productivity and academic success. Epstein's research, for the most part, relates to the influence of parent involvement in the lives of elementary-aged students. Very little of Epstein's research deals with the issue of parent involvement and its impact on the education lives of high school-aged children.

Of particular use to this study has been the research dealing with the change from elementary to high school and the impact of parent involvement. Anderman and Maehr (1994) and Lepper, Sethi, Daldin, and Drake (1997) indicate that a change occurs in the way that students respond to school and the work involved in being successful students, and that students' motivation for school tasks declines steadily from mid-elementary school through entry into high school. Both the changing nature of children as they move from childhood to adulthood and their quest for independence affect the nature of parent involvement on a day-to-day basis. Knowing and accounting for this change is important if one is to understand the relationship between parent involvement and high school student engagement, academic achievement, attendance and attitude toward school.

Importance of the Study

Both Berger (1995) and Cunningham (2002) point out that there is a clear link between parent involvement and student academic success; however, they do not clarify if that link continues once students enter high school. On the contrary, researchers such as Finn (1998) question the usefulness of parent involvement as it relates to their physical presence in and around the school. Finn indicates that certain types of behavior in the home may be more effective than behavior exhibited in or at the school. This study attempts to expand the body of knowledge relating to the concept of type of parent involvement (Epstein, 2001) and its relationship to adolescent student engagement, academic achievement, attendance and attitude toward school. Furthermore, it deals with Finn's assertion that direct parental influence within the school itself is not useful in helping students academically. The results of this study should enable high school administrators to offer better advice to parents of high school students as to how best to influence their children when they enter their high school years.

Purpose of the Study

The purpose of this study is two-fold: first, to find out which of Epstein's (2001) types of parental involvement most positively correlate with high school student engagement, academic achievement, attendance and attitude toward school; and second, to determine which type of parent involvement most negatively correlate to high school student engagement, academic achievement, attendance, and attitude toward school.

Dealing with adolescent children presents its own set of challenges for parents. Once children become teenagers and enter the years of searching for their independence, parents begin the process of changing the way that they parent. Zimmer-Gembeck,

Chipper, Hanisch, Creed, and McGregor (2006) state, “During adolescence, young people develop social relationships with nonfamilial adults and peers, and seek greater autonomy and self-determination” (p. 928). When the expectations that parents set run into conflict with students’ school performance, parents more often than not turn to the school officials for advice and guidance (Epstein, 2001). The advice they need must be grounded in research that is relevant to the age of the child and to theory that is applicable to the current state of the child’s development.

Problem Statement

The U.S. *No Child Left Behind: What Parents Need to Know* (2005) report states the following:

The law also requires states, districts and schools to develop ways to get parents more involved in their child’s education and in improving their child’s school. For example, both Title I districts and schools must have written policies on parental involvement and provide this information to you. (p. 6)

Alberta’s Commission on Learning (2003) highlighted in its report the need for active involvement of parents in the education of their children. The report also recommended the establishment of parenting centers to help achieve the goal of an improved education system. Baker and Soden (1998) explain the difficulty:

While most practitioners and researchers support the policy direction of increased parent involvement, few agree about what constitutes effective involvement.

Confusion persists regarding the activities, goals, and desired outcomes of various parent involvement programs and policies. A major source of this confusion is the lack of scientific rigor in the research informing practice and policy. Because of

this, less is known about parent involvement than commonly is assumed.

Nonetheless, early studies suggesting the importance of parent involvement are treated as definitive, regardless of the equivocal nature of the data, and are used to support the position that all types of parent involvement are important. (p. 1)

Although at various levels governments are mandating more parental involvement, educators need to be concerned with improved student performance, not just compliance. It appears from the language in these various government reports that governments too have been concerned with improved student performance and therefore are mandating parental involvement as a means to an end.

School administrators, as the educational leaders within schools, were faced then, as they are now, with the daunting task of determining what type of parent involvement they should actively encourage and support. Although the various government documents spoke to the value and merit of active parent involvement, they did not deal in specifics as to what types of parent involvement were most positively associated with student performance factors such as student academic achievement, engagement, attitude toward school and attendance. High school administrators were left, for the most part, to their own devices to determine which involvement types were most closely correlated with these student performance factors.

Catsambis (1998) points out the lack of information on parent involvement at the secondary level:

Despite the significant amount of research that investigates parental involvement and its effects on student achievement, the field has not produced clear and consistent results for secondary education. Differences in how researchers

conceptualize parental involvement are one of the major reasons for inconsistent results. Some researchers conceive of parental participation in school activities; others, as parental aspirations for their children; and others, as involvement in children's learning activities at home. Only recently have researchers recognized the multi-dimensional character of parental involvement and have tried to capture the multitude of parental activities regarding children's education. (p. 1)

This lack of clear guidance is a problem for high school administrators in their quest to improve student performance as indicated by student academic achievement, engagement, attitude toward school and attendance. By helping to determine the relationship between Epstein's (2001) types of parental involvement and the student performance factors of academic achievement, engagement, attitude toward school and attendance, this study should prove useful to high school administrators who need to meet governmental mandates and, more importantly, to improve overall student performance.

Student Performance Factors

The student performance factors of engagement, academic achievement, attitude toward school and attendance were chosen for comparison to Epstein's (2001) types of parent involvement, since they were all frequently mentioned in literature as being important to overall student success.

Margolin's (2000) understanding of the importance of school-based activities to overall student achievement and sense of belonging was used throughout this study to explain the use of the performance factor of engagement. Students' active involvement in school-based activities, and in turn their sense of engagement, were measured by the numbers of hours spent on school-based extracurricular activities. As indicated,

researchers such as Connell, Spencer, and Aber (1994) established the connection between student engagement and academic success. This study investigates the relationship between engagement, understood as time spent on school-based activities, and parent involvement.

Of the four dependent variables in this study, academic achievement was the one most referenced in the literature as being important to overall student success (Catsambis, 1998; Epstein, 1992; Montecel, Cortez & Cortez, 2002; Steinberg, 2001). In this study the student performance factor of academic achievement was determined as overall student average.

Margolin (2000) stressed the importance of attitude as an ingredient leading toward high school student school success. McCoach and Siegle (2002) developed the instrument used in this study to determine the level of student attitude toward school. Margolin, and also McCoach and Siegle, found that a better student attitude toward school led to better student performance at school.

Student attendance at school is an item that researchers such as Astone and MacLanahan (1991) indicate is an essential ingredient to success in school; essentially, the more often students attend school, the better they will perform academically.

Research Questions and Hypothesis

Clearly a study was required to determine if there is a relationship between type of parent involvement in the lives of high school students and their school performance, as indicated by their engagement, academic achievement, attitude toward school and attendance. The relationship was ascertained by answering the following research questions:

1. What relationship exists between the type of parent involvement and high school student academic achievement, attendance, engagement and attitude toward school?
2. What relationship exists between the parent's socioeconomic status, as defined as level of parent education, type of involvement, and student academic achievement, attendance, engagement and attitude toward school?
3. What relationship exists between type of parent involvement and student performance in the four core subject areas in high school (sciences, math, English, and social studies)?
4. What relationship exists between the type of parent involvement and male/female student academic achievement, attendance, engagement and attitude toward school?
5. What relationship exists between accessing web-enabled software, as a sub-type of parent involvement, and student academic achievement, attendance, engagement and attitude toward school?

Definitions

For the purposes of this study, the following definitions are used.

Academic student. An academic student in the Province of Alberta is one who is taking courses in high school that lead toward university entrance.

Adolescence. *The American Heritage Dictionary of the English Language* (Pickett et al., 2005) defines adolescence as “the period of physical and psychological development from the onset of puberty to maturity.”

Adolescent high school student. For the purposes of this research, an adolescent high school student is defined as a student between the ages of 13 and 18 who is in grade 10, 11, or 12. This study examines the relationship between parent involvement and variables measured in adolescent high school students between the ages of 15 and 18.

Attendance. Attendance is defined as the percentage of days a student was listed as being absent from school. It is calculated by dividing the number of days absent by the number of days in the semester.

Parent. The term *parent* as used in this study includes, in addition to a natural parent, a legal guardian or other person standing in *loco parentis*, such as a grandparent or stepparent with whom the child lives, or a person who is legally responsible for a child's welfare (U.S. Department of Education, 2004).

Parent involvement. This is a broad, complex term with many and varied definitions. It is often used to refer to the various ways that parents can be involved in a child's education. This study draws heavily on Epstein's (2001) six-item classification system covering school-to-home communication, parent involvement in school and community, home learning activities, and parents as decision-maker.

Non-academic student. A non-academic student in the Province of Alberta is one who is taking courses in high school that will lead toward college entrance or admission to a trade.

Socioeconomic status of the family. This is a demographic descriptor that identifies parents and families that may experience social and economic limitations. In U.S. schools, this status is based upon parent/family income level of poverty, as measured by those students who receive free or cost-reduced lunch (Epstein, Williams &

Jansorn, 2004; Moles, 1993). As free or cost-reduced lunch programs do not exist as a government procedure in Southern Alberta, a student-reported parent education level is used in this study.

Type of parent involvement. This term refers to the type of impact that parents have on the lives of their high school-aged children. Epstein's (2001) basic typology is used to differentiate between each of the six types of parent involvement. Epstein's typology has been adjusted to reflect adolescent-aged students: Type 1 Parenting (setting basic rules of home life, including amount of television watched per week, setting weekday curfew, and assigning basic chores); Type 2 Communicating (making contact with school and teachers during the school year, attending parent/teacher conferences, and reading school newsletters on a monthly basis); Type 3, Volunteering (taking part in school-based activities, attending school concerts, performances and/or athletic events); Type 4, Learning at Home (assisting with homework, setting basic ground rules for completion of homework, encouraging the completion of school related duties); Type 5 Decision Making (active involvement in school-based decision making bodies, such as School Council, PTA, sports governing bodies, etc.); Type 6 Collaborating with the Community (involving students in community-based activities, such as athletic events, cultural events, or other events of student interest).

Student academic achievement. This term refers to the student's overall average in science, social studies, English, and math, expressed as a percent grade.

Student attitude toward school. This term denotes a student's feeling of belonging to the school community as evidenced by a score on the School Attitude Assessment Survey-Revised (McCoach & Siegle, 2002).

Student engagement. Student engagement is understood as the degree to which a student is actively engaged in the life of the school, as witnessed by involvement in activities such as co-curricular activities, fine arts, sports and clubs. It is defined by the amount of time a student reports being engaged in school-based activities throughout a typical school year.

Web enabled software. Web enabled software denotes computer programs that allow parents to check on the coursework of their children through the use of the Internet, reporting marks on completed assignments, assignments that are due, and assignment and test dates still to come.

Summary

The research recognizes that an adolescent high school student is different from the typical elementary-aged student and therefore reacts differently to parent involvement. The focus and indeed the intent of this study concerns the relationship between parent involvement and high school student performance, as highlighted by the factors of student engagement, academic achievement, attendance and attitude toward school. The knowledge gained through this study is intended for school administrators and relates to the advice they can provide to parents of high school aged adolescents.

CHAPTER TWO: LITERATURE REVIEW

Introduction

The review of literature is divided into six major sections. First, the literature pertaining to adolescence is reviewed so as to differentiate between the stages of childhood and adolescence. The second section reviews the work on parenting style and its impact on child development. The third section focuses on governmental mandates that require parent involvement in schools and those that advocate greater involvement of parents in the process of the education system. This section also reviews the link between the encouragement of greater parent involvement and the direction given to schools as to how to best accomplish this directive. The fourth section concentrates on research pertaining to family life and its impact on student performance. In this section research is reviewed to determine if parent involvement remains the same as a child goes through school or if the type of parent involvement tends to change along with the changes occurring in the child. The fifth section focuses on the role of communication in the parent-school relationship. Finally, the sixth section reviews the literature pertaining to the role that each of the dependent variables plays in overall student performance; it also reviews the relationship that each variable has to parent involvement.

Adolescent Years

According to Borman and Schneider (1998), the concept of adolescence as a distinct phase of human development emerged in the early years of the twentieth century. Borman and Schneider cite G. Stanley Hall's work *Adolescence* (1904), which identifies adolescence as a marked period in child development that typically occurs between the ages of 13 and 18. Hall identified adolescence as a time of extreme crisis, of storm and

stress. Borman and Schneider also indicate that not all researchers have accepted the “stormy” interpretation of adolescence. They point out, for example, that Margaret Mead in *Coming of Age in Samoa* (1928) suggested that adolescence was not a psychologically turbulent period in some societies. Mead saw the cultural milieu as a defining characteristic of this life stage. Even though, as Borman and Schneider point out, other researchers have questioned Mead’s work, it served a useful purpose in beginning the recognition of adolescence as a stage of child development.

In 1944, the National Society for the Study of Education published its 43rd Yearbook, also entitled *Adolescence* (cited in Borman & Schneider, 1998). The Yearbook pulled together studies that were conducted in the ‘30s and ‘40s and dealt with the physical and physiological changes that occur during the adolescent years. In the Yearbook, George D. Stoddard stated, “It would be better to wait until new methods of analysis (physiological, mental, emotional, and social), have been perfected” (quoted in Borman & Schneider, 1998, p. ix). The argument was that there is more to being adolescent than physical changes to the body.

Borman and Schneider (1998) note that, during the last half century, there have been numerous studies that use the methods of analysis Stoddard was looking for:

The emphasis in these studies, however, has been less on biological and physiological changes during this developmental stage and more on the problems young people encounter in a rapidly changing society and on their strategies for coping with those problems. (p. ix)

Adolescence, in essence, cannot be viewed as being apart from society and social change, including school and its influence. The changes in a society necessitate our rethinking what it means to be an adolescent.

Borman and Schneider (1998) also argue that key changes to society need to be identified so that adolescent behavior can be understood; once understood, it can be appropriately dealt with. They identify the following as key societal changes:

- compulsory education and the need for a more educated workforce
- re-structuring of family life, as exemplified by working mothers, unmarried young mothers, childcare being left to institutions, less adult time being spent with children
- the communication revolution and almost instantaneous access to information, and the resulting loss of parental control; parents not necessarily being recognized as the purveyors of information and knowledge
- other features of today's society, such as Acquired Immune Deficiency Syndrome (AIDS), victimization of crime, and the increasing suicide rate among adolescents

According to Borman and Schneider (1998), "These brief references to changes in social contexts illustrate how such changes can complicate the lives of adolescents. They show how restrictive it can be to think of adolescence only as a time of physical and physiological changes" (p. xi). Thus it is necessary to view this time period as one in which adolescents are preoccupied with two critical tasks: the establishment of an identity and the search for autonomy.

Csikszentmihalyi and Schmidt (1998) further develop the idea of adolescent establishment of identity and search of autonomy, so as to present a picture of adolescence in this age. They maintain that the understanding of adolescence is a reflection of an evolutionary process. Traits that were once considered essential, such as aggressiveness in boys and nurturance in girls, may not have the same impact in today's world. However, the change in characteristics of adolescents has not kept pace with societal change, resulting in stress that will not go away by itself. According to Csikszentmihalyi and Schmidt, "The good news is that we are beginning to understand better the conditions responsible for the conflict, thereby making it possible to initiate constructive action to resolve it" (p. 1).

Csikszentmihalyi and Schmidt (1998) argue, "Much of the storm and stress that characterize the teenage years is caused by a mismatch between the genetically primed behavior of adolescents and the societal demands imposed upon them by the present stage of sociocultural evolution" (p. 5). They suggest three solutions to the mismatch: change the genetic programming, return to a social system that would accommodate the full expression of adolescent drives, or the following third option:

Discover what adolescents enjoy doing that is consistent with their genetic programming and also with social requirements, and make opportunities available for such activities -- while reducing or modifying those that satisfy only one or neither of those requirements. (p. 5)

Csikszentmihalyi and Schmidt (1998) also discuss five obstacles placed in front of adolescents that prohibit them from gaining a sense of who they are and their place in the world as they struggle to become adults. These obstacles include (a) restrictions on

physical movements and freedoms, (b) absence from responsibility, (c) problems of sexuality and intimacy, (d) isolation from adult role models, and (e) absence from control and power. If these obstacles can be overcome, adolescents will gain a greater sense of who they are and express themselves in socially acceptable ways. Csikszentmihalyi and Schmidt consider adolescence and childhood to be two different stages of life that need to be handled with a different skill set.

Restrictions on Physical Movement and Freedom

Csikszentmihalyi and Schmidt (1998) report that “just hanging out” is the most frequently admitted free-time activity of teenagers in the United States. Adolescents want to be free to do that which they want to do; school, homework, riding a bus, even the layout of suburbs and distance from friends may not be very appealing to them. Even when students are in classes they enjoy, they still feel the restrictions on their movements and mobility. The search for freedom becomes a major motivating force in the lives of adolescents.

Absence from Responsibility

Erickson (1962) first described adolescence in modern Western societies as a “moratorium,” a period of freedom from responsibilities that allows thinking about alternatives and experimenting with opinions before committing oneself to a lifelong career. However, Csikszentmihalyi and Schmidt (1998) point out that this belief is fraught with danger: if adolescents are excluded from responsibilities for too long, they will never learn how to run their own lives effectively. As they state, “The worst consequence of not having clear and real expectations is that adolescents feel that what

they do does not matter and therefore that they do not matter” (p. 8). Such a belief could have dangerous results, such as withdrawal from responsibilities or even suicide.

Expectations that are too high may have the same result. However, as Csikszentmihalyi and Schmidt maintain, more likely than not a lack of expectations would communicate indifference, which could be very traumatic. It is that right blend of expectations tempered with the realization that adolescents are not yet adults that produces resiliency. However, as has been noted earlier, parents are not always available to adolescents, and the problem of lack of resiliency becomes exacerbated (Alberta’s Commission on Learning, 2003).

Problems of Sexuality and Intimacy

Csikszentmihalyi and Schmidt (1998) discuss the issues surrounding sex and intimacy and their impact on adolescents. Interestingly, they found that the sexual revolution was not really liberating for the adolescents in their study, nor did it increase the possibility of developing resiliency in young people. Adolescents can face various consequences of sex without intimacy, including AIDS, sexually transmitted diseases (STDs), pregnancy, and loneliness. Perhaps resiliency can be safeguarded by making sure that teenagers do not become committed to parental responsibilities at too early an age. Csikszentmihalyi and Schmidt view school and societal organizations as having a responsibility to offer other activities that may capture the passion of adolescents. Fulfillment of the passion might help to forestall adolescents’ engagement in sex without intimacy, contributing in turn to the resiliency that they need for personal growth.

Isolation from Adult Role Models

Typical teens, according to Csikszentmihalyi and Schmidt (1998), spend 3.5 minutes per day with their fathers, but over 3.5 hours with their peers. These researchers also maintain that adolescents are losing their adult role models, with the effect that, for many adolescents, the only significant adult in their lives is their teacher. Furthermore, even when this relationship exists, very little time is spent one-on-one but more as a part of a large class which is reflective of peer culture rather than adult culture:

[Our] research indicates that those rare adolescents who have the opportunity to develop a relationship with an adult role model (parental or otherwise) are more successful in coping with the everyday stresses of adolescent life, and are better able to recover from extreme adversity if it occurs. (p. 12)

Csikszentmihalyi and Schmidt argue that intergenerational contact is required for healthy adolescent development.

Absence of Control and Power

Even with the lack of parental influence and time spent with adolescents, Csikszentmihalyi and Schmidt (1998) report that adolescent lives are still very much controlled by others. That control may come from parents, school, or society in general. The end result is a feeling of a lack of control over one's own life and of being marginalized. Because of this feeling, some teens turn to violence while others may withdraw. As Csikszentmihalyi and Schmidt state, "A truly civilized society would be one where youth was allowed to express resilience by finding means of control and self-respect that do not depend on violence and naked power" (p. 13).

From this work it is evident that adolescents struggle with the conflicting feelings that arise from their physical and physiological makeup, along with the demands placed on them by the changing nature of society. Parents, schools, and society have important roles in helping adolescents grow into healthy and productive adults. However, it would appear that adults do not always play their necessary roles; adolescents feel the consequences, with implications for their relationships with schools and parents.

Parenting Style

Before examining the various types of parent involvement, it is appropriate to explore the concept of parenting style. Type of parent involvement, for the purposes of this research, refers strictly to Epstein's (2001) typology and does not enter the realm of parenting style. However, as parenting style sheds some light on the parent/adolescent relationship, it can usefully be included in the literature review.

In 1991, Lamborn, Mounts, Steinberg, and Dornbusch completed an exhaustive study of 4,100 14- to 18-year-olds, in order to determine the relationship between parenting style and children's psychosocial development, school achievement, internalized stress, and problem behavior. Lamborn et al. built on the research of Diana Baumrind (1967, 1971), who originally studied the relationship between parenting style and child development. Baumrind developed the general categorization of authoritative parenting and its generally accepted description of parental warmth, inductive discipline, non-punitive punishment practices, and consistency in child rearing, and developed the link to positive developmental outcomes in children.

Lamborn et al. (1991) first employed a fourfold typology of parenting style consistent with the framework outlined in Maccoby and Martin's (1983, cited in

Lamborn et al.) review of Baumrind's work. Lamborn et al. examined the combined effects of warmth and demandingness, as had Maccoby and Martin (1983), but came to a slightly different conclusion in that they identified four parenting styles, not the three found in the earlier work.

Lamborn et al. (1991) also emphasized the need to look at multiple outcomes, as opposed to the pattern followed by Baumrind who studied only one outcome at any particular time. Lamborn et al. included a range of outcome variables that "tap several aspects of adolescent functioning in order to evaluate more thoroughly the impact of various parenting styles on adolescent development and behavior" (p. 1050).

Lamborn et al. (1991) developed the following inventory of parenting styles:

Authoritative Style – parents are both firm and supportive.

Authoritarian – parents are firm and directive but relatively less supportive.

Indulgent – parents are supportive but not directive.

Neglectful – parents are relatively low in both supportive and firm control.

It should be noted that this inventory was very much in keeping with the parenting style inventories first used by Baumrind (1967, 1971, cited in Lamborn et al.). Lamborn et al. concluded that, "Authoritatively reared adolescents were the most competent and prosocial, the lowest in internalizing problems, and among the lowest in drug use" (p. 1050). They describe the other parenting styles as follows:

Neglectful – least competent and prosocial and most likely to internalized and externalized problem behavior

Indulgent – adolescents appeared as competent, prosocial, and autonomous as those from authoritative homes, but were more likely to use drugs

Authoritarian style -- adolescents displayed few behavioral problems but were rated as less competent than those from Indulgent or Authoritative homes.

Lamborn et al. (1991) surveyed 10,000 students in grades 9 through 12. They selected schools to produce a diverse sample in terms of ethnicity, family structure, socioeconomic status and type of community. The researchers used a passive consent format; they informed the parents what the research was about and gave them the opportunity to call the school to withdraw their children, but did not seek parents' consent. Students were given the opportunity to participate or withdraw on the day of the test in their school. The dimensions used to assign parents to a particular parenting style were acceptance/involvement and strictness/supervision. Ten items categorized the acceptance/involvement dimension, with the following overall results: $\alpha = .72$, mean = .81, SD = .11, range = .25 to 1. Nine items were used for the strictness/supervision dimension, with these overall results: $\alpha = .76$, mean = .74, SD = .13, range = .30 to 1. In the sample, the dimensions were modestly intercorrelated ($r = .34$, $p < .001$). Results were compared for the total population ($N = 9,996$) and the sample ($N = 4,081$).

Lamborn et al. (1991) looked at four outcome variables in this study: psychosocial development, academic competence, internalized distress, and problem behavior. All outcome variables were rated on a four point Likert-type scale with the exception of the students' actual marks. Most of the academic competence category items were, however, also placed on a Likert-type four point scale. A four way multivariate analysis of variance was conducted for each of the four clusters of related outcome variables, with parenting style (four categories), sex, ethnicity (four categories), and parental education (two categories) as the independent variables. Lamborn et al. were

able to determine that, “All of the MANOVAs, as well as the univariate tests associated with each cluster of variables, indicated a significant effect for parenting style enabling us to carry out a series of planned comparisons” (p. 1956). Based on their data analysis, the researchers stated the following:

For the authoritative and neglected groups, the findings are consistent across the four sets of outcomes. Adolescents who come from homes characterized as authoritative are better adjusted and more competent; they are confident in areas of achievement, and less likely than their peers to get into trouble. In sharp contrast, adolescents who characterize their parents as neglectful are consistently compromised, whether the index examined taps competence, self-perceptions, misbehavior, or psychological distress. (p. 1062)

Pre-Existing Mandates

As far back as 1983, with the release of an American report entitled *A Nation at Risk* (National Commission on Excellence in Education), parent involvement in the education process was highlighted as a significant requirement of educational reform leading to greater student achievement.

In 2001, the United States Government passed the *No Child Left Behind* legislation into law. Title V, Promoting Informed Parental Choice and Innovative Programs, reaffirmed the importance of the parents’ role in the education process of their children (Public Law Print of PL 107-110, The No Child Left Behind Act of 2001).

In Canada, a year-long investigation into the state of education in Alberta revealed the importance of parental involvement and made recommendations for parent centers to be created throughout the province to aid parents in their role of helping

students succeed. Alberta's Commission on Learning (2003) reported that parent involvement is one of the top ten influences increasing academic excellence in the classroom (p. 198).

With these studies as a backdrop, a review of the research literature is useful to determine what relationship exists between type of parent involvement and the student performance factors of student engagement, academic achievement, attitude toward school and attendance particularly in the light of conflicting data. The literature indicates that the relationship between family practice and student academic achievement tends to vary by age and is strongest with elementary school children (Singh et al., 1995). Some researchers report no effects of parental involvement on student standardized test scores in high school (Keith, 1991, cited in Singh et al., 1995; Lee, 1994). However, other researchers conclude that parental involvement remains important for children's success throughout high school (Astone & McLanahan, 1991; Fehrmann, 1987; Keith et al., 1993; Lee, 1994; Muller & Kerbow, 1993; Singh et al., 1995; Stevenson & Baker, 1987; Sui-Chu & Willms, 1996).

The Family and School Achievement

In 1994, Henderson and Berla conducted what has become one of the seminal works on parent involvement. In their meta-analysis they highlighted the following as key ingredients of family behaviors that contribute to student academic achievement: (a) parents who maintain high expectations, (b) parents who respond to and interact with their children frequently, and (c) parents who see themselves as teachers of their children.

Rioux and Berla (1993) discuss the importance of parent involvement in terms of overall student academic success as well as school success. They maintain that both are

greater in schools with well-defined parent programs that encourage active involvement, compared to schools that do not.

In a 1986 study designed to test a model of educational productivity among senior high school students, Walberg, Fraser, and Welch drew interesting conclusions about factors that predict student school achievement and attitude. Home environment, determined as level of parent education, was one of the factors used to predict achievement and attitude. Walberg et al. also looked at factors they called TV and homework. Both amount of TV watched and homework completed were part of Epstein's type of parent involvement used as the independent variable in this study. As Walberg et al. (1986) state, "With other factors held constant, an increase of one hour per day in the time spent on homework is associated with a 3.11 points increase, while a decrease of one hour of television viewing per day is associated with 0.23 of a point increase" (p. 137). As both TV watched and homework completed factors relate to type of parent involvement, they represent a reasonable starting point for the exploration of home environment and its relationship to student productivity.

Influences of Programs

Helwig (2004) reported on a ten-year longitudinal study of career awareness in students. Helwig's findings indicate the importance of a number of factors influencing student career choices. In this study, involvement ranked high as an influence almost to the time of graduation. From elementary to grade 10, parents were viewed as the primary source of career information. However, that trend started to change as the students moved through high school and began preparing for graduation.

Involvement of the larger community has also been shown to impact student school performance. Through the use of groups, telephone polling, public meetings, email, and study circles, school personnel have been able to access public sentiment and support (Cunningham, 2002).

As Walberg et al. (1986) stated, “According to Walberg’s theory of productivity, nine factors require optimization to increase student achievement of cognitive and affective outcomes” (p. 133). These factors include (a) ability or prior achievement, (b) age and, (c) motivation or self-concept as indicated by personality tests or willingness to persevere on learning tasks; the instructional variables of (d) quantity of instruction and (e) quality of the instructional experience; and educationally stimulating psychological aspects of (f) the home environment, (g) the classroom or school environment, (h) the mass media, and (i) the peer group environment.

Walberg et al. (1986) used the results of the 1982 National Assessment in Science, which assessed the science productivity of 18,000 students, ages 9, 13, and 17, in the United States. They obtained results for 11 predictors and then regressed them on the basis of achievement and attitude. Strong positive correlations were determined to be in the .29 to .42 range, and moderate in the .10 to .28 range. Home environment was listed as a .19 correlation to achievement and a .23 correlation with attitude toward school with a $p < .05$.

These studies clearly identify the correlation between process and student achievement. In other words, where parents and community know what to do, a positive correlation exists.

Family Processes

It is important to understand what happens within the home in regards to parent involvement with high school student academic achievement. In other words, what has research shown to be effective in terms of parent involvement in children's education? Traditionally, homework has been the constant measure of parent involvement (Lewis, 1995). Lewis states:

The U.S. Department of Education's own report on parent involvement downplays the issue of homework and emphasizes other ways in which the home environment can support learning. For example, the factors that together explain almost 90% of the differences among eighth-graders in math performance on the 1992 National Assessment of Educational Progress are ones parents control: student absenteeism, variety of reading materials available in the home, and excessive television watching. Reading aloud to young children, the report says, is the single most important activity that parents can undertake to influence the future reading success of their children. (p. 6)

Sui-Chu and Willms (1996) categorize parental involvement in the family relationship as being of two types. One is associated with discussing school activities and the other with monitoring a child's out-of-school activities. There are also two types of school involvement; one pertains to maintaining contact between parents and school personnel and the other to volunteering in school and attending parent-teacher conferences and open house meetings.

Hoover-Dempsey, Bassler, and Brissie, (1992) explored the relationship between parenting style and student academic achievement, determining that an authoritative style

produces the greatest academic gain in children. They argued that authoritative parents would take the time to reason with their children and to give explanations as to why certain tasks needed to be completed.

Both the study by Sui-Chu and Willms (1996) and that by Hoover-Dempsey et al. (1992) make a research-based case for the relevance of greater parental involvement in the school lives of children. Whether that involvement takes the form of working with homework, reading to children, or engaging in complex tasks like reasoning, the bottom line is the same: parents influence the academic success of their children.

Parental Involvement and Communication

According to Epstein (2001), a noted authority on family-school relations, there are three perspectives that guide researchers in their study of school-family relations and reflect the underlying belief systems of the institutions involved: separate responsibilities, shared responsibilities, and sequential responsibilities. The term “sequential” is closely related to the term “separate,” in the sense that the pre-school years are in the domain of the parents, while the school years rely more heavily on teacher’s responsibility. Epstein supports two mechanisms for building family-school relations. One, espoused by Mead in 1934, is called symbolic interactionism; that is, we fashion our behavior to fulfill others’ expectations and to receive their recognition. The other mechanism, known as Merton’s Reference Group Theory, addresses reactive behaviors that are based on reference groups. For example, parents may take into account teachers’ perspectives when taking action, and teachers may refer to parents’ beliefs in the same manner. Epstein argues that these underlying beliefs and motivations drive efforts to establish connections between schools and families.

Research on the Dependent Variables

This study examines parent involvement and its relationship to adolescent student engagement, academic achievement, attendance and attitude toward school.

Consequently it is important to examine what is meant by each of these dependent variables and to explore a possible link between the two in the literature.

Student Engagement

According to Skinner, Wellborn, and Connell (1990), school engagement incorporates students' "initiation of action, effort, and persistence on schoolwork, as well as ambient emotional states during learning activities" (p. 24). Connell et al. (1994) assert that engagement appears to be the cornerstone of academic achievement motivation. They examined the behavioral, psychological, and contextual predictors of staying in high school for 443 urban African-American adolescents in grades 7 to 9. The five behavioral factors examined were (a) attendance, (b) suspensions, (c) grades, (d) test scores, and (e) grade retention. The three psychological factors examined were (a) students' engagement in school, (b) their self-system processes (perceived competence, autonomy, and relatedness), and (c) their experience of support from adults at home and in school. Path analyses revealed that students who avoided risky behavior in junior high school and reported themselves as more engaged were more likely to remain in high school three years later. Engaged students reported more positive perceptions of competence, autonomy, and relatedness in school.

Hudley, Daoud, Hershberg, Wright-Castro, and Polanco (2002) highlight the necessity of student engagement as a reflection of intrinsic motivation that is necessary for student success in high school. They maintain that students who become increasingly

disengaged with school tend to leave or drop out early. In contrast, students who find comfort and experience a feeling of belonging tend to do much better as they progress through high school. Hudley et al. point out that intrinsic motivation exists in most young children and that they experience success in school in relationship to their natural curiosity and desire to learn. Children do not need external motivators such as fast food certificates to read or to strive to understand some concept in mathematics.

Hudley et al. (2002) summarize recent research findings that indicate the importance of student perception of teacher support, peer attitudes, and beliefs about the importance of education as being critical to the formation of school engagement beliefs, and in turn to student academic success. As Epstein (2002) points out, one of the critical factors of parental involvement is inculcating in students a belief about the importance of school. Hudley et al. found a clear relationship between student perception of school engagement and academic success. They began their research with this anticipation:

Students who reported more positive attitudes and perceptions about their school and their own learning, perceived themselves to be more intrinsically motivated, and perceived more teacher support would also have higher achievement, higher college and career aspirations, and lower reported discipline problems (i.e., would be more highly engaged with school). (p. 5)

A sample of 318 students in one school district was surveyed; this number represented 20% of secondary school students in one school district in Southern California.

In summary, the findings by Hudley et al. (2002) converge with other findings in the motivation literature to indicate that schools must sustain a climate that promotes a positive attitude in students of all ethnicities and thus encourages all students'

engagement in learning. As anticipated by Hudley et al., more positive attitudes toward self and school were related to several indicators of engagement. However, several attitudinal predictors of school engagement functioned differently as a function of adolescents' grade level, gender, or ethnic identification. (p. 12)

In a study of factors that influence student engagement, Tucker and Hall (2003) concluded that neither schools nor parents can impact student engagement alone. For students to feel that they belong in school and to feel that they can succeed, they require both influences in their lives, from parents and from school:

Many contextual and self-variables can either enhance and/or impede school engagement. Contextual variables refer to external influences in an adolescent's life, such as family support, peer relationships, school environment, or neighborhood characteristics. Self or internal variables are characteristics of an individual, such as level of self-efficacy or autonomy. Contextual variables and self-variables frequently have a complex relationship with one another and are often closely related. Therefore, a theoretical perspective that integrates the important contributions of both types of variables can provide an organizing framework for better understanding the role of these variables in children's school engagement. (p. 418)

Tucker and Hall (2003) conducted their research in one large southeastern U.S. metropolitan high school. They surveyed 123 adolescents aged 13 to 19. This number was representative of the gender and race distribution of the school but was not representative of the grade breakdown, being high in grade 9 and low in grade 12 students. Tucker and Hall found this result:

Generalized self-efficacy was correlated with grade point average ($r = .31, p < .01$), absences ($r = -.26, p < .05$), and RAPS score [Rochester Assessment Package for Schools-Student Report, a self-report measure of behavioral, affective, and cognitive aspects of school engagement] ($r = .38, p < .01$). (p. 422).

Tucker and Hall concluded, “The findings could be interpreted to suggest that the more confident adolescents are about their level of competence, the more likely they are to get better grades in school and to be more engaged in various aspects of school” (p. 423).

However, all is not positive in the relationship between student engagement and student academic achievement, as evidenced in the literature review. Margolin (2000) asked students in West Virginia about a host of factors that they might consider obstacles to success in school. College-bound students listed the following as the top ten obstacles:

| <u>Obstacle Category</u> | <u>Response</u> |
|--|-----------------|
| 1. Sports | 15% |
| 2. Homework | 13% |
| 3. Boyfriend/girlfriend | 12% |
| 4. Extra-curricular activities (other than sports) | 11% |
| 5. Personal (family problems) | 10% |
| 6. Teachers | 9% |
| 7. Disruptive Peers | 8% |
| 8. Part-time job | 7% |
| 9. Not enough sleep | 6% |
| 10. School is boring | 5% |

Non-college-bound students reported the following as their top ten obstacles:

| <u>Obstacle Category</u> | <u>Response</u> |
|---------------------------------|-----------------|
| 1. Homework | 16% |
| 2. Boyfriend/Girlfriend | 14% |
| 3. Teachers | 12% |
| 4. Part-time job | 11% |
| 5. Personal (family) problems | 10% |
| 6. Not enough sleep | 9% |
| 7. Disruptive peers | 9% |
| 8. Subjects not interesting | 8% |
| 9. Sports | 6% |
| 10. School is boring in general | 4% (p. 27) |

Margolin (2000) summarizes:

Participation in individual and/or team sports ranked as the number one obstacle identified by college bound students (15% of the responses). For those not planning to attend college, sports ranked ninth (6% of the responses). These figures reflected the microcosm of the overall participation rates for the two groups of students. Nearly seven in ten (68%) of the college bound students were involved in at least one sport at their respective schools, compared to approximately three in ten (29%) of their counterparts. The dominant reason participation in sports was considered to be an obstacle was the significant amount of time it consumed. (p. 35)

Academic Achievement

Montecel et al. (2002), in an informative report to the 2002 American Educational Research Association, provided an analysis of what works in bilingual education. This report once again highlighted the need for active parent involvement in the academic performance of their children. It should be noted that a majority of the students involved in the study were from elementary and middle schools. The researchers concluded that, in the ten schools studied, it was evident that strong parental support was an essential criterion for student academic success: “Parents were strong advocates of bilingual education programs and were welcome in their children’s schools, not as ‘helpers’ but as partners engaged in meaningful activities within the school structure” (p. 13).

According to Steinberg (2001), “The most important message we can convey is that what parents do *does* matter, even after their children enter adolescence” (p. 16). Steinberg is very clear about the research literature: parenting style impacts student academic performance and, indeed, overall adolescent development. According to Steinberg, an authoritative parenting style impacts the development of a child in a positive way. Authoritative style refers to one in which parents are warm, firm, and accepting of the need for psychological autonomy. Steinberg concludes that this type of parenting tends to result in children who are characterized by self reliance, achievement motivation, prosocial behavior, self control, cheerfulness, and social confidence. Important in this study are Steinberg’s findings on the importance of the authoritative style of parenting as it relates to young people entering adolescence: if at least one parent exhibits the behaviors associated with the authoritative mode, then adolescents, not only

children, will perform better academically than adolescents who live in homes with other forms of parenting.

Lee and Croninger (1994) used the National Educational Longitudinal Study (NELS) (1988) data to answer questions related to home life and student literacy. The research questions were the following: What effect do the differential levels of poor and middle-class children's home support for literacy have on reducing differences in literacy between these groups? Do home supports have different effects on literacy development for these two groups? The NELLS used a sample of 25,000 eighth grade students in this study. The dependent measure used was student literacy, as determined by a 21-question assessment. The independent measure related to student economic background and demographic variables such as minority status and race. A third set of measures was also used to determine the level of literacy supports in the home. Lee and Croninger were interested in learning if school and home life factors could interact, and whether one could supplant the other to make a difference in student literacy attainment. They stated, "It is not surprising that the correlation between reading achievement and academic background is quite strong ($r > .4$), and academic background is also strongly related to the mother's educational expectations" (p. 302). Highlighted in the same study were correlations of $r > .3$ between minority status and language minority status, and between literary resources and parents' education. Moderate correlations (identified as those between .2 and .3) were noted for most of the other within school categories studied.

Catsambis (1998) analyzed the data from the same 1988 National Educational Longitudinal Study, but from a different perspective than that of Lee and Croninger (1994). In Catsambis' work, the emphasis was on the data gleaned from parent responses

to the NELS study. Catsambis looked at the change in academic performance from eighth to twelfth grade and controlled for prior achievement. Only coefficients significant at the *alpha* were included in the tables of data. Catsambis' determination of academic achievement related to completion of math, science and reading courses. Using Epstein (1992) parent involvement typologies, she reported each question for each type separately. The item with the highest positive coefficient was "educational expectations," which Catsambis classified as being a Type 1: Parent Obligation parent involvement type. She controlled for prior achievement and reported following the results for the no controls and control group (p. 152):

Math – No Controls .31, Controls .16

Science – No Controls .26, Controls .13

English – No Controls .20, Controls .12

The area that Catsambis found to have the greatest negative correlation was "educational contacts with the school," which she classified as a Type 2: Parent/School Obligation parent involvement type (p. 152).

Math – No Controls -.14, Controls -.11

Science – No Controls -.13, Controls -.11

English – No Controls -.07, Controls -.06

From these studies it is possible to make the link between parent involvement and student academic achievement.

Attitude Toward School

In a West Virginia-wide study of student perceptions about school and post-school placement, Margolin (2000) examined what students said about a host of school

and family related issues. One of the items investigated involved enthusiasm and enjoyment of school. Those students who reported heightened levels of enjoyment and enthusiasm for school also reported better grades and a desire to attend college. The West Virginia study also linked the role of parent involvement in the lives of adolescents with their academic success. Students were also very likely to report that school was a high priority for them if they were doing well and had plans to attend college. One note in this study relates to students' perception of how hard to "try" at school. Those who planned to attend college reported that they tried hard and wanted to do well in school. This same group of students had fathers (58%) who attended college and/or university and came from families that were important to them. Of this group, 98% reported that family was the primary motivator in their lives when it came to school work. They characterized family involvement using items such as being able to talk about school and discussing issues that arose at school. Interestingly, homework was identified as the number one obstacle of all the aggregate responses.

Margolin's (2000) study was designed initially to involve 360 students from nine different schools (final number was 343). The students were drawn from a statewide total high school enrollment (i.e., grades 9-12) in 1998-99 of 90,954 students attending 127 high schools. The survey format was a blend of questionnaires, interviews, and researcher observations at the nine school sites.

Student Attendance

Astone and MacLanahan (1991) provide a theoretical perspective on the importance of student attendance to student school success. In essence they relate that, the more a student attends school, the greater the likelihood of the student's overall

academic performance being better than if the student misses school on a regular basis. They also posit that parents play a role in student attendance and, through it, academic achievement.

Concluding Remarks

Parents make a difference in the lives of their children. The research reviewed clearly indicates that, even into their children's high school years, parental involvement is valued and worthwhile. In the light of Epstein's (2001) concept of "responsibilities," it is evident that parental involvement can make a difference even when it is shared with the influence of peers and teachers. What is unknown is exactly what type of parental involvement will best serve the needs of adolescents as they enter and go through their high school years.

In a review of the research literature pertaining to the challenges of parent involvement in adolescent lives, Baker and Soden (1998) state that, "While most practitioners and researchers support the policy direction of increased parent involvement, few agree about what constitutes effective involvement" (p. 1). Baker and Soden's research supports the notion that very few clear measures have been developed to date that might determine what type of parent involvement best serves adolescents once they enter high school.

Baker and Soden (1998) highlight the importance of researchers' adopting a consistent meaning of and method for measuring parent involvement. They advocate the use of Epstein's (1994) six-item classification system, as defined and explained in this study. Baker and Soden also support the need to differentiate between parent involvement at home and at school, to ascertain the amount of parent involvement, and to investigate

whether all aspects of involvement remain important as students go from elementary school into high school.

CHAPTER THREE: METHODOLOGY

Introduction

The purpose this study is to determine whether varying types of parental involvement in the lives of adolescent high school-aged children were correlated with differing levels of student engagement, academic achievement, attendance and attitude toward school. This chapter describes the methodology used to answer the research questions. Five research questions were used in this study: (a) What is the relationship, if any, between the type of parent involvement and high school student academic achievement, attendance, engagement and attitude toward school? (b) What relationship exists between parent socioeconomic status, as defined by level of education, and parent involvement type and student academic achievement, attendance, engagement and attitude toward school? (c) What relationship exists between parent involvement type and student performance in the four core subject areas in high school (sciences, math, English, and social studies)? (d) What relationship exists between the type of parent involvement and male/female student academic achievement, attendance, engagement and attitude toward school? (e) What relationship exists between accessing web-enabled software, as a form of parent involvement, and student academic achievement, attendance, engagement and attitude toward school?

Research Design

This study examines the relationship between the type of parent involvement and high school student academic achievement, engagement, attendance, and attitude toward school. Types of parent involvement are categorized as (a) Type 1 Parenting, (b) Type 2 Communicating, (c) Type 3 Volunteering at School, (d) Type 4 Learning at Home, (e)

Type 5 Decision Making, and (f) Type 6 Collaborating with the Community.

Categorization of parents into these groups was determined by student responses to the parent involvement survey. The parent involvement survey (see Appendix A) was a modified version of the National Education Longitudinal Survey of the United States Department of Education.

The dependent variables used in this study were high school students' academic achievement, engagement, attendance, and attitude toward school. Student academic achievement was represented by the average of students' most recent percentage grades in science, social studies, English language arts, and mathematics. Student engagement was a self-reported measure of the amount of time that students spend involved in school-related activities. Attendance was drawn from answers to survey questions, reported directly by the student. Attendance was expressed as a percent and reflected the number of class periods absent from school during the last full semester attended by the student. Student attitude scores were drawn from the results of the School Attitude Assessment Survey-Revised (2002).

Procedure

Students were identified in four high schools located in the South Zone of the Province of Alberta, Canada. The schools selected were representative of the general school population of the South Zone. Careful attention was given to the urban and rural makeup of the South Zone schools, and the schools selected are representative of this distribution. The students were purposively selected based on grade and academic stream. The researcher visited each school, after appropriate notification had been given and permissions received (see Appendix B for Superintendent Authorization Letter;

Appendix C for Letter to Principals; Appendix D, Letter on Informed Consent; Appendix E, Letter to Students) to have the selected students complete the appropriate instruments: the Student Survey of Parent Involvement (based on a modification of the National Longitudinal Survey) and the School Attitude Assessment Survey-Revised (2003). As part of the process, students were provided with a printout of their attendance data from the previous semester along with their most recent marks. Students were able to transfer their attendance and mark data to their survey response sheets so as to provide the researcher with accurate information on academic and attendance history.

Population and Sample

Population

Students in their first (grade 10), second (grade 11), and third (grade 12) year of high school participated in this study. The population was drawn from the high schools in Zone Six of Southern Alberta. The combined high school population of this section of the Province of Alberta was just under 10,000 grade 10 to 12 students at the time of the survey (Alberta Schools Athletics Association, 2004-2005). This student population number included only first-time grade 12 students; it did not include students who were back to upgrade as high school students.

Sample

A clustered sample of more than 390 students was selected. Krejcie and Morgan's sample sizes required for given population served as the benchmark for determining the sample size for this study (Gay & Airasian, 2003). As a clustered sample was used to develop the sample of students, it was important to work with the four schools to select classes that represented the student population as a whole. The students came from four

high schools in the South Zone that represented the overall distribution of students in the region: one large high school, two medium-sized schools, and one small rural high school. The South Zone has six large schools with a total student population of 5152, 17 medium-sized schools with a total population of 3872, and 13 small rural high schools with a total student population of 688.

Variables and Levels of Data

The independent variable in this study was the type of parent involvement; the dependent variables were (a) student academic achievement, (b) student engagement, (c) student attitude toward school, and (d) student attendance rates. The level of data was nominal for the independent variable and ratio for the dependent variables of academic achievement, attendance and engagement while being ordinal for attitude toward school.

Independent Variable

Epstein (2001) developed the parent involvement type categorization that was used in this study. Baker and Soden (1998) supported Epstein's typology when they examined the strengths and weaknesses of research into parent involvement in the educational lives of children:

Drawing on Epstein's (1994) six-item classification system—covering school-home communications, parent involvement in school and community, home learning activities, and parents as decision makers—might prove useful for developing such a measurement, as it provides a widely accepted typology of parent involvement. (p. 5)

Baker and Soden were referring to what they perceived as a fault in parent research and was related to the problem of how to measure involvement. As a result, they used

Epstein's (2001) basic typology to differentiate between each of the six types of parent involvement.

The survey instrument (see Appendix A) that was used to gather the information required to determine the classification of parents' type of involvement comes from the United States Department of Education's Educational Longitudinal Study of 2002. The following explains how the questions relate to parenting type.

Type 1 Parenting was defined as the setting of basic rules of home life, including amount of television watched per week, setting a weekday curfew, and assignment of basic chores. This type of involvement was determined by student responses to survey questions 51 e (required to do work or chores), 51 f (limits to TV watching and playing of video games), and 51 g (limits to going out with friends on weeknights).

Type 2 Communicating was defined as the contact that parents have with teachers during the school year, attendance at parent/teacher conferences, and activities such as reading school newsletters on a monthly basis. Type 2 involvement was ascertained through the use of questions 51 h (phone or speak to teacher or counselor) and 51 i (attend meetings at the school).

Type 3 Volunteering at School assessed the involvement of parents in school-based activities such as attending school concerts, performances and/or athletic events. Volunteering was determined by student answers to questions 50 a (attended school function), 50 b (visited school), and 50 c (volunteered at school).

Type 4 Learning at Home entailed items that related to two different areas. The first set dealt with items such as assisting with homework, setting basic ground rules for completion of homework and encouraging the completion of school-related duties. This

area of Type 4 was determined by responses to questions 51 a (check on whether homework is done), 51 b (help with homework), 51 c (privileges given for completion of homework), and 51 d (limits on privileges for work not done). The second area concerned how much students discussed with their parents various school-related issues ranging from selecting courses to things that were troubling them. The specific questions were 51 a (selecting courses or programs at school), 52 b (school activities and events of particular interest to students), 52 c (things students studied in class), 52 d (grades), 52 g (going to college), 52 h (community, national, and world events), and 52 i (things that are troubling you).

Type 5 Decision Making related to parents' active involvement in school-based decision-making bodies, such as School Council, PTA, sports governing bodies, etc. This type of parent involvement was determined by student responses to questions 50 d (school council/PTA), 50 e (sports group), and 50 f (graduation committee).

Type 6, Collaborating with the Community involved parents getting students to participate in community-based activities, such as athletic events, cultural events, or other events of student interest. The following questions were examined to determine inclusion in this type of parent involvement: 21 b (working on hobbies and crafts), 21 c (volunteering in the community), 21 f (taking art or music classes), 21 g (sports lessons), and 21 h (playing non-school sports).

Dependent Variables

The dependent variables in this study included (a) student academic achievement, (b) student engagement, (c) student attitude toward school, and (d) attendance rates. Their relationship to parent involvement type was ascertained in the following manner.

Student academic achievement was determined by the information provided by the students for question 55 in the student questionnaire. In this question students were asked to transpose from their transcript, provided to them by the school, their most recent science, social studies, English, and math marks. An average of the marks provided by the student was used to determine student academic achievement. Students were divided into an academic group and a non-academic group, based on the courses they reported taking in the previous semester. Academic courses were considered to include English 10-1, 20-1, 30-1; Social Studies 10, 20, 30; Mathematics 10P, 20P, 30P, and Mathematics 31; Science 10; Biology 20 and 30; Chemistry 20 and 30; Physics 20 and 30. Non-academic courses were considered to include English 10-2, 20-2, 30-2; Social Studies 13, 23, 33; Mathematics 10A, 20A, 30A, and Mathematics 14, and 24; Science 10, 14, 24.

Student engagement was defined in this study as the degree to which a student was actively engaged in the life of the school, as evidenced by involvement in activities such as co-curricular, fine arts, sports and clubs. The student engagement rate was determined by the amount of time a student reported being engaged in school-based activities during a typical school week. Question 19 on the student questionnaire asked the number of hours that a student spent, in a typical week, participating in school-sponsored extra-curricular activities.

Student attitude toward school was defined as the score the student received from the School Attitude Assessment Survey-Revised. Students completed the entire School Attitude Assessment Survey-Revised, as it was included in question 5 of the student questionnaire. The School Attitude Assessment Survey-Revised was used with the

permission of the copyright holder. The validation study of this instrument was carried out by McCoach and Siegle (2002).

McCoach and Siegle's (2002) research narrowed the School Attitude Assessment Survey-Revised responses to five questions when attitude toward school was at issue, as opposed to using the other areas that the instrument evaluated, namely academic self-perception, attitudes toward teachers, goal valuation and motivation. Therefore, although the entire instrument was used in question 5 of the student questionnaire, only a mean rank average of questions 5.6, 5.7, 5.12, 5.19, and 5.23 was used to determine student attitude toward school. McCoach and Siegel reported that these questions taken together had a mean rank average of 5.1, standard deviation = 1.4, which resulted in the following scale being used: 5.8 = Above Average, 5.8 to 4.4 = Average/Normal, 4.4 to 3.6 = low Average, 1.5 to 3.6 = Low, and Below 1.5 = Very Low.

Attendance Rate was defined as the percent the student was absent from class as calculated by dividing the number of days absent by the total number of days in the semester. In question 55 of the student questionnaire, students were asked to transpose the number of days absent from their transcript of marks for each of their last semester's science, social studies, English, and math classes. This number was changed into a percent absent for the mean of the classes listed based on the overall number of days the classes were held throughout the semester. Questions 6 a, 6 b, and 6 c were also used as a comparison to the attendance data used by students in question 55. Question 6 was used to differentiate between being absent and cutting/skipping class.

Null Hypothesis

The null hypothesis for the study was that the type of parent involvement in the lives of high school adolescent students would not demonstrate a relationship, where the $\tau = .20$ with an $alpha = .05$, to student academic achievement, student attendance, student engagement, or student attitude toward school.

Statistical Procedures

The Kendall *Tau* B Coefficient was used to indicate the degree of association between each type of parent involvement and the four dependent variables.

A Priori

The assumption of normality was met by sufficient sample size. An important *a priori* relationship correlation was set at $\tau = .20$. Experimentally consistent predictability was defined as $p < .05$ level. A correlation of .20 was set as the level of importance in keeping with the work of Walberg et al. (1986). Walberg et al. (1986) used the results of the 1982 National Assessment in Science, which assessed the science productivity of 18,000 students, ages 9, 13, and 17, in the United States. They obtained results for 11 predictors and then regressed them on the basis of achievement and attitude. Strong positive correlations were determined to be in the .29 to .42 range, and moderate in the .10 to .28 range. Home environment was listed as a .19 correlation to achievement and a .23 correlation with attitude toward school with a $p < .05$.

Anonymity and Confidentiality

Students were given a general instruction sheet prior to completing the survey. In the instructions they were assured of personal anonymity as well as confidentiality of their individual responses.

Limitations and Delimitations

Limitations

The major limitation that existed within both the design and the scope of this study was the use of a group of students that is set in time and place and that limits the generalizability of these results. Ideally, to be more certain of the direct and indirect correlations established, longitudinal data with at least four waves would be needed (Cole & Maxwell, 2003). However, given the scope and breath of this study, the correlations established will be useful for school administrators in southern Alberta.

Delimitations

First, this study was delimited to Zone 6 of southern Alberta, Canada, and to grades 10, 11, and first-time grade 12 students.

Second, all the measures were based on self-reports from adolescents. Therefore, all information about relationships between parent involvement and student performance was from adolescents' perspectives. Biases within this adolescent perspective may have impacted the correlations found. Another aspect of this delimitation is the reliability of the data presented by the students. Even though students had available to them their transcripts they may not have used the accurate information and in turn some of the data may be erroneous. Third, although there are many factors that affect parental involvement in education, this study investigated only six types of parent involvement as developed by Epstein (2001).

Summary

The review of literature revealed that the type of parent involvement evolves from the time when students are in elementary school to the time when they are in high school.

According to the literature, active parent involvement continues to be associated with student performance, even after students enter high school. However, the question remains: what type of parent involvement is positively or negatively related to student performance, as indicated by their academic achievement, engagement, attitude, and attendance? Using the data acquired from running a modified version of the National Educational Longitudinal Study, the relationships between the type of parent involvement and high school students' academic success, engagement, attendance, and attitude were ascertained, as they relate to high school education in Zone Six of Southern Alberta.

CHAPTER FOUR: RESULTS

Introduction

Zone Six of the Province of Alberta includes the Livingstone Range School Division, Westwind School Division, Holy Spirit School Division, Lethbridge Public School District, Palliser School Division, Horizon School Division, Medicine Hat Catholic School Division, Medicine Hat Public School District, Prairie Rose School Division and Grasslands School Division. Permission to conduct research in each school division/district was given by the respective superintendent, with only Holy Spirit School Division placing restrictions that prohibited use of students in that jurisdiction. Once permission was received from the superintendents, an analysis of school size and makeup was conducted to identify schools that represented the demographic makeup of the schools throughout the region. Four schools were selected. The large urban school was located in Lethbridge Public School District, the small rural school in Westwind School Division, while one of the mid-sized town schools was in Palliser School Division and the other in Horizon School Division. Permission was received from each of the respective principals, and then classes were selected for inclusion in the study.

In total, 465 surveys were distributed to the schools for completion by the sampled students. Of these, 424 surveys were returned completed. In total, 212 surveys were completed by females and 211 by males; one survey did not indicate male or female. While 395 surveys were completed fully, 29 were partially completed. Students in School One completed 145 surveys, students in School Two completed 91, students in school three completed 89, and students in School Four completed 97. Two surveys did not indicate a school. Of the 424 returned surveys, 156 were from students in grade 10,

151 from students in grade 11, and 113 from students in grade 12; two did not indicate a grade. Table 1 displays surveyed student numbers for each school by gender and academic/non-academic status.

Table 1. Breakdown of Students by Gender, School, and Academic/Non-Academic Status

| | School | 1 | 2 | 3 | 4 | Total | Missing |
|-----------------------|--------|-----|----|----|----|-------|---------|
| Males | | 61 | 48 | 50 | 52 | 211 | 1 |
| Females | | 84 | 43 | 40 | 45 | 212 | |
| Academic students | | 117 | 63 | 63 | 73 | 316 | 2 |
| Non-academic students | | 28 | 28 | 26 | 24 | 106 | |

Table 2 presents the minimum and maximum overall academic average for students, along with the mean and standard deviation. The overall average comes from the self reported marks they received in their last full semester in school. The results are shown first for all students, then for academic and non-academic students, and finally for male and female students.

Table 2. Academic Average Minimum and Maximum for all Students, Academic and Non-Academic Students, Males and Females

| Descriptor | <i>N</i> | Min. | Max. | Mean | SD |
|-----------------------|----------|-------|-------|-------|------|
| All students | 360 | 23.0% | 97.7% | 71.3% | 12.6 |
| Academic students | 254 | 40.0% | 97.7% | 75.1% | 11.7 |
| Non-academic students | 106 | 23.0% | 83.0% | 62.1% | 9.5 |
| Male | 174 | 23.0% | 97.7% | 69.5% | 13.5 |
| Female | 186 | 41.7% | 97.7% | 72.9% | 11.4 |

Table 3 shows the student absence rate as determined by attendance data provided for question 55 of the survey. Students reported the number of days they were absent from class in the last full semester of school. The days absent were then changed to overall percent absent from class by calculating the days absent by the total number of days in the semester.

Table 3. Student Percent Absent From Class, Academic and Non-Academic Categories

| Descriptor | <i>N</i> | Min. | Max. | Mean | SD |
|-----------------------|----------|------|-------|------|------|
| Academic students | 247 | 0.0 | 43.2% | 4.9% | 6.04 |
| Non-academic students | 104 | 0.0 | 65.9% | 7.9% | 9.0 |
| Male | 172 | 0.0 | 65.9% | 5.9% | 8.0 |
| Female | 179 | 0.0 | 34.7% | 5.6% | 6.2 |

Table 4 displays the number of hours students spent participating in school extra-curricular activities. The data in this table show the results for students participating in academic and non-academic programs.

Table 4. Hours Spent Participating in Extra-Curricular Programs

| Program | <i>N</i> | Min. | Max. | Mean | SD |
|-----------------------|----------|------|------|------|-----|
| All students | 413 | 0.0 | 21 | 3.7 | 5.2 |
| Academic students | 306 | 0.0 | 20 | 4.1 | 5.3 |
| Non-academic students | 104 | 0.0 | 21 | 2.5 | 4.8 |
| Male students | 206 | 0.0 | 20 | 3.7 | 5.6 |
| Female students | 207 | 0.0 | 21 | 3.7 | 4.8 |

Student attitude toward school was determined by responses to questions 5.6, 5.7, 5.12, 5.19, and 5.23. McCoach and Siegel (2002) report that, based on the sample of students used in their study, these questions taken together resulted in a mean rank of 5.1 and a standard deviation of 1.4. Based on mean rank scores for these questions, McCoach and Siegel were able to group the students into the following categories: 5.8 = Above Average, 5.8 to 4.4 = Average/Normal, 4.4 to 3.6 = low Average, 1.5 to 3.6 = Low, and below 1.5 = Very Low.

Analysis of the responses from this sample of students from high schools in southern Alberta resulted in a mean of 3.9 and a standard deviation of 1. The mean of 3.9 indicates an overall lower score for attitude toward school for this sample of students than for that used by McCoach and Siegel (2002). Table 5 indicates the mean, percent, and standard deviation for all students in this study, along with the breakdown for the specific groups of male and female, as well as academic and non-academic.

Table 5. Student Attitude Toward School, Number, Mean, Standard Deviation

| Group | <i>N</i> | Mean | SD |
|-----------------------|----------|------|----|
| All students | 422 | 3.9 | 1 |
| Male students | 211 | 3.8 | 1 |
| Female students | 211 | 4.0 | 1 |
| Academic students | 316 | 4.0 | 1 |
| Non-academic students | 106 | 3.6 | 1 |

Table 6 presents the frequency and valid percent for the categories of very low, low, low average, average, and above average, as classified by McCoach and Siegel.

Table 6. Student Attitude Toward School Score, Frequency and Valid Percent

| Category/Group | Frequency | Valid Percent |
|-----------------------|-----------|---------------|
| All students | | |
| Very low | 6 | 1.4 |
| Low | 46 | 10.9 |
| Low average | 65 | 15.4 |
| Average | 168 | 39.8 |
| Above average | 137 | 32.5 |
| Total | 422 | 100 |
| Academic Students | | |
| Very low | 2 | .6 |
| Low | 31 | 9.8 |
| Low average | 46 | 14.6 |
| Average | 116 | 36.7 |
| Above average | 121 | 38.3 |
| Total | 316 | 100 |
| Non-Academic Students | | |
| Very low | 4 | 3.8 |
| Low | 15 | 14.2 |
| Low average | 19 | 17.9 |
| Average | 52 | 49.1 |
| Above average | 16 | 15.1 |
| Total | 106 | 100 |
| Male Students | | |
| Very low | 2 | .9 |

| Category/Group | Frequency | Valid Percent |
|-----------------|-----------|---------------|
| Low | 27 | 12.8 |
| Low average | 43 | 20.4 |
| Average | 85 | 40.3 |
| Above average | 54 | 25.6 |
| Total | 211 | 100 |
| Female Students | | |
| Very low | 4 | 1.9 |
| Low | 19 | 9.0 |
| Low average | 22 | 10.4 |
| Average | 83 | 39.3 |
| Above average | 83 | 39.3 |
| Total | 211 | 100 |

Prior to presenting data related to each of the research questions it will be useful here to present the research base for the use of a .20 level of importance and a level of significance set at $p = .05$. Walberg et al. (1986) used the results of the 1982 National Assessment in Science, which assessed the science productivity of 18,000 students, ages 9, 13, and 17, in the United States. They obtained results for 11 predictors and then regressed them on the basis of achievement and attitude. Strong positive correlations were determined by Walberg et al. to be in the .29 to .42 range, and moderate in the .10 to .28 range. Home environment was listed as a .19 correlation to achievement and a .23 correlation with attitude toward school with a $p < .05$. It was the identification by Walberg et al. of the home environments relationship to achievement at the .19 level that drove the use of a .20 level of importance in this research.

Research Question One

The first research question addressed was the following: What is the relationship, if any, between the type of parent involvement and high school student academic achievement, attendance, engagement and attitude toward school? As per the research design, the type of parent involvement was determined by grouping questions together and also by examining the results of each question independently. Table 7 shows the correlation between the types of parent involvement and students' engagement, academic achievement, attendance, and attitude toward school.

Table 7. Correlation Between Types of Parent Involvement and Academic Achievement, Engagement, Attendance, and Attitude Toward School

| Type of Parent Involvement | | Parent | Comm. | Volun. | Home | Dec. Ma | CI | |
|----------------------------|--------------|----------|-------|--------|---------|---------|--------|--------|
| Descriptor | | | | | | | | |
| Achievement | Academic | <i>r</i> | .062 | .106* | -.165** | .032 | .125* | .024 |
| | | N | 249 | 248 | 247 | 247 | 244 | 251 |
| | Non-academic | <i>r</i> | .148* | -.063 | -.189* | .241** | .046 | .049 |
| | | N | 105 | 106 | 106 | 104 | 104 | 105 |
| Engagement | Academic | <i>r</i> | .124* | .221** | -.401** | .160** | .357** | .249** |
| | | N | 290 | 289 | 286 | 286 | 282 | 304 |
| | Non-academic | <i>r</i> | .195* | .087 | -.264** | .092 | .403** | .241** |
| | | N | 103 | 104 | 104 | 102 | 102 | 103 |
| Attitude | Academic | <i>r</i> | .087 | .195** | -.178** | .226** | .131* | .107* |
| | | N | 291 | 290 | 284 | 287 | 283 | 307 |
| | Non-academic | <i>r</i> | .163* | .123 | -.243** | .332** | .038 | -.011 |
| | | N | 105 | 106 | 106 | 104 | 104 | 105 |
| Attendance | Academic | <i>r</i> | -.035 | -.062 | .005 | -.020 | -.048 | .036 |
| | | N | 242 | 241 | 240 | 240 | 237 | 244 |
| | Non-academic | <i>r</i> | -.113 | -.011 | -.076 | -.089 | -.015 | .079 |
| | | N | 104 | 105 | 106 | 104 | 104 | 105 |

Note. Parent Involvement Types: Vol. = Type 1 Parenting, Comm. = Type 2 Communicating, Vol. = Type 3 Volunteering, Home = Type 4 Learning at Home, Dec. Ma. = Type 5 Decision Making, CI = Type 6 Community Involvement.

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 8 displays in more detail the relationship between academic achievement, attendance, engagement and attitude toward school and parent involvement type, by presenting the results for the individual questions that made up the predetermined parent

involvement groupings. Type 1 Parenting is associated with questions 51 e, 51 f, and 51 g; Type 2 Communicating with questions 51 h and 51 i; Type 3 Volunteering at School with questions 50 a, 50 b, and 50 c; Type 4 Learning at Home with questions 51 a, 51 b, 51 c, 51 d, 52 a, 52 b, 52 c, 52 d, 52 g, 52 h, and 52 i; Type 5 Decision Making with questions 50 d, 50 e, and 50 f; and Type 6 Collaborating with the Community with questions 21 b, 21 c, 21 f, 21 g, and 21 h.

Table 8. Attendance, Attitude, Academic Achievement and Engagement by Question Correlated to Type of Parent Involvement, Split by Academic Grouping

| Variables | τ /N | Att. | Atti. | Acad. | Eng. |
|--|--------------|--------|--------|--------|------|
| Parent type and sub questions | | | | | |
| Type 1 – Parenting (academic students) | | | | | |
| 51e. How often do your parents require you to do work or chores? | τ -.038 | .083 | .222** | .108 | |
| | N 243 | 292 | 250 | 291 | |
| 51f. How often do your parents limit the amount of TV/play video games? | τ -.066 | .111 | .152* | .080 | |
| | N 243 | 292 | 250 | 291 | |
| 51g. How often do your parents limit the amount of time going out with friends on school nights? | τ .044 | .069 | -.069 | .076 | |
| | N 243 | 292 | 249 | 290 | |
| Type 1 – Parenting (non-academic students) | | | | | |
| 51e. How often do your parents require you to do work or chores? | τ -.023 | .045 | .107 | .163 | |
| | N 103 | 105 | 105 | 103 | |
| 51f. How often do your parents limit the amount of TV/play video games? | τ -.143 | .147 | .115 | .192 | |
| | N 104 | 106 | 106 | 104 | |
| 51g. How often do your parents limit the amount of time going out with friends on school nights? | τ -.132 | .089 | .169 | .189 | |
| | N 104 | 106 | 106 | 104 | |
| Type 2 – Communicating (academic students) | | | | | |
| 51h. How often do your parents phone or speak to a teacher or school counselor? | τ -.032 | .178** | .020 | .098 | |
| | N 243 | 292 | 250 | 291 | |
| 51i. How often do your parents attend meetings at the school? | τ -.098 | .234** | .238** | .272** | |
| | N 241 | 290 | 248 | 289 | |
| Type 2 – Communicating (non-academic students) | | | | | |
| 51h. How often do your parents phone or speak to a teacher or school counselor? | τ .119 | .058 | -.192* | .057 | |
| | N 104 | 106 | 106 | 104 | |

| Variables | τ /N | Att. | Atti. | Acad. | Eng. |
|---|---------------|---------|---------|---------|------|
| 51i. How often do your parents attend meetings at the school? | τ -.007 | .128 | -.032 | .256** | |
| | N | 104 | 106 | 106 | 104 |
| <hr/> | | | | | |
| Type 3 – Volunteering (academic students) | τ /N | Att. | Atti. | Acad. | Eng. |
| 50a. Since the beginning of the year, has either of your parents attended a school event? | τ .053 | -.190** | -.205** | .360** | |
| | N | 241 | 290 | 248 | 289 |
| 50b. Since the beginning of the year, has either of your parents visited the school? | τ -.020 | -.187** | -.114 | -.208** | |
| | N | 241 | 290 | 248 | 289 |
| 50c. Since the beginning of the year, has either of your parents volunteered at your school? | τ -.036 | -.121* | -.165** | -.324** | |
| | N | 241 | 288 | 248 | 287 |
| <hr/> | | | | | |
| Type 3 – Volunteering (non-academic students) | τ /N | Att. | Atti. | Acad. | Eng. |
| 50a. Since the beginning of the year, has either of your parents attended a school event? | τ -.025 | -.342** | .222** | -.353** | |
| | N | 104 | 106 | 106 | 104 |
| 50b. Since the beginning of the year, has either of your parents visited the school? | τ -.069 | -.242* | -.192* | -.077 | |
| | N | 104 | 106 | 106 | 104 |
| 50c. Since the beginning of the year, has either of your parents volunteered at your school? | τ .114 | -.095 | -.127 | -.342** | |
| | N | 104 | 106 | 106 | 104 |
| <hr/> | | | | | |
| Type 4 – Learning at Home (academic) | τ /N | Att. | Atti. | Acad. | Eng. |
| 51a. How often do your parents check for home work completion? | τ -.050 | .150* | -.098 | .082 | |
| | N | 243 | 293 | 250 | 292 |
| 51b. How often do your parents help you with your homework? | τ .023 | .178** | -.028 | .116* | |
| | N | 243 | 292 | 250 | 292 |
| 51c. How often do your parents give you privileges as a reward for good grades? | τ .052 | .089 | -.153* | -.011 | |
| | N | 241 | 290 | 250 | 269 |
| 51d. How often do your parents limit privileges for poor grades? | τ .133* | .027 | -.236** | .077 | |
| | N | 243 | 293 | 250 | 292 |
| 52a. In the first semester of this school year how often have you discussed selecting courses/programs at school with your parents? | τ -.102 | .353** | .177** | .078 | |
| | N | 244 | 292 | 251 | 290 |
| 52b. In the first semester of this school year how often have you discussed activities or events of interest with your parents? | τ -.100 | .348** | .205** | .333** | |
| | N | 243 | 292 | 250 | 290 |
| 52c. In the first semester of this school year how often have you discussed things you've studied in class with your parents? | τ -.089 | .325** | .254** | .051 | |
| | N | 244 | 292 | 251 | 290 |
| 52d. In the first semester of this school year how often have you discussed your grades with your parents? | τ -.003 | .269** | .061 | .066 | |
| | N | 244 | 292 | 251 | 290 |
| 52g. In the first semester of this school year how often have you discussed going to college with your parents? | τ -.074 | .195** | .258** | .175** | |
| | N | 244 | 293 | 251 | 291 |
| 52h. In the first semester of this school year how often have you | τ -.162* | .156** | .263** | .145* | |
| | N | 244 | 293 | 251 | 291 |

| Variables | τ /N | Att. | Atti. | Acad. | Eng. |
|---|-----------|-------|---------|---------|---------|
| discussed world and local events with your parents? | N | 244 | 293 | 251 | 291 |
| 52i. In the first semester of this school year how often have you discussed things that are troubling you with your parents? | τ | .041 | .247** | .071 | .025 |
| | N | 244 | 292 | 251 | 290 |
| <hr/> | | | | | |
| Type 4 – Learning at Home (non-academic) | τ /N | Att. | Atti. | Acad. | Eng. |
| 51a. How often do your parents check for home work completion? | τ | -.099 | .237* | .126 | .200* |
| | N | 104 | 106 | 106 | 104 |
| 51b. How often do your parents help you with your homework? | τ | -.133 | .292** | .184 | .021 |
| | N | 104 | 106 | 106 | 104 |
| 51c. How often do your parents give you privileges as a reward for good grades? | τ | .058 | .208* | .144 | -.007 |
| | N | 104 | 106 | 106 | 104 |
| 51d. How often do your parents limit privileges for poor grades? | τ | .064 | -.014 | -.039 | .103 |
| | N | 104 | 106 | 106 | 104 |
| 52a. In the first semester of this school year how often have you discussed selecting courses/programs at school with your parents? | τ | -.055 | .319** | .270** | -.099 |
| | N | 104 | 106 | 106 | 104 |
| 52b. In the first semester of this school year how often have you discussed activities or events of interest with your parents? | τ | -.011 | .330** | .207** | .213* |
| | N | 103 | 105 | 105 | 103 |
| 52c. In the first semester of this school year how often have you discussed things you've studied in class with your parents? | τ | -.095 | .292** | .224* | -.013 |
| | N | 103 | 105 | 105 | 104 |
| 52d. In the first semester of this school year how often have you discussed your grades with your parents? | τ | -.131 | .186 | .206* | -.100 |
| | N | 103 | 105 | 105 | 104 |
| 52g. In the first semester of this school year how often have you discussed going to college with your parents? | τ | -.105 | .379** | .180 | .179 |
| | N | 104 | 106 | 106 | 104 |
| 52h. In the first semester of this school year how often have you discussed world and local events with your parents? | τ | .023 | .195* | .257** | .137 |
| | N | 104 | 106 | 106 | 104 |
| 52i. In the first semester of this school year how often have you discussed things that are troubling you with your parents? | τ | -.097 | .267** | .374** | -.036 |
| | N | 104 | 106 | 106 | 104 |
| <hr/> | | | | | |
| Type 5 – Decision making (academic) | τ /N | Att. | Atti. | Acad. | Eng. |
| 50d. Since the beginning of the year, has either of your parents been an active member of the school council/PTA? | τ | -.099 | -.020 | -.039 | -.122 |
| | N | 240 | 287 | 247 | 286 |
| 50e. Since the beginning of the year, has either of your parents been a member of a parent group responsible for a sport team? | τ | .117 | -.130* | -.112 | -.374** |
| | N | 241 | 289 | 248 | 288 |
| 50f. Since the beginning of the year, has either of your parents been a member of a group responsible for grad? | τ | .076 | -.160** | -.189** | -.241** |
| | N | 240 | 286 | 247 | 286 |
| <hr/> | | | | | |
| Type 5 – Decision making (non-academic) | τ /N | Att. | Atti. | Acad. | Eng. |
| 50d. Since the beginning of the year, has either of your parents been an active member of the school council/PTA? | τ | .133 | .002 | .051 | -.261** |
| | N | 104 | 106 | 106 | 104 |

| Variables | τ /N | Att. | Atti. | Acad. | Eng. |
|--|-----------|-------|--------|-------|---------|
| 50e. Since the beginning of the year, has either of your parents been a member of a parent group responsible for a sport team? | τ | .084 | -.064 | -.139 | -.458** |
| | N | 104 | 106 | 106 | 104 |
| 50f. Since the beginning of the year, has either of your parents been a member of a group responsible for grad? | τ | .084 | .035 | -.057 | -.137 |
| | N | 104 | 106 | 106 | 104 |
| <hr/> | | | | | |
| Type 6 – Collaborating with the community (academic) | τ /N | Att. | Atti. | Acad. | Eng. |
| 21b. How often do you spend time working on hobbies and crafts? | τ | .012 | .108 | -.042 | -.010 |
| | N | 245 | 308 | 253 | 305 |
| 21c. How often do you spend time volunteering in the community? | τ | -.032 | .173** | -.042 | .144* |
| | N | 247 | 310 | 254 | 307 |
| 21f. How often do you spend time taking art, music, classes? | τ | .023 | .102 | .091 | .139* |
| | N | 246 | 309 | 253 | 306 |
| 21g. How often do you spend time taking sports lessons? | τ | .055 | .098 | .096 | .333** |
| | N | 247 | 310 | 254 | 307 |
| 21h. How often do you spend time playing non-school sports? | τ | .030 | .058 | .069 | .100 |
| | N | 247 | 310 | 254 | 307 |
| <hr/> | | | | | |
| Type 6 – Collaborating with the community (non-academic) | τ /N | Att. | Atti. | Acad. | Eng. |
| 21b. How often do you spend time working on hobbies and crafts? | τ | .130 | -.093 | -.026 | .002 |
| | N | 103 | 105 | 105 | 103 |
| 21c. How often do you spend time volunteering in the community? | τ | -.016 | .165 | .107 | .166 |
| | N | 103 | 105 | 105 | 103 |
| 21f. How often do you spend time taking art, music, classes? | τ | -.029 | .237** | -.026 | .249** |
| | N | 103 | 105 | 105 | 103 |
| 21g. How often do you spend time taking sports lessons? | τ | .004 | .161 | .065 | .519** |
| | N | 103 | 105 | 105 | 103 |
| 21h. How often do you spend time playing non-school sports? | τ | .019 | -.104 | .004 | .160 |
| | N | 103 | 105 | 105 | 103 |

Note. Att. = attendance, att. = attitude toward school, aca. = academic achievement, eng. = student engagement.

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

What is the relationship, if any, between the type of parent involvement and high school student academic achievement, attendance, engagement and attitude toward school? This research question formed the basis of this study. The data presented in Tables 11 and 12 indicate that type of parent involvement does have a relationship to

student academic achievement, attendance, engagement and attitude toward school. The null hypothesis for the study was that the type of parent involvement in the lives of high school adolescent students would not demonstrate a relationship, where the $\tau = .20$ with an $alpha = .05$, to student academic achievement, student attendance, student engagement, or student attitude toward school. The null hypothesis is rejected.

With the group classified as academic students, engagement was importantly correlated with Type 2 Communicating (.22), Type 5 Decision Making (.36), and Type 6 Decision Making (.25). Attitude toward school was importantly correlated with Type 4 Learning at Home (.27). No important relationship was found between attendance and any of the parent involvement types. An important correlation was found between student engagement and Type 3 Volunteering (-.40).

Similar results were found for non-academic and academic students, with a few notable differences. Student academic achievement was importantly associated with parent involvement Type 4 Learning at Home (.24); engagement with Type 5 Decision Making (.40) and Type 6 Community Involvement (.24); and attitude toward school with Type 4 Learning at Home (.33). Once again no important relationship existed between attendance and the various parent involvement types. An important relationship existed between engagement and Type 3 Volunteering at School (-.40), and between attitude toward school and Type 3 Volunteering (-.24).

Research Question Two

The second research question for this study concerned the issue of parent socioeconomic status and student performance factors. The second research question was, What relationship exists between parent socioeconomic status, as defined by level of

education, and parent involvement type and student academic achievement, attendance, engagement and attitude toward school? It was felt that asking students about parent income would not generate an answer that was accurate enough, so the decision was made to ask only about level of parent education.

Table 9 shows the relationship between the level of education of the student's father and mother to student engagement, academic achievement, attitude toward school and attendance.

Table 9. Level of Parent Education Correlated to Student Engagement, Academic Achievement, Attitude toward School and Attendance for all Students

| Survey question | Descriptors | Eng. | Aca. | Atti. | Att. |
|---|-------------|--------|--------|--------|-------|
| | τ /N | | | | |
| Question 49m. How far in school did you mother go? | | | | | |
| | τ | .215** | .180** | .129** | -.029 |
| | N | 379 | 340 | 382 | 332 |
| Question 49f. How far in school did your father go? | | | | | |
| | τ | .206** | .236** | .174** | -.061 |
| | N | 377 | 337 | 380 | 329 |

Note. Att. = attendance, att. = attitude toward school, aca. = academic achievement, eng. = student engagement.

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 9 indicates that there is a moderate relationship between how far in school the mother went to student engagement (.22). This table also demonstrates a moderate relationship between father's education level and student engagement (.21) and student academic achievement (.24)

Table 10 shows the correlations between parent level of education and student performance, with a filter applied to differentiate between academic and non-academic students.

Table 10. Level of Parent Education Correlated to Student Engagement, Academic Achievement, Attitude toward School and Attendance for Academic and Non-Academic Students

| Survey question | Descriptors | Eng. | Aca. | Atti. | Att. |
|---|-------------|--------|--------|--------|-------|
| Question 49m. How far in school did you mother go? | τ /N | | | | |
| Academic students | τ | .226** | .109* | .130* | -.023 |
| | N | 282 | 241 | 283 | 235 |
| Non-academic students | τ | .084 | .131 | .010 | -.010 |
| | N | 97 | 99 | 99 | 97 |
| Question 49f. How far in school did your father go? | | | | | |
| Academic students | τ | .197** | .172** | .153** | -.023 |
| | N | 279 | 237 | 280 | 231 |
| Non-academic students | τ | .111 | .153 | .112 | .004 |
| | N | 98 | 100 | 100 | 98 |

Note. Att. = attendance, atti. = attitude toward school, aca. = academic achievement, eng. = student engagement.

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 10 indicates that when students are split into the academic and non-academic groupings that a moderate relationship (.23) exists only between academic students and mothers level of education attained with student engagement.

Table 11 expands the relationship between parent level of education and student performance as indicated by engagement, academic achievement, attitude and attendance and also brings into consideration the relationship to parent involvement type. An added feature to this table is that it not only distinguishes between the education level of mother and father but also groups the education levels into these categories: (a) High school or less, (b) Some college/university, and (c) University degree(s).

Table 11. Level of Parent Education Correlated by Mother's and Father's Education, and Types of Parent Involvement Correlated to Student Engagement, Academic Achievement, Attitude toward School and Attendance

| Parent Types | Descriptors | Eng. | Aca. | Atti. | Att. |
|---|-------------|---------|---------|---------|--------|
| Survey question | τ /N | | | | |
| Question 49m. How far in school did your mother go? | | | | | |
| Education Level/Parent Type | | | | | |
| High school or less | | Eng. | Aca. | Atti. | Att. |
| Type 1 | τ | .042 | .126* | .160* | -.155* |
| | N | 145 | 127 | 147 | 123 |
| Type 2 | τ | .105 | .016 | .196** | -.028 |
| | N | 143 | 125 | 145 | 121 |
| Type 3 | τ | -.318** | -.204** | -.232** | .036 |
| | N | 142 | 126 | 144 | 122 |
| Type 4 | τ | .140* | .114 | .339** | -.109 |
| | N | 140 | 124 | 142 | 120 |
| Type 5 | τ | .317** | .039 | .017 | -.033 |
| | N | 139 | 124 | 141 | 120 |
| Type 6 | τ | .237** | .050 | .071 | -.043 |
| | N | 144 | 121 | 146 | 125 |
| Some college/university | | Eng. | Aca. | Atti. | Att. |
| Type 1 | τ | .157* | .091 | .029 | -.037 |
| | N | 129 | 118 | 129 | 115 |
| Type 2 | τ | .179** | .041 | .150* | -.072 |
| | N | 130 | 119 | 130 | 116 |

| | | | | | |
|--|--------|---------|---------|---------|-------|
| Type 3 | τ | -.362** | -.230** | -.252** | .062 |
| | N | 130 | 119 | 130 | 116 |
| Type 4 | τ | .079 | .079 | .162** | -.009 |
| | N | 129 | 118 | 129 | 115 |
| Type 5 | τ | .346** | .206** | .185* | -.090 |
| | N | 126 | 115 | 126 | 112 |
| Type 6 | τ | .264** | -.006 | .065 | .115 |
| | N | 130 | 129 | 130 | 116 |
| College/university degree(s) | | Eng. | Aca. | Atti. | Att. |
| Type 1 | τ | .219** | .080 | .088 | .043 |
| | N | 101 | 93 | 102 | 92 |
| Type 2 | τ | .210** | .102 | .172* | -.030 |
| | N | 102 | 94 | 103 | 93 |
| Type 3 | τ | -.473** | -.117 | -.081 | -.070 |
| | N | 102 | 94 | 103 | 93 |
| Type 4 | τ | .196** | .065 | .232** | .033 |
| | N | 102 | 94 | 103 | 93 |
| Type 5 | τ | .370** | .053 | .118 | -.015 |
| | N | 102 | 94 | 103 | 93 |
| Type 6 | τ | .250** | -.035 | .014 | .169* |
| | N | 102 | 94 | 103 | 03 |
| Question 49m – How far in school did your father go? | | | | | |
| High school or less | | Eng. | Aca. | Atti. | Att. |
| Type 1 | τ | -.008 | .150 | .089 | -.035 |
| | N | 153 | 129 | 155 | 126 |
| Type 2 | τ | .050 | .011 | .185* | -.018 |
| | N | 153 | 129 | 155 | 126 |
| Type 3 | τ | -.013 | -.231** | -.347** | -.034 |
| | N | 152 | 130 | 154 | 127 |
| Type 4 | τ | .133 | .155 | .342** | -.050 |
| | N | 151 | 129 | 153 | 126 |
| Type 5 | τ | .280** | .070 | .114 | .070 |
| | N | 148 | 127 | 150 | 124 |
| Type 6 | τ | .168* | -.084 | .056 | .104 |
| | N | 151 | 126 | 153 | 123 |

| Some college or university | | Eng. | Aca. | Atti. | Att. |
|------------------------------|--------|---------|-------|--------|-------|
| Type 1 | τ | .212* | .088 | .064 | .093 |
| | N | 108 | 103 | 109 | 100 |
| Type 2 | τ | .289** | .063 | .102 | -.046 |
| | N | 107 | 102 | 108 | 99 |
| Type 3 | τ | -.480** | -.147 | -.044 | -.115 |
| | N | 108 | 103 | 109 | 100 |
| Type 4 | τ | .070 | .132 | .387** | -.106 |
| | N | 106 | 101 | 107 | 98 |
| Type 5 | τ | .467** | .127 | .080 | -.043 |
| | N | 107 | 102 | 108 | 99 |
| Type 6 | τ | .376** | -.009 | .010 | .089 |
| | N | 108 | 103 | 109 | 100 |
| College/university degree(s) | | Eng. | Aca. | Atti. | Att. |
| Type 1 | τ | .137 | .139 | .080 | -.123 |
| | N | 112 | 103 | 112 | 101 |
| Type 2 | τ | .242** | .012 | .106 | .095 |
| | N | 113 | 104 | 113 | 103 |
| Type 3 | τ | -.472** | -.172 | -.079 | .042 |
| | N | 112 | 103 | 112 | 101 |
| Type 4 | τ | .144 | -.003 | .242* | .086 |
| | N | 112 | 10 | 112 | 101 |
| Type 5 | τ | .332** | .166 | .099 | -.157 |
| | N | 110 | 101 | 110 | 99 |
| Type 6 | τ | .240** | .077 | .201** | .038 |
| | N | 114 | 104 | 114 | 102 |

Note. Att. = attendance, atti. = attitude toward school, aca. = academic achievement, eng. = student engagement.

** Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

As these data demonstrate, a relationship was found for parent's level of education between involvement type and the various student performance factors, although some of these relationships are negative. Mother's level of education was associated with student engagement (.22), while father's education level was associated

with both engagement (.21) and academic achievement (.24). When parent involvement type is broken down into its respective categories, an interesting pattern emerges. Type 3 Volunteering at School was consistently shown to be negatively associated with engagement (mother's level of education: high school or less at $\tau = -.32$, some college $\tau = -.37$, college/university degree $\tau = -.47$; father's level of education: some college $\tau = -.48$, college/university degree $\tau = -.47$), academic achievement (mother's level of education: high school or less at $\tau = -.20$, some college $\tau = -.23$; father's level of education: high school or less $\tau = -.23$), and attitude toward school (mother's level of education: high school or less at $\tau = -.23$, some college $\tau = -.25$; father's level of education: high school or less $\tau = -.35$). Type 4 Learning at Home consistently correlated with student attitude toward school (mother's level of education: high school or less $\tau = .34$, some college $\tau = .$, college/university degree $\tau = .23$; father's level of education: high school or less $\tau = .34$, some college $\tau = .39$, college/university degree $\tau = .24$).

Research Question Three

What relationship exists between parent involvement type and student performance in the four core subject areas in high school (sciences, math, English, and social studies)? This third question was developed so as to examine student academic achievement specifically in these core subject areas. In the Province of Alberta, students require the following academic courses for high school completion: 15 credits in English Language Arts, 15 credits in Social Studies, 10 credits in Mathematics and 10 credits in the Sciences.

Table 12 highlights the correlation between Science, English, Social Studies and Mathematics marks and type of parent involvement. Table 12 does not break the data

down into differences between academic and non-academic students; however, it presents a starting point for determining if there is a correlation between the core subject areas and type of parent involvement.

Table 12. Correlation Between Core Subject Areas and Parent Involvement Type

| Parent involvement type | τ /N | Par. | Comm. | Volun. | Home | D Mak. | CI |
|-------------------------|-----------|--------|--------|---------|--------|--------|-------|
| Science 10 | τ | -.002 | .052 | -.242** | .062 | .099 | -.022 |
| | N | 98 | 96 | 95 | 95 | 92 | 96 |
| Biology | τ | .069 | .200** | -.279** | .094 | .189* | .162* |
| | N | 95 | 96 | 95 | 95 | 92 | 96 |
| Chemistry | τ | -.135 | -.064 | .032 | -.174* | .028 | -.110 |
| | N | 77 | 78 | 76 | 77 | 74 | 79 |
| Physics | τ | -.054 | -.048 | -.164 | -.019 | .172 | .000 |
| | N | 51 | 51 | 51 | 50 | 50 | 52 |
| English Language Arts | τ | .172** | .100* | -.226** | .142** | .165** | .110* |
| | N | 265 | 265 | 264 | 263 | 260 | 267 |
| Social Studies | τ | .051 | .056 | -.199** | .131** | .063 | .098* |
| | N | 207 | 208 | 208 | 207 | 206 | 206 |
| Mathematics | τ | .060 | .078 | -.176** | .073 | .090 | -.025 |
| | N | 236 | 236 | 237 | 233 | 233 | 238 |

Note. Parent Involvement Types: Par = Type 1 Parenting, Comm. = Type 2 Communicating, Vol. = Type 3 Volunteering, Home = Type 4 Learning at Home, D. Mak. = Type 5 Decision Making, CI = Type 6 Community Involvement.

** Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Table 13 shows the correlation between the four core subject areas and parent involvement type, differentiating between students taking academic and non-academic programs.

Table 13. Correlation between Core Subject Areas and Parent Involvement Type
Differentiated by Academic and Non-academic Students

| Parent involvement type | τ /N | Par. | Comm. | Volun. | Home | D Mak. | CI |
|------------------------------|-----------|--------|--------|---------|--------|--------|-------|
| Academic students | | | | | | | |
| Science10 | τ | -.055 | .010 | -.181* | -.019 | .059 | -.011 |
| | N | 70 | 69 | 70 | 69 | 69 | 70 |
| Biology | τ | .002 | .232** | -.248** | .039 | .176 | .148 |
| | N | 75 | 76 | 75 | 76 | 72 | 76 |
| Chemistry | τ | -.102 | -.083 | .051 | -.177* | -.017 | -.137 |
| | N | 73 | 74 | 72 | 73 | 70 | 75 |
| Physics | τ | -.027 | -.077 | -.098 | .023 | .139 | -.061 |
| | N | 46 | 46 | 46 | 45 | 45 | 47 |
| English Language Arts | τ | .160** | .197** | -.214** | .122* | .213* | .126* |
| | N | 178 | 177 | 176 | 177 | 174 | 180 |
| Social Studies | τ | .039 | .095 | -.140* | .115 | .021 | .092 |
| | N | 132 | 132 | 132 | 132 | 131 | 131 |
| Mathematics | τ | .003 | .081 | -.102 | -.044 | .038 | -.087 |
| | N | 160 | 161 | 159 | 160 | 158 | 162 |
| Non-academic students | | | | | | | |
| Science 10 | τ | .198 | .165 | -.334** | .358** | .158 | -.121 |
| | N | 28 | 29 | 29 | 29 | 28 | 28 |
| English Language Arts | τ | .147 | -.077 | -.148 | .175* | -.026 | .078 |
| | N | 87 | 86 | 88 | 86 | 86 | 87 |
| Social Studies | τ | .094 | -.046 | -.121 | .155 | .067 | .045 |
| | N | 75 | 76 | 76 | 75 | 75 | 75 |
| Mathematics | τ | .082 | -.024 | -.166 | .218** | .052 | .013 |
| | N | 76 | 77 | 77 | 77 | 75 | 76 |

Note. Parent Involvement Types: Par = Type 1 Parenting, Comm. = Type 2 Communicating, Vol. = Type 3 Volunteering, Home = Type 4 Learning at Home, D. Mak. = Type 5 Decision Making, CI = Type 6 Community Involvement.

** Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

From the data in Table 12 it is interesting to note that, when individual core subject area marks are assessed, a correlation exists between some of the overall averages and parent involvement Type 3 Volunteering at School (Science 10 $\tau = -.24$, Biology $\tau = .28$, English Language Arts $\tau = -.23$, Social Studies $\tau = -.20$).

Table 13 data indicates that important relationships exist between Type 4 Learning at Home involvement and some of the core subject areas (Science $\tau = .36$, and Mathematics $\tau = .29$).

Research Question Four

What relationship exists between the type of parent involvement and male/female student academic success, attendance, engagement and attitude toward school? That is, is there a difference in the way female and male student performance factors are correlated to parent involvement types? Table 14 presents the correlations between student gender and academic achievement, attitude toward school, engagement, and attendance.

Table 14. Correlation Between Academic Achievement, Engagement, Attendance, and Attitude toward School and Parent Involvement Type Differentiated by Academic Program and Sex

| Parent involvement type | τ /N | Par. | Comm. | Volun. | Home | D Mak. | CI |
|-------------------------|-----------|--------|--------|---------|--------|--------|--------|
| <hr/> | | | | | | | |
| Male | r /N | Par. | Comm. | Volun. | Home | D Mak. | CI |
| Engagement | τ | .149** | .231** | -.380** | .153** | .385** | .219** |
| | N | 193 | 193 | 191 | 191 | 186 | 204 |
| Attendance | τ | -.091 | -.037 | .000 | -.032 | -.118 | .032 |
| | N | 169 | 169 | 168 | 168 | 164 | 170 |
| Attitude toward school | τ | .077 | .132* | -.173** | .286** | .166* | .084 |
| | N | 195 | 195 | 193 | 193 | 188 | 208 |
| Academic achievement | τ | .134* | .036 | -.167** | .140** | .155** | .080 |
| | N | 171 | 171 | 170 | 170 | 166 | 172 |
| <hr/> | | | | | | | |
| Female | τ /N | Par. | Comm. | Volun. | Home | D Mak. | CI |
| Engagement | τ | .148** | .150** | -.398** | .143** | .379** | .293** |
| | N | 200 | 200 | 199 | 197 | 198 | 203 |
| Attendance | τ | -.050 | -.086 | .048 | -.067 | -.013 | .03 |
| | N | 176 | 176 | 176 | 174 | 175 | 177 |
| Attitude toward school | τ | .133* | .198* | -.219** | .191** | .072 | .077 |
| | N | 201 | 201 | 200 | 198 | 199 | 206 |
| Academic achievement | τ | .063 | .112* | -.260** | .041 | .133* | .002 |
| | N | 183 | 183 | 183 | 181 | 182 | 184 |

Note. Parent Involvement Types: Par = Type 1 Parenting, Comm. = Type 2 Communicating, Vol. = Type 3 Volunteering, Home = Type 4 Learning at Home, D. Mak. = Type 5 Decision Making, CI = Type 6 Community Involvement
 ** Correlation is significant at the 0.01 level (2-tailed).
 *Correlation is significant at the 0.05 level (2-tailed).

In Table 14 it is indicated that males have engagement and attitude toward school scores that form important relationships to some of the parent involvement types (engagement: Type 2 Communicating $\tau = .23$, Type 3 Volunteering $\tau = -.38$, Type 5 Decision Making $\tau = .39$, and Type 6 Community Involvement $\tau = .22$; attitude toward school: Type 4 Learning at Home $\tau = .29$). Similar data is presented for females but also includes a relationship to academic achievement (engagement: Type 3 Volunteering $\tau = -.38$, Type 5 Decision Making $\tau = .38$, and Type 6 Community Involvement $\tau = .29$; attitude toward school: Type 3 Volunteering $\tau = -.22$; academic achievement: Type 3 Volunteering $\tau = -.26$).

Table 15 narrows the data, allowing for a closer look at the differences between male and female students as they relate to academic achievement. In this Table the core subject areas are compared to parent involvement type.

Table 15. Correlation Between Core Subject Areas and Parent Involvement Type
Differentiated by Gender

| Parent involvement type | τ /N | Par. | Comm. | Volun. | Home | D Mak. | CI |
|-------------------------|-----------|--------|-------|---------|--------|--------|--------|
| Males | | | | | | | |
| Sciences | τ | .081 | .066 | -.115 | .039 | .152 | .130 |
| | N | 109 | 110 | 108 | 108 | 105 | 111 |
| English Language Arts | r | .197** | .058 | -.184** | .170** | .152* | .094 |
| | N | 135 | 135 | 134 | 135 | 131 | 135 |
| Social Studies | r | .052 | .026 | -.165* | .157* | .155 | .201** |
| | N | 99 | 99 | 100 | 100 | 98 | 98 |
| Mathematics | r | .029 | -.007 | -.089 | .095 | .118 | -.030 |
| | N | 120 | 121 | 120 | 120 | 117 | 121 |
| Females | | | | | | | |
| Sciences | r | -.016 | .106 | -.269** | -.012 | .135 | -.116 |
| | N | 118 | 118 | 119 | 119 | 117 | 118 |
| English Language Arts | r | .138* | .139* | -.256** | .087 | .185** | .128* |
| | N | 130 | 130 | 130 | 128 | 129 | 132 |
| Social Studies | r | .056 | .084 | -.229* | .099 | -.029 | .008 |
| | N | 108 | 109 | 108 | 107 | 108 | 108 |
| Mathematics | r | .063 | .147* | -.237** | .008 | .047 | -.044 |
| | N | 116 | 117 | 116 | 117 | 116 | 117 |

Note. Parent Involvement Types: Par = Type 1 Parenting, Comm. = Type 2 Communicating, Vol. = Type 3 Volunteering, Home = Type 4 Learning at Home, D. Mak. = Type 5 Decision Making, CI = Type 6 Community Involvement

** Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

From the data presented in Tables 14 and 15, it is evident that there are some differences in the way parent involvement types are related to male and female academic

achievement, engagement, attitude toward school and attendance. For male students, parent involvement Type 2 Communicating (.23), Type 5 Decision Making (.39), and Type 6 Community Involvement (.22) are associated with the student performance factor of engagement. When considering the student performance factor of engagement, female students did not have an important relationship to parent involvement Type 2 Communicating; however, they did have correlations between parent involvement Type 5 Decision Making (.38) and Type 6 Community Involvement (.29).

For both males and females, an important relationship existed between parent involvement Type 3 Volunteering at School and student engagement (males: $\tau = .38$, females: $\tau = -.40$). For female students, this correlation also existed between Type 3 Volunteering at School and academic achievement (-.26) and attitude toward school (-.22). For male students, the relationship between academic achievement and attitude toward school did not meet the level of importance.

Research Question Five

Research question five addressed the relationship between parent use of web-enabled software and student academic achievement. From conversations with school officials at all four schools, it was determined that only School 3 was actively using a web-enabled software package that permitted parents to log onto the Internet and to access marks and attendance and other course-related information. Therefore, the relationship between the use of web-enabled software and student academic achievement was only examined for School 3.

In School 3, the use of web-enabled software was correlated to student academic achievement with an τ of -.30 and at a significance level of .01 and an N of 88. These

data indicate that the answer to research question five would be that a negative relationship exists between the use of web enabled student information software and student academic achievement. However, it is difficult to make a definitive statement as the data are limited and come from only one school.

Other Relevant Data

Student performance is a complex process. As determined through the literature review, many factors are related to students' academic achievement, engagement, attendance, and attitude toward school. This study was designed to attempt to determine the level of relationship between Epstein's (2001) parent involvement types and high school student academic achievement, attendance, engagement and attitude toward school. The survey used to glean the information necessary to answer the basic research questions of this study also allowed for other factors associated with student performance to be analyzed. The data related to skipping school, part-time jobs, friends, homework, reading for pleasure, computer use, and television watched/video games played were examined in relation to student performance, to determine if there was a greater or lesser correlation than which was found to exist with the various parent involvement types.

Skipping School

Students were asked about attendance at two points in the survey. Question 55 asked them to indicate their marks, as well as the number of times they were absent from class. Question 6 sought attendance data in a slightly different way than question 55, in that it asked students if they were late, skipped, and were simply absent. Table 16 presents the relationship between questions 6a, 6b, and 6c to student academic achievement.

Table 16. Relationship Between Student Lates, Skips, and Absences from School and Academic Achievement

| Survey Question | Academic Achievement | |
|---|----------------------|---------|
| Male | τ /N | |
| 6a. How many times in the first semester were you late for school? | τ | -.133** |
| | N | 174 |
| 6b. How many times in the first semester did you skip school? | τ | -.337** |
| | N | 174 |
| 6c. How many times in the first semester were you absent from school? | τ | -.215** |
| | N | 174 |
| Female | | |
| 6a. How many times in the first semester were you late for school? | τ | -.163** |
| | N | 185 |
| 6b. How many times in the first semester did you skip school? | τ | -.351** |
| | N | 185 |
| 6c. How many times in the first semester were you absent from school? | τ | -.067** |
| | N | 185 |

Note. ** Correlation is significant at the 0.01 level (2-tailed).

Table 16 presents data that highlights the important relationship between student skipping and academic performance. Correlations of -.34 for males and -.35 for females strongly indicate the effect of skipping as opposed to students just being absent from school. Being absent from school, as reported by the students, resulted in correlations to academic achievement that for males was at the -.22 level and did not meet the level of importance for females.

Part-Time Job

Question 42 asked students to report the number of hours they worked at a job each week. Table 17 presents the results of this question correlated to academic achievement and split for grade level.

Table 17. Relationship Between Student Hours Worked at a Job and Academic Achievement by Grade Level

| Survey Question | Academic Achievement | |
|---|----------------------|---------|
| Grade 10 | τ | N |
| 42. How many hours do/did you usually work on your most recent job? | τ | -.213** |
| | N | 128 |
| Grade 11 | τ | N |
| 42. How many hours do/did you usually work on your most recent job? | τ | .019 |
| | N | 123 |
| Grade 12 | τ | N |
| 42. How many hours do/did you usually work on your most recent job? | τ | -.012 |
| | N | 109 |

Note. ** Correlation is significant at the 0.01 level (2-tailed).

As indicated in Table 17 very little relationship existed between Grade 11 and Grade 12 students and a moderate relationship between was apparent between Grade 10 students and hours of work.

Friends

Several questions in the survey addressed the influence of friends on student academic achievement. Question 7e asked students how important getting good grades was to three of their friends. Question 7f asked if the students' parents knew their friends.

Table 18 presents the correlation between friends wanting to get good grades and academic achievement, and the relationship between parents knowing students' friends and academic achievement. In both cases the information is shown for academic and non-academic student responses.

Table 18. Relationship Between Students' Friends Wanting Good Grades and Parents Knowing Students' Friends and Academic Achievement

| Survey Question | Academic Achievement | |
|--|----------------------|-------|
| Academic Program | τ /N | |
| Academic students: | | |
| 7e. How important is getting good grades to the friend? Friend 1 | τ | .065 |
| | N | 248 |
| 7g. Do you know either or both of this friend's parents? | τ | -.088 |
| | N | 231 |
| 7e. How important is getting good grades to the friend? Friend 2 | τ | -.010 |
| | N | 241 |
| 7g. Do you know either or both of this friend's parents? | τ | -.081 |
| | N | 231 |
| 7e. How important is getting good grades to the friend? Friend 3 | τ | -.042 |
| | N | 231 |
| 7g. Do you know either or both of this friend's parents? | τ | -.090 |
| | N | 231 |
| Non-academic students: | | |
| 7e. How important is getting good grades to the friend? Friend 1 | τ | .036 |
| | N | 99 |

| Survey Question | Academic Achievement | |
|--|----------------------|-------|
| 7g. Do you know either or both of this friend's parents? | τ | -.137 |
| | N | 93 |
| 7e. How important is getting good grades to the friend? Friend 2 | τ | .168* |
| | N | 97 |
| 7g. Do you know either or both of this friend's parents? | τ | .013 |
| | N | 93 |
| 7e. How important is getting good grades to the friend? Friend 3 | τ | -.068 |
| | N | 93 |
| 7g. Do you know either or both of this friend's parents? | τ | .065 |
| | N | 93 |

Note. * Correlation is significant at the 0.05 level (2-tailed).

Table 18 indicates that no important relationship existed between friendship and the student performance factor of academic achievement. This result is not indicative of friendship in its holistic sense but more so to the way in which the question was asked.

Homework

Question 11 addressed homework completion and its relationship to academic achievement, asking students to report the time they spent doing homework each week in all subjects, then in their last English course, and then in their last Math course. Table 19 details the relationship between homework completion in all subject areas to overall achievement, and then to achievement in English and Math. The data are split into two groups, academic and non-academic students.

Table 19. Relationship Between Hours Spent Doing Homework and Academic Achievement

| Survey Question | Academic Achievement | | |
|--|----------------------|--------|-------|
| Academic Program | τ /N | | |
| Academic students | | | |
| 11. Overall, about how much time do you spend on homework each week? | | | |
| | All subjects | τ | .093 |
| | | N | 250 |
| | 12. English class | τ | .030 |
| | | N | 179 |
| | 13. Math class | τ | -.072 |
| | | N | 158 |
| Non-academic students | | | |
| 11. Overall, about how much time do you spend on homework each week. | | | |
| | All subjects | τ | .136 |
| | | N | 104 |
| | 12. English class | τ | .056 |
| | | N | 101 |
| | 13. Math class | τ | .157* |
| | | N | 101 |

Note. *Correlation is significant at the 0.05 level (2-tailed).

Table 19 indicates that no important relationship existed between number of hours students report that they do homework in a typical week and their academic achievement.

Reading

Students were asked in question 20 about the amount of additional reading that they did during the course of a typical week. They were asked to record only the amount

of reading they did on their own and not to consider reading that they did as part of their schoolwork. The results were examined in relationship to overall student academic achievement. The results indicate very little relationship between the amount of student reading and academic achievement. For students taking a primarily academic program, the τ is .096 with an N of 251 with a correlation significance at the .05 level. The data for the non-academic students had an τ of .144 and an N of 104 with the correlation at the .05 level of significance.

Computer Use

Students' use of computers and its relationship to student academic achievement was ascertained through three questions, 22 a, b, and c. The questions asked how frequently students used computers to complete assignments, as a resource to learn things that interest them, and for fun. Table 20 presents the correlations between the three questions and overall student academic achievement.

Table 20. Relationship Between Hours Spent Using Computers at Home and Academic Achievement

| Survey Question | Academic Achievement | |
|---------------------------------------|----------------------|-------|
| Academic Program | τ | N |
| Academic students | | |
| 22. How often do you use computers... | | |
| a. for fun. | τ | -.006 |
| | N | 253 |
| b. for school work or assignments. | τ | .116* |
| | N | 253 |
| c. as a resource to learn new things. | τ | .067 |
| | N | 253 |
| Non-academic students | | |
| 22. How often do you use computers... | | |
| a. for fun. | τ | -.042 |
| | N | 105 |
| b. for school work or assignments. | τ | .007 |
| | N | 104 |
| c. as a resource to learn new things. | τ | .116 |
| | N | 105 |

Note. * Correlation is significant at the 0.05 level (2-tailed).

Table 20 indicates that no important relationship existed between how often students used computer technology and academic achievement.

Television/Video Games

The relationship between the amount of television students watched and the video games they played to academic achievement was ascertained through responses to

question 24. Again students were split into the academic and non-academic categories. Academic students had a τ of $-.09$ with an N of 246, while non-academic students had a τ of $-.083$ and an N of 101.

Parents' High Expectations

Lamborn, Mounts, Steinberg, and Dornbusch (1991) reinforced the importance of the authoritative parenting style, with its reliance on parents' high expectations of their children, coupled with a strong sense of affiliation between parents and adolescents. Epstein (2001) also refers to the importance of high parental expectations in student academic success.

In the survey, question 37 relates directly to the idea of parental expectations and student academic success. It is not surprising that, for students who are taking an academic high school program, a high correlation exists between question 37 and academic achievement. A non-important and non-significant correlation was noted for non-academic students and academic achievement.

The data for academic students had a τ of $.21$ when mothers' expectations were correlated to academic achievement and $.20$ for fathers' expectations. Both were at a significance level of $.01$, with an N of 232 for the question about mothers and 225 for the question about fathers.

The data for non-academic students had an τ of $.064$ for mothers and $.13$ for fathers. The significance level was greater than the $.05$ threshold set for this study. The N for the question about mothers was 85, while 75 students responded to the question about fathers.

Comparison of the degree of correlation between the responses about the mothers to those about the fathers showed that the τ for both groups was extremely high at .80 for the academic students and .79 for the non-academic students. Both were consistent at the .01 level.

Summary

The results reported in this study support the rejection of the null hypothesis. Student engagement, academic achievement and attitude toward school all have relationships at the *a priori* level of importance to various parent involvement types. The data in this study do not suggest an *a priori* relationship level between parent involvement type and student attendance, based on students' self reported non-attendance in question 55. However, the relationship changes when attendance as indicated by student self-reported skipping is taken into account. The skipping data from question 6 b indicate that there is an important *a priori* determined relationship between student attendance and parent involvement.

Many of the relationships demonstrated in this study are positive in nature, and meet or exceed the *a priori* level of importance, indicating that when parents are involved in the lives of their high school-aged children, their children report better results. The results, however, vary depending upon parent type. They also clearly show that parent involvement Type 3 Volunteering at School has a consistently negative relationship to the various student performance factors.

CHAPTER FIVE: DISCUSSION

Introduction

The purpose of this study was to determine if any of Epstein's (2001) types of parent involvement were positively or negatively correlated to the high school student performance factors of engagement, attitude toward school, academic achievement, and attendance for the students surveyed. The research questions were designed so as to explore factors typically associated with differences in student background. Items such as gender, socioeconomic status, course work, and academic stream were integrated into the study. The five research questions for this study were the following: (a) What is the relationship, if any, between the type of parent involvement and high school student academic achievement, attendance, engagement and attitude toward school? (b) What relationship exists between parent socioeconomic status, as defined by level of education, and involvement and student academic achievement, attendance, engagement and attitude toward school? (c) What relationship exists between parent involvement type and student performance in the four core subject areas in high school (Sciences, Math, English, and Social Studies)? (d) What relationship exists between the type of parent involvement and male/female student academic achievement, attendance, engagement and attitude toward school? (e) What relationship exists between accessing web-enabled software, as a form of parent involvement, and student academic achievement, attendance, engagement and attitude toward school?

This chapter is organized so as to present possible reasons for the answers to each of the five research questions, as well as to explore further the reasoning behind rejection of the null hypothesis. The data associated with each research question is presented in

Chapter Four, arranged in order by question. In this chapter the information is presented in a similar fashion, with each research question discussed individually.

General Information

Key to the success of this research study was the cooperation and support of the schools selected to represent the general high school population of southern Alberta. Fortunately the educational leaders of the schools selected were very willing to participate actively in selecting classes that would represent the general nature of the schools and provide for an adequate grade representation from their respective schools. A great deal of thought and consideration was given to the classes selected, and this has paid dividends to the representative nature of the responses.

Although consideration was given to the selection of classes based on the academic stream of the students, consideration was not given to garnering equal representation by gender. However, a side bonus of the process used was that almost equal numbers of males and females participated in the study: 211 males and 212 females. The overall number of students participating in the survey did not breakdown evenly for each grade. However, the resulting grade breakdown did compare favorably with that which is experienced throughout the general student population. In southern Alberta there are more grade 10 than grade 11 students, and in turn more grade 11 than grade 12 students (Alberta Schools Athletics Association, 2006). This study surveyed 156 students in grade 10, 151 in grade 11, and 113 in grade 12. The principals of each school selected classes that would represent the academic nature of the school. The selection process resulted in 254 academic students and 106 non-academic students fully

completing surveys. Because they also indicated courses completed, it was also possible to determine the academic/non-academic distinction.

Generally speaking, students who took courses in the academic stream had higher marks, attended school more often, were more actively engaged in the school's program of activities, and had a more positive attitude toward school score than students who followed the non-academic stream. The same general observation could also be made about males and females. Compared to the male students in this study, the female students indicated they performed better academically, attended school more often, and had a better attitude toward school. The only area in which results were almost identical for males and females was that of engagement; females and males had the same mean scores of hours spent in their school's extracurricular program.

Research Question One

What is the relationship, if any, between the type of parent involvement and high school student academic achievement, attendance, engagement and attitude toward school? This overarching question was designed to look at the "big picture" relationship between parent involvement type and the student performance factors. The question was addressed through two sets of processes. The first process involved grouping together the responses to each question that made up the items for each of Epstein's (2001) six parent involvement types. The second process involved running a correlation between each of the questions as a separate item to examine its direct relationship to the student performance factors.

Prior to the discussion of the findings associated with this research question, it may be useful to re-state Epstein's (2001) parent involvement types as well as the

questions from the survey that were used to determine to which type of involvement parents were classified as belonging.

Type 1 Parenting was defined as setting the basic rules of home life, including the amount of television watched per week, setting weekday curfew, and assigning basic chores. This type was determined by student responses to survey questions 51 e (required to do work or chores), 51 f (limits to TV watching and playing of video games), and 51 g (limits to going out with friends on weeknights).

Type 2 Communicating was defined as parents having contact with teachers during the school year, attending parent/teacher conferences, and performing such activities as reading school newsletters on a monthly basis. Type 2 was ascertained through questions 51 h (phone or speak to teacher or counselor) and 51 i (attend meetings at the school).

Type 3 Volunteering at School concerned parents' involvement in school-based activities, for example, by attending school concerts, performances and/or athletic events. Volunteering was determined by student answers to questions 50 a (attended school function), 50 b (visited school), and 50 c (volunteered at school).

Type 4 Learning at Home entailed items that related to two different areas. The first set involved items such as assisting with homework, setting basic ground rules for completion of homework, and encouraging the completion of school-related duties. This area of Type 4 was determined by responses to questions 51 a (check on whether homework is done), 51 b (help with homework), 51 c (privileges given for completion of homework), and 51 d (limits on privileges for work not done). The second area concerned how much students discussed with their parents various school-related issues ranging

from selecting courses to things that were troubling them. The specific questions were 51 a (selecting courses or programs at school), 52 b (school activities and events of particular interest to students), 52 c (things students studied in class), 52 d (grades), 52 g (going to college), 52 h (community, national, and world events), and 52 i (things that are troubling you).

Type 5 Decision Making involved parents' active participation in school-based decision-making bodies such as School Council, PTA, and sports governing bodies. This type of parent involvement was determined by student responses to questions 50 d (school council/PTA), 50 e (sports group), and 50 f (graduation committee).

Type 6 Communicating with the Community involved parents getting students to participate in community-based activities such as athletic events, cultural events, or other events of student interest. The following questions were examined to determine inclusion in this type of parent involvement: 21 b (working on hobbies and crafts), 21 c (volunteering in the community), 21 f (taking art or music classes), 21 g (sports lessons), and 21 h (playing non-school sports).

The relationship between parent involvement type and academic achievement met the *a priori* level of importance only with parent involvement Type 4 Learning at Home, and then only for students classified as non-academic (.24). It is interesting to note that a non-important correlation existed between Type 3 Volunteering at School and academic achievement (-.17 for academic students and -.19 for non-academic students). In almost every other category related to Type 3 Volunteering at School, an important correlation existed (engagement: academic students $\tau = -.40$, non-academic students $\tau = -.26$; attitude toward school: non-academic students $\tau = -.24$). This result is in keeping with Finn's

(1998) finding of a negative relationship between parents actively volunteering in the school and high school student academic performance.

Engagement results yielded an important correlation between the relationship for all parenting types, with the exception of Type 3 Volunteering at School, for both academic and non-academic students. The strongest correlation existed between parenting Type 5 Decision Making (.36 for academic students and .40 for non-academic) and students' active engagement in day-to-day school-based activities. It would appear that parents who actively participate in the formal decision making processes of the school also have children who actively participate in school-based activities. A moderate correlation also existed between parenting Type 6 Community Involvement and student involvement in school-based activities (.25 for academic students and .24 for non-academic).

Student attitude toward school and its relationship to parent involvement produced an important correlation only with parenting Type 4 Learning at Home (.27 for academic students and .33 for non-academic). Once again, an important relationship existed with parent involvement Type 3 Volunteering at School and students' scores on attitude toward school (-.24 for non-academic students).

Even though most parent involvement types (Types 1, 2, 4, and 5) had a correlation to student attendance none were at the level to be deemed important.

Each parent involvement type was ascertained through the use of numerous questions found in the student survey. Correlating each individual question with the student performance factors yielded important information about parent involvement. Important correlations between each question and student performance are presented here

and arranged by performance category: academic achievement, attitude toward school, engagement and attendance. As a general guide for each performance category, only correlations that meet the minimum threshold of $\tau = .20$ are presented. The findings are displayed for the academic and non-academic student groupings. The first performance category explored is that of academic achievement, followed by attitude toward school, engagement, and then attendance.

Academic Achievement

Relationships greater than .20 are presented in parentheses () prior to each question.

Academic students:

Type 1 Parenting: (.22) How often do your parents require you to do work of chores?

Type 2 Communicating: (.24) How often do your parents attend meetings at school?

Type 3 Volunteering: (-.20) Since the beginning of the school year, has either of your parents attended a school event?

Type 4 Learning at Home: (-.27) How often do your parents limit privileges for poor grades? (.20) How often have you discussed activities or events with your parents? (.25) How often have you discussed things you've studied in class with your parents? (.26) How often have you discussed going to college with your parents? (.26) How often have you discussed world or local events with your parents?

Non-academic students:

Type 3 Volunteering: (.22) Has either of your parents attended a school event?

Type 4 Learning at Home: (.27) How often have you discussed courses/programs at school with your parents? (.20) How often have you discussed activities or events of interest with your parents? (.22) How often have you discussed things that you've studied in class with your parents? (.21) How often have you discussed grades with your parents? (.26) How often have you discussed world of local events with your parents? (.37) How often have you discussed things that are troubling you with your parents?

Even though this study was designed to consider Epstein's (2001) parent involvement types, an interesting note can be made about these findings to demonstrate the relationship between parenting type and academic achievement. Lamborn et al. (1991) presented the authoritative parenting style as being more closely related to student academic performance than authoritarian, negligent, or indulgent parenting styles. The questions in this study to which student academic achievement most closely correlate are also questions that highlight Lamborn et al.'s (1991) parenting styles. That is, both relate to the necessity of parent rules and structure in the home, along with evidence of active parent involvement, care and concern.

Attitude Toward School

Relationships greater than .20 are presented in parentheses () prior to each question.

Academic students:

Type 2 Communicating: (.23) How often do your parents attend meetings at the school?

Type 4 Learning at Home: (.35) How often have you discussed selecting courses/programs at school with your parents? (.35) How often have you discussed

activities or events of interest with your parents? (.33) How often have you discussed things you've studied in class with your parents? (.27) How often have you discussed your grades with your parents? (.25) How often have you discussed things that are troubling you with your parents?

Non-academic students:

Type 3 Volunteering: (-.34) Since the beginning of the year, has either of your parents attended a school event? (-.24) Since the beginning of the year, has either of your parents visited the school?

Type 4 Learning at Home: (.32) How often have you discussed selecting courses/programs at school with your parents? (.33) How often have you discussed activities or events of interest with your parents? (.29) How often have you discussed things you've studied in class with your parents? (.38) How often have you discussed going to college with your parents? (.27) How often have discussed things that are troubling you with your parents?

Type 6 Collaborating with the Community: (.28) How often do you spend time taking art or music classes?

Engagement

Relationships greater than .20 are presented in parentheses () prior to each question.

Academic students:

Type 2 Communicating: (.27) How often do your parents attend meetings at the school?

Type 3 Volunteering: (.36) Has either of your parents attended a school event? (-.2) has either of your parents visited the school? (-.32) Has either of your parents volunteered at your school?

Type 4 Learning at Home: (.33) How often have you discussed activities or events of interest with your parents?

Type 5 Decision Making: (-.37) Has either of your parents been a member of a parent group responsible for a sport team? (-.24) Has either of your parents been a member of a group responsible for grad?

Type 6 Collaborating with the Community: (.33) How often do you spend time taking sports lessons?

Non-academic students

Type 2 Communicating: (.26) How often do your parents attend meetings at the school?

Type 3 Volunteering: (.35) Has either of your parents attended a school event? (-.34) Has either of your parents volunteered at your school?

Type 4 Learning at Home: (.20) How often do your parents check for homework completion? (.21) How often have you discussed activities or events of interest with your parents?

Type 5 Decision Making: (-.26) Has either of your parents been an active member of the school council or PTA? (-.46) Has either of your parents been a member of a parent group responsible for a sport team?

Type 6 Collaborating with the Community: (.25) How often do you spend time taking art or music classes?

Attendance

Daily attendance reported by students as part of their answers to question 55 did not result in any correlations with the pre-determined level of importance.

The findings for research question one indicate that there is a relationship between the various parent involvement types, especially when each question is considered on its own merits. Individual questions that highlight active involvement of parents in the lives of their adolescent high school aged children at home are the items that most closely correlate to the student performance factors. On the other hand, items that relate to parents being active members of the school community are more often than not negative in their correlation with student performance. The idea of active parent involvement as volunteers at school resulting in correlations that are negative in nature was surprising and somewhat in contradiction to current thought about parent involvement. Yet in many ways is also very much in keeping with the ideas presented by Csikszentmihalyi and Schmidt (1998) in their theories about adolescent development. This idea will be further explored in the conclusions section of this paper.

In the literature review, the research was highlighted of Csikszentmihalyi and Schmidt (1998), who wrote about the changes that adolescents go through as they progress from childhood to adulthood. Adolescence, they noted, is a time of searching for independence and freedom from the control of others. The data in this research study indicates that students' performance is related to the way that parents treat their children as individuals and the degree to which they respect their children's quest for freedom. Type 3 Volunteering at School results demonstrate that, when parents believe that they need to continue to be in the high school on a regular basis just as they were in

elementary school, their volunteering at school leads to results for student engagement, academic achievement, and attitude toward school that are negative in nature. On the other hand, parents who influence their children through observable actions such as those associated with Type 4 Learning at Home tend to have children who report better results in their attitude toward school, as well as academic achievement and engagement scores that are higher than those of children whose parents do not perform many of these activities.

Type 4 Learning at Home descriptors are divided between items that indicate parents checking up on the performance of their children and those that indicate parents' willingness to discuss issues with their children. On items where parents are checking on their children's academic performance, the correlation to students' performance generally is not important, and when it is important the results tend to be negative in nature. However, when the questions related to this type of parent involvement deal with issues inviting discussion between parent and adolescent, then the results meet the level of importance and are very positive in nature.

One item from parent involvement Type 2 Communicating seems to go against the norm of active parent involvement in school life not being importantly related to student performance. That item concerns parents' attending meetings at school. For academic students, this item was related to student attitude toward school (.23), academic achievement (.24), and engagement (.27). Parents' attending meetings at school also met the level of importance with non-academic students with the performance factor of engagement (.26). The idea of attending meetings is contrasted with the other item from the Type 2 Communicating area, where parents who continue to phone or speak to the

teacher tend to produce a relationship to student performance that is important and generally negative.

For non-academic students, discussing things that trouble them with their parents produced one of the highest single correlations in this study ($\tau = .37$). This result highlights just how important it is for parents to remain connected to their children as they go through high school.

Research Question Two

Research question two was designed to explore the relationship between parent education and high school student performance. What relationship exists between parent socioeconomic status, as defined by level of education, and involvement and student academic achievement, attendance, engagement and attitude toward school?

When the general relationship between parent education level and student engagement, academic achievement, attitude toward school and attendance was examined, the following results were noted: mother's level of education related positively at an acceptable level of importance only to the student performance category of student engagement (.22); however, father's education level yielded an important correlation with engagement (.21) and with academic achievement (.24).

Parent level of education was separated into three general categories: (a) high school or less, (b) some college/university, and (c) college/university degree(s). When these groupings were considered for mother's education, the following correlations met the *a priori* level of importance:

High school or less:

Type 3 Volunteering at School: (-.32) engagement, (-.20) academic achievement, (-.23) attitude toward school. Type 4 Learning at Home: (.34) attitude toward school. Type 5 Decision Making: (.32) engagement. Type 6 Collaborating with the Community: (.24) engagement.

Some college/university:

Type 3 Volunteering at School: (-.36) engagement, (-.23) academic achievement, (-.25) attitude toward school. Type 5 Decision Making: (.35) engagement, (.21) academic achievement. Type 6 Collaborating with the Community: (.26) engagement.

College/university degree(s):

Type 1 Parenting: (.22) engagement. Type 2 communicating: (.21) engagement. Type 3 Volunteering at School: (-.47) engagement. Type 4 Learning at Home: (.20) engagement, (.23) attitude toward school. Type 5 Decision Making: (.37) engagement. Type 6 Collaborating with the Community: (.25) engagement.

With father's education, Type 3 Volunteering at School continues to result in important correlations. Types 4 and 5 produce positive results.

High school or less:

Type 3 Volunteering at School: (-.23) academic achievement and (-.38) attitude toward school. Type 4 Learning at Home: (.34) attitude toward school. Type 5 Decision Making: (.28) engagement.

Some college/university

Type 1 Parenting: (.21) engagement. Type 2 Communicating: (.29) engagement. Type 3 Volunteering at School: (-.48) engagement. Type 4 Learning at Home: (.39)

attitude toward school. Type 5 Decision Making: (.47) engagement. Type 6 collaborating with community: (.38) engagement.

College/university degree(s):

Type 2 Communicating: (.24) engagement. Type 3 Volunteering at School: (-.47). Type 4 Learning at Home: (.24) attitude toward school. Type 5 Decision Making: (.33) engagement. Type 6 Collaborating with the Community: (.24) engagement.

The results for parents' level of education indicate that, whether parents have just a high school education or have completed a college or university degree the more they talk and build a relationship with their adolescent children the better the children do in school.

Research Question Three

The third research question addressed the relationship between core academic subjects and parent involvement types. A pattern of negative correlations between parenting Type 3 Volunteering at School and each of the core subject areas was evident when students were grouped together. The results for each subject were as follows: Science 10 was $\tau = -.24$, Biology $\tau = -.28$, Chemistry $\tau = .03$, Physics $\tau = -.16$, English $\tau = -.27$, and Social $\tau = .2$. At the same time, none of the other parent involvement types had a relationship that met the *a priori* level of importance.

The results for core subject achievement and its relationship to parent type were very much in keeping with the more general results produced for research question one. The trend of Type 3 Volunteering at School having important correlations that were negative in nature and the other types of parent involvement having important

correlations that were positive in nature continued when the core subjects were considered for the whole group of students.

Research Question Four

The fourth research question concerned the relationship between gender and the student performance factors of engagement, academic achievement, attitude toward school and attendance, and the relationship to the various parent involvement types.

For both males and females, correlations were found in the student performance category of engagement. Males had important correlations with Type 2 Communicating (.23), Type 3 Volunteering at School (-.38), Type 5 Decision Making (.39), and Type 6 Collaborating with the Community (.22). Females showed important correlations with Type 3 Volunteering at School (-.39), Type 5 Decision Making (.38), and Type 6 Collaborating with the Community (.29).

Academic achievement results for males and females were similar, with no important positive correlations noted. Academic achievement for both males and females did not have an important relationship to Type 3 Volunteering at School.

When scores for attitude toward school were analyzed for similarities and differences between males and females, very little difference was noted between the two. With both groups Type 3 Volunteering at School was negative, with males at $\tau = -.17$ and females at $\tau = -.22$; Type 4 Learning at Home was positive, with males at $\tau = .29$ and females at $\tau = .19$. However, as some of the results did not meet the level of importance.

No important relationships were noted for the student performance factor of attendance with either the male or female group.

Research Question Five

The fifth research question concerned the relationship between new technology, as evidenced by web-enabled software, and student performance factors. For this question, academic achievement was of primary interest. Students were asked how many times parents used web enabled software programs to log onto the internet and to check on their son/daughter's homework completion, assignment and test marks, as well as other relevant data required for parents to gain a good understanding of students' performance. It is interesting to note that the correlation between parent access and student academic achievement was negative. Once again, it would appear that, if parents had to check closely on student academic achievement in this fashion, then the result was important and negative in nature. This time the correlation was $-.30$ with a level of significance at the $.01$ level based on the responses of 88 students.

Other Relevant Data

A number of questions in the survey were designed to address items ordinarily assumed to impact student performance. The results are presented here to show what impact these items might have on student performance, and to determine if they might have any relevance to parent involvement.

High schools deal on a regular basis with students who skip school. Parents are often contacted when students skip classes and are expected to do something to prevent the student from skipping again. The data from this study suggest that skipping school impacts students' academic achievement. In question 6 b, students were asked how much they skip school. When a correlation was run between skipping school and academic achievement, correlations were noted of $-.34$ for males and $-.35$ for females. Yet when

this information was correlated to parent involvement types, no important relationship existed between skipping school and any of the types. The fact that all of the parent involvement types show neutral results suggests that parent influence wanes as students enter high school and that parents have limited influence on whether students skip or attend school.

School officials often blame working at part-time jobs as something that takes students away from their studies and in turn hurts their overall academic achievement. In this study, students were asked to report the number of hours they worked at a job during a typical school week. The data were split so as to examine the impact on grade 10, grade 11, and grade 12 students. The results indicate that a moderate relationship exists between grade 10 academic achievement and working at a part-time job, with a correlation of $\tau = -.21$. For grade 11 and grade 12 students, the correlation did not meet the level of importance, with grade 11 at $\tau = .02$ and grade 12 at $\tau = -.01$.

The results for the part-time job relationships indicate once again the importance of Csikszentmihalyi and Schmidt's (1998) understanding of the importance of relevance in the lives of adolescents. Csikszentmihalyi and Schmidt maintain that adolescents need to feel valued and worthwhile. The experience of a part-time job may very well produce feelings of satisfaction and of being valued that outweigh the resulting loss of time for school homework.

As noted in the literature review, Walberg et al. (1986) found that an increase of one hour per day in homework was associated with a 3.11 point increase in marks. In this study, students were asked to report the number of hours in a week that they spent doing homework in all subjects, in their last English class, and in their last Math class. The

results revealed no important relationship between homework and academic achievement in overall grade, or in English or Math class. In other words, spending more time doing homework did not necessarily mean that students would earn higher marks.

Facility in reading, the oft-noted essential ingredient for student academic success (Stanovich, 1986; Slavin, Karweit, Wasik, 1994; Tanner & Decotis, 1995), appears to be especially important for students in high school. Reading instruction is of primary importance throughout elementary school. Home-based reading programs are encouraged as a natural extension of the school curriculum and are viewed as an essential tool in enhancing students' ability to read. Students enter high school with all the skills they have learned during their previous school experience. The impact that their parents have had on the way students see the world also comes with them. Reading is like the other elements of their abilities as students and citizens of the world. Students do not come into high school as a blank slate. They come with personalities and previously developed beliefs and abilities. It is not surprising, then, given the other results in this study, that the time high school students spend reading does not have an important relationship to their academic achievement. This is not to say, of course, that being a better or worse reader does or does not impact academic achievement. It simply means that the amount of reading students do on their own may or may not impact academic achievement once they are in high school.

Conclusions

This study was designed to determine if there was an important, *a priori* determined level of $\tau = .20$ and $p - .05$, relationship between type of parent involvement and high school student engagement, academic achievement, attitude toward school, and

attendance. Epstein's (2001) six types of parent involvement were used, with each type having its own descriptors and associated questions from the survey. As the findings indicate, an important relationship was found between parent involvement and the student performance factors of engagement, academic achievement, and attitude toward school. However, only a non-important relationship was evident between the student performance factor of attendance and any of the parent involvement types.

The two types of parent involvement for which the findings provide the most information for high school administrators are Type 3 Volunteering at School and Type 4 Learning at Home. Type 3 Volunteering at School, for the most part, was negatively and importantly correlated to engagement, academic achievement, and attitude toward school; it had no important relationship to attendance. Type 4 Learning at Home was positively and importantly correlated to engagement and attitude toward school; it had no important relationship to attendance. Type 5 Decision Making was also positively and importantly related to engagement, as was Type 6 Collaborating with the Community.

Type 3 Volunteering, as a parent involvement type, presents some of the most interesting data in this study. The important negative relationships indicated between parents coming into the school and student performance is worthy of note and of further study.

The main finding from this study relates back to the importance of the work of Lamborn et al. (1991) on parenting style. Questions from the various parent involvement types that demonstrated structure within the home but at the same time evidence of students seeing parents as people they can talk to, invariably had correlations that were

positively and importantly associated with the student performance factors of engagement, academic achievement, and attitude toward school.

When the student performance factor of academic achievement was examined for academic students, items such as doing work or chores around the home, parents attending meetings at the school, and students discussing with parents events of interest, things studied in class, going to college, and local events yielded results indicating a strong relationship. These items all suggest warmth and development of personal rapport between the students and their parents. However, items that are designed to restrict freedoms or punish students, rather than encourage, tend to have an important relationship to academic achievement that predicts lower student performance. Very similar results are evident with the group identified as non-academic students, with the notable exception of parents attending meetings at school.

Null Hypothesis

As both the data and the findings clearly indicate that parent involvement type does have an important, *a priori* determined, relationship to the student performance factors of engagement, academic achievement, and attitude toward school, the null hypothesis is rejected. The *a priori* level of importance was set at $\tau = .20$. Student academic achievement was positively associated with parent involvement Type 4 Learning at Home (.24); engagement with Type 5 Decision Making (.40) and Type 6 Community Involvement (.24); and attitude toward school with Type 4 Learning at Home (.33). Once again no important relationship existed between attendance and the various parent involvement types. An important relationship existed between engagement and

Type 3 Volunteering at School (-.40), and between attitude toward school and Type 3 Volunteering (-.24).

Recommendations for Administrators

As indicated in the literature review, various governments have encouraged and even mandated greater parent involvement in schools, without specifying what type of involvement might be most helpful. Based on the findings of this study, it might be more useful for governments and educators to encourage parents to continue building solid relationships with their adolescent children. Furthermore legislation and practice needs to be developed so as to reinforce stages of child development and also to pay particular note to adolescent child development. The data supports the necessity of further study as far as parent volunteers in high school is concerned as there appears a measure of predictability associated with parent volunteering in high school and lower student performance.

A challenge for high school administrators will be to discover ways to help parents improve their relationships with their adolescent children if the students do not already view their existing relationships as positive. Adolescents come to high school with a pre-existing set of skills and beliefs, as well as already-formed relationships with their parents. Changing relationships between parent and adolescents may be very difficult once they have entered high school. However, if parents are encouraged to attend meetings at school and through their attendance to demonstrate the importance they place on school, and at the same time to express by their actions their expectations for their adolescent children, then further positive correlations to student performance may very well be predicted.

The data in the study suggests a level of predictability between parental influence on adolescent children through what they do at home and student performance. Expectations, as well as care and concern, form a two-pronged approach that parents can use to influence student performance positively. This study was not intended or designed to show cause and effect. However, the relationship between parents' expectations, care and concern with the student performance factors of engagement, academic achievement, and attitude toward school is solid enough to be suggestive and that a degree of predictability exists between the two. Parents should continue to express their expectations, care and concern for their adolescent children.

Recommendations for Further Study

The individual student voices involved in this study seemed to be crying out to be heard. Following this quantitative study with one of a qualitative nature would increase our understanding of parent involvement in the lives of adolescent high school students. Conducting a similar study to this but from the perspective of parents would help to clarify the importance of parent involvement and its relationship to student performance. Finally, conducting this study over a series of years and encompassing upper elementary, middle school, and high school students would yield useful longitudinal data and information about patterns in parent involvement in the lives of adolescent children.

End Note

Csikszentmihalyi and Schmidt (1998) noted that five obstacles are placed in front of adolescents, prohibiting them from gaining a sense of who they are as they struggle to become adults and find their place in the world. These included (a) restrictions on physical movements and freedoms, (b) absence from responsibility, (c) problems with

sexuality and intimacy, (d) isolation from adult role models, and (e) absence from control and power. Their research indicated that, if these obstacles could be overcome, adolescents would gain a greater sense of who they are and express themselves in socially acceptable ways. Csikszentmihalyi and Schmidt presented adolescence and childhood as being two different stages of life that need to be handled with a different skill set by both parents and schools.

In this study, the types of parent involvement that were found to relate in significant and important ways to student performance are in keeping with the findings of Csikszentmihalyi and Schmidt (1998). The fact that students' performance was positively associated with parent involvement in their lives highlights a basic understanding about the important role of parents at this stage in their children's lives. Parents should not place undue limits on adolescents' movement and freedoms, nor excuse them from responsibility. Parents should establish expectations for adolescents that are reasonable yet challenging. They should not isolate adolescents from adult role models. Parents need to be available to their adolescent children to discuss issues of relevance and importance to the adolescents themselves. Finally, parents should not look to limit adolescents' boundaries, but work to expand their horizons.

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APPENDIX A. SURVEY INSTRUMENT

MARKING DIRECTIONS

PLEASE READ CAREFULLY AND USE A SOFT LEAD (#2) PENCIL TO COMPLETE THIS QUESTIONNAIRE.

FILLING IN CIRCLES:

It is important that you completely fill in the circles next to your answers and print clearly.
Shown below is the correct way to mark you answers, along with examples of incorrect ways.

Correct Mark:

Dark and thick, circle completely filled



Incorrect Marks:

Light and thin



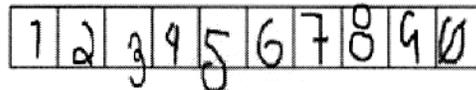
PRINTING NUMBERS IN BOXES:

Print one number per box. The numbers should be printed with solid connected lines and should not touch or cross any of the box lines. Do not cross zeroes or sevens.

Write digits like this:



Do not write digits like this:



KEY FOR MONTHS:

01 = January
02 = February
03 = March
04 = April

05 = May
06 = June
07 = July
08 = August

09 = September
10 = October
11 = November
12 = December

GENERAL INSTRUCTIONS

PLEASE READ EACH QUESTION CAREFULLY. It is important that you follow the directions for responding to each kind of question. Here are examples of the five types of items:

I. MARK ONE RESPONSE

1. What is the color of your eyes?

(MARK ONE RESPONSE)

- Brown
 - Blue
 - Green
 - Another color
- If the color of your eyes is green, you would mark the circle beside green.

II. MARK ALL THAT APPLY

2. Last week, did you do any of the following?

(MARK ALL THAT APPLY)

- Saw a play
- Went to a movie
- Attended a sporting event
- None of the above

If you went to a movie and attended a sporting event last week, but did not see a play, you would mark the two circles as shown.

III. MARK ONE RESPONSE ON EACH LINE

3. Do you plan to do any of the following next week?

(MARK ONE RESPONSE ON EACH LINE) If you plan to study at a

- | | Yes | No | Don't know | |
|-------------------------------|----------------------------------|----------------------------------|-----------------------|-------------------------------|
| a. Study at a friend's house. | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | friend's house, do not plan |
| b. Go to a museum | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | to go to a museum, and do |
| c. Visit a relative | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | not plan to visit a relative, |

you would mark one circle on each line as shown.

IV. MARK ONE RESPONSE IN EACH COLUMN

4. What is your favorite color and your best friends favorite color?

(MARK ONE RESPONSE IN EACH COLUMN)

| | Your favorite color | Your best friend's favorite color | If you like blue best and your best friend likes yellow best, you would mark one circle in each column as shown. |
|-------------------|----------------------------------|-----------------------------------|--|
| Blue | <input checked="" type="radio"/> | <input type="radio"/> | |
| Green | <input type="radio"/> | <input type="radio"/> | |
| Yellow | <input type="radio"/> | <input checked="" type="radio"/> | |
| Purple | <input type="radio"/> | <input type="radio"/> | |
| None of the above | <input type="radio"/> | <input type="radio"/> | |

V. QUESTION WITH A SKIP

5. Do you eat sweet foods?

(MARK ONE RESPONSE)

- Yes → (GO TO QUESTION 6)
- No → (SKIP TO QUESTION 7)

6. Do you brush you teeth after eating sweet food?

(MARK ONE RESPONSE)

- Yes
- No

7. Do you brush you teeth after eating sweet food?

(MARK ALL THAT APPLY)

- Attend a sporting event
- Go to a movie
- None of the above

THIS IS THE END OF THE EXAMPLES.

If you do not eat sweet foods, you would mark the circle as shown. You would not answer Question 6. Instead you would skip over Question 6 and go directly to Question 7. Sometimes you will be asked to skip more than one question.

THIS QUESTIONNAIRE IS NOT A TEST.

WE HOPE YOU WILL ANSWER EVERY QUESTION (OTHER THAN THE ONES YOU ARE DIRECTED TO SKIP OVER), BUT YOU MAY SKIP ANY QUESTION YOU DO NOT WISH TO ANSWER.

PLEASE GO TO THE NEXT PAGE TO BEGIN THE QUESTIONNAIRE.

[next page]

1 Please select the relationship to you of the male adult you live with.
(MARK ONE RESPONSE)

- A parent
- A Grandparent
- An aunt or uncle
- A brother or sister
- A friend
- Other

2 Please select the relationship to you of the female adult you live with.
(MARK ONE RESPONSE)

- A parent
- A Grandparent
- An aunt or uncle
- A brother or sister
- A friend
- Other

3 When were you born?

| Month | | Day | | Year | | | |
|-------|--|-----|--|------|--|--|--|
| | | | | | | | |

4 What is your sex?

- Male
- Female

5. SCHOOL ATTITUDE ASSESSMENT SURVEY-REVISED (used with permission)
 Part I: Please rate how strongly you agree or disagree with the following statements. In answering each question, use a range from (1) to (7) where (1) stands for **strongly disagree** and (7) stands for **strongly agree**. Please circle only one response choice per question.

| Statement | Strongly Disagree | Disagree | Slightly disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree |
|---|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| 1. My classes are interesting. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. I am intelligent. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. I can learn new ideas quickly in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. I check my assignments before I turn them in. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. I am smart in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. I am glad that I go to this school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. This is a good school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. I work hard at school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. I relate well to my teachers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. I am self-motivated to do my schoolwork. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. I am good at learning new things in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. This school is a good match for me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. School is easy for me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. I like my teachers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. I want to get good grades in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. My teachers make learning interesting. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. My teachers care about me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. Doing well in school is important for my future | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. I like school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. I can grasp complex concepts in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. Doing well in school is one of my goals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. I am capable of getting straight A's | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. I am proud of this school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. I complete my schoolwork regularly. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. It's important to get good grades in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. I am organized about my schoolwork. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. I use a variety of strategies to learn new | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28. I want to do my best in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29. It is important for me to do well in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30. I spend a lot of time on my schoolwork. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 31. Most of the teachers at this school are good | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32. I am a responsible student. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33. I put a lot of effort into my schoolwork. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34. I like my classes. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35. I concentrate on my schoolwork. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

6. How many times did the following things happen to you in the first semester or term of this school year?

(MARK ONE RESPONSE ON EACH LINE)

| | 0 | 1-2 | 2-3 | 7-9 | 10 or more |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| a. I was late for school | <input type="radio"/> |
| b. I cut or skipped classes | <input type="radio"/> |
| c. I was absent from school | <input type="radio"/> |
| d. I got in trouble for not following school rules | <input type="radio"/> |
| e. I was put on in-school suspension | <input type="radio"/> |
| f. I was suspended or put on probation | <input type="radio"/> |
| g. I was transferred to another school for disciplinary reasons | <input type="radio"/> |

7. Please write down the names of your best friends at your present school. Please fill in up to three names. If you have fewer close friends, provide less than three names. Then for each friend you named, answer questions 7a through 7g.

| Friend 1 | Friend 2 | Friend 3 |
|--|--|--|
| First Name _____ | First Name _____ | First Name _____ |
| Last Initial _____ | Last Initial _____ | Last Initial _____ |
| a. Is this friend ...? | | |
| <input type="radio"/> Male <input type="radio"/> Female | <input type="radio"/> Male <input type="radio"/> Female | <input type="radio"/> Male <input type="radio"/> Female |
| d. What grade is this friend in at your school? (MARK ALL THAT APPLY FOR EACH FRIEND) | | |
| <input type="radio"/> 8 th <input type="radio"/> 11 th <input type="radio"/> 9 th <input type="radio"/> 12 th <input type="radio"/> 10 th <input type="radio"/> Other | <input type="radio"/> 8 th <input type="radio"/> 11 th <input type="radio"/> 9 th <input type="radio"/> 12 th <input type="radio"/> 10 th <input type="radio"/> Other | <input type="radio"/> 8 th <input type="radio"/> 11 th <input type="radio"/> 9 th <input type="radio"/> 12 th <input type="radio"/> 10 th <input type="radio"/> Other |
| e. How important is getting good grades to this friend? (MARK ONE RESPONSE FOR EACH FRIEND) | | |
| <input type="radio"/> Not at all important <input type="radio"/> Somewhat important <input type="radio"/> Very important | <input type="radio"/> Not at all important <input type="radio"/> Somewhat important <input type="radio"/> Very important | <input type="radio"/> Not at all important <input type="radio"/> Somewhat important <input type="radio"/> Very important |
| f. Do you know either or both of this friend's parents? | | |
| <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |
| g. Does your mother or father know either or both of this friend's parents? | | |
| <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> Yes <input type="radio"/> No |

8. If you had to limit yourself to one of the following three choices, which comes nearest to describing your high school program?

(MARK ONE RESPONSE)

- General (Applied/13/10-2)
- University Preparatory (Academic, Advanced Placement/IB/10-1/10/10Pure)
- Vocational (including technical or business, IOP or 14/24)

9. How much do you agree or disagree with the following statements about why you go to school?

(MARK ONE RESPONSE ON EACH LINE)

| | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| a. I go to school because I think the subjects I'm taking are interesting and challenging | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. I go to school because I get a feeling of satisfaction from doing what I'm supposed to do in class | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. I go to school because I have nothing better to do | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. I go to school because education is important for getting a job later on | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. I go to school because it's a place to meet my friends | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. I go to school because I play on a team or belong to a club | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. I go to school because I'm learning skills that I will need for a job | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. I go to school because my teachers expect me to succeed | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. I go to school because my parents expect me to succeed | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

10. To what extent do you agree or disagree with the following statement: I like school.

- Strongly Agree
- Agree
- Strongly Disagree
- Disagree

11. Overall, about how much time do you spend on homework each week, both in and out of school?

| Total time spent on homework: All subjects | | | |
|--|----------------------|---------------|--|
| In school | | Out of school | |
| <input type="text"/> | <input type="text"/> | hours | |
| <input type="text"/> | <input type="text"/> | hours | |

12. In your last math course, about how much time did you spend on homework each week both in and out of school?

| Math | | | |
|---|----------------------|---------------|--|
| In school | | Out of school | |
| <input type="text"/> | <input type="text"/> | hours | |
| <input type="text"/> | <input type="text"/> | hours | |
| <input type="radio"/> I'm not taking a math class | | | |

13. In your last English course, about how much time did you spend on homework each week both in and out of school?

| English | | | |
|---|----------------------|---------------|--|
| In school | | Out of school | |
| <input type="text"/> | <input type="text"/> | hours | |
| <input type="text"/> | <input type="text"/> | hours | |
| <input type="radio"/> I'm not taking an English class | | | |

14. How important are good grades to you?
(MARK ONE RESPONSE)

- Not important
- Somewhat important
- Important
- Very important

15. How often do you come to class without these things?
(MARK ONE RESPONSE ON EACH LINE)

| | Never | Seldom | Often | Usually |
|------------------------|-------|--------|-------|---------|
| a. Pencil/pen or paper | 0 | 0 | 0 | 0 |
| b. Books | 0 | 0 | 0 | 0 |
| c. Homework done | 0 | 0 | 0 | 0 |

16. For the following items, intramural means competition between teams or students within the same school. For each sport listed below, indicate whether you participated on an intramural team in this sport during this school year.
(MARK ONE RESPONSE ON EACH LINE)

| | School does not have intramural teams | Did not participate | Participated in intramural sports |
|---|---------------------------------------|---------------------|-----------------------------------|
| a. Baseball | | | |
| b. Softball | | | |
| c. Basketball | | | |
| d. Football | | | |
| e. Volleyball | | | |
| f. Other team sports | | | |
| g. An individual sport (e.g. Wrestling, golf tennis, cross-country) | | | |
| h. Cheerleading | | | |

18. For the following items, interscholastic means competition between different schools. For each sport listed below, indicate whether you participated on an interscholastic team during this school year.
(MARK ALL THAT APPLY)

| | School does not have interscholastic team | Did not participate | Participated on a junior varsity team | Participated on a varsity team | Participated as a varsity team captain/co-captain |
|---|---|-----------------------|---------------------------------------|--------------------------------|---|
| a. Baseball | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Softball | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Basketball | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Football | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Volleyball | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Other team sports | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. An individual sport (e.g. Wrestling, golf tennis, cross-country) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. Cheerleading | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

18. Have you participated in the following school-sponsored activities this school year?
(MARK ONE RESPONSE ON EACH LINE)

| | Yes | No |
|---|-----------------------|-----------------------|
| a. Band, orchestra, chorus, choir | <input type="radio"/> | <input type="radio"/> |
| b. School play or musical | <input type="radio"/> | <input type="radio"/> |
| c. Student government | <input type="radio"/> | <input type="radio"/> |
| d. National Honor Society (NHS) or other academic honor society | <input type="radio"/> | <input type="radio"/> |
| e. School yearbook, newspaper, literary magazine | <input type="radio"/> | <input type="radio"/> |
| f. Service club | <input type="radio"/> | <input type="radio"/> |
| g. Academic club | <input type="radio"/> | <input type="radio"/> |
| h. Hobby club | <input type="radio"/> | <input type="radio"/> |
| i. Vocational education club, vocational student organization (e.g. DECA, VICA, FFA, FHA) | <input type="radio"/> | <input type="radio"/> |

19. In a typical week, how much time do you spend on school-sponsored extracurricular activities (for example, sports, school clubs)?

| | | |
|--|--|-------|
| | | Hours |
|--|--|-------|

20. How much additional reading do you do each week on your own outside of school – not in connection with schoolwork? (Do not count any school-assigned reading)

| | | |
|--|--|-------|
| | | Hours |
|--|--|-------|

21. How often do you spend time on the following activities outside of school?
(MARK ONE RESPONSE ON EACH LINE)

| | Rarely or never | Less than once a week | One or twice a week | Every day or almost every day |
|---|-----------------------|-----------------------|-----------------------|-------------------------------|
| a. Visiting with friends at a hangout | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Working on hobbies, arts, crafts | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Volunteering or performing community service | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Driving or riding around | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Talking with friends on the telephone | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Taking classes: music, art, language, dance | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. Taking sports lessons | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. Playing non-school sports | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

22. Whether at home, school, or some place else, how often do you use a computer ...
(MARK ONE RESPONSE FOR EACH LINE)

| | Rarely or Never | Less than once a week | Once or twice a week | Every day or almost every day |
|---|-----------------------|--------------------------|-------------------------|-------------------------------------|
| a. for fun, such as talking to friends or relatives through E-mail, playing games, surfing the Internet, or listening to music? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. for school work or assignments? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. as a resource to learn things of interest to you on your own? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

23. How many hours a day do you usually use a computer ...

a. for school work?

| | | |
|--|--|-------|
| | | Hours |
|--|--|-------|

b. other than for school work?

| | | |
|--|--|-------|
| | | Hours |
|--|--|-------|

24. During the school year, how many hours a day do you usually watch TV or videotapes/DVDs?

| | | | |
|---|--|----------|--|
| Watch TV or videotapes/DVDs | | | |
| Weekdays | | Weekends | |
| | | | |
| hours | | hours | |
| <input type="radio"/> I don't watch TV or videotapes/DVDs | | | |

25. How many times in a month would your parents use a web based program to check on your school progress?

| | | | |
|--|--|--|-------|
| | | | Times |
|--|--|--|-------|

26. During the school year, how many hours a day do you usually play video or computer games such as Nintendo or Playstation?

| Play video or computer games | | | |
|---|-------|---|-------|
| Weekdays | | Weekends | |
| <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> | hours | <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> | hours |
| <input type="radio"/> I don't play video or computer games | | | |

27. How important is each of the following to you in your life?
(MARK ONE RESPONSE ON EACH LINE)

| | Not important | Somewhat important | Very important |
|--|-----------------------|-----------------------|-----------------------|
| a. Being successful in my line of work | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Finding the right person to marry and having a happy family life | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Having lots of money | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Having strong friendships | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Being able to find steady work | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Helping other people in the community | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. Being able to give my children better opportunities than I've had | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. Living close to parents and relatives | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. Getting away from this area of the country | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| j. Working to correct social and economic inequalities | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| k. Having children | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| l. Having leisure time to enjoy my own interests | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| m. Becoming an expert in my field of work | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| n. Getting a good education | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

28. As things stand now, how far in school do you think you will get?
(MARK ONE RESPONSE)

| | | | |
|---|-----------------------|---|---------------------|
| Less than high school graduation | <input type="radio"/> | } | SKIP TO QUESTION 34 |
| High school graduation or GED only | <input type="radio"/> | | |
| Attend or complete a 2-year school course in a community or vocational school | <input type="radio"/> | | |
| Attend college, but not complete a 4-year degree | <input type="radio"/> | } | GO TO QUESTION 29 |
| Graduate from college | <input type="radio"/> | | |
| Obtain a Master's degree or equivalent | <input type="radio"/> | | |
| Obtain a Ph.D., M.D. or other advanced degree | <input type="radio"/> | | |
| Don't know | <input type="radio"/> | | |

29. Do you plan to continue your education right after high school or at some time in the future?
(MARK ONE RESPONSE)

- Yes, right after high school
 - Yes, after staying out of school for one year
 - Yes, after staying out of school for over a year
 - Yes, but I don't know when
 - No, I don't plan to continue my education after high school → (SKIP TO QUESTION 34)
 - I don't know if I will continue my education after high school → (SKIP TO QUESTION 34)
- } GO TO QUESTION 02

30. Which of the following do you plan to attend?
(MARK ONE RESPONSE)

- Four-year college or university
- Two-year community college
- Vocational, technical or trade school

31. Where have you gone for information about the entrance requirements of various colleges?
(MARK ALL THAT APPLY)

- Guidance counselor
- Teacher
- Coach
- Parent
- Friend
- Brother or sister
- Other relative
- College publications or websites
- College search guides, publications, or websites
- None of the above

32. Would you like to participate in athletics (not intramurals) at the collegiate level?

- Yes → (SKIP TO QUESTION 33)
- No → (SKIP TO QUESTION 35)

33. Do you hope to receive an athletic scholarship to pay for all or part of your college expenses?

- Yes
 - No
- } GO TO QUESTION 35

34. Which of the following are reasons why you have decided NOT to continue your education past high school?

(MARK ONE RESPONSE ON EACH LINE)

| | Yes | No |
|--|-----------------------|-----------------------|
| a. I do not like school | <input type="radio"/> | <input type="radio"/> |
| b. My grades are not high enough | <input type="radio"/> | <input type="radio"/> |
| c. I can't afford to go on to school | <input type="radio"/> | <input type="radio"/> |
| d. I will not need more education for the career I want | <input type="radio"/> | <input type="radio"/> |
| e. I'd rather work and make money than go to school | <input type="radio"/> | <input type="radio"/> |
| f. I plan to be a full-time homemaker | <input type="radio"/> | <input type="radio"/> |
| g. I do not feel that going to school is important | <input type="radio"/> | <input type="radio"/> |
| h. I need to help support my family | <input type="radio"/> | <input type="radio"/> |
| i. I don't get encouragement from my parents to continue | <input type="radio"/> | <input type="radio"/> |

35. Write in the name of the job or occupation that you expect or plan to have right after high school.

-
- I don't plan to work right after high school
 - I don't know

36. Write in the name of the job or occupation that you expect or plan to have at age 30.

-
- I don't plan to work right when I'm 30
 - I don't know

WHEN WE SAY PARENT(S), MOTHER, OR FATHER, ANSWER FOR THE PARENT, GUARDIAN, OR STEPPARENT WITH WHOM YOU LIVE MOST OF THE TIME.

37. How far in school do you think your mother and father want you to go?
(MARK ONE RESPONSE IN EACH COLUMN)

| | Mother | Father |
|---|-----------------------|-----------------------|
| Less than high school graduation | <input type="radio"/> | <input type="radio"/> |
| High school graduation or GED only | <input type="radio"/> | <input type="radio"/> |
| Attend or complete a 2-year school course in a community or vocational school | <input type="radio"/> | <input type="radio"/> |
| Attend college, but not complete a 4-year degree | <input type="radio"/> | <input type="radio"/> |
| Graduate from college | <input type="radio"/> | <input type="radio"/> |
| Obtain a Master's degree or equivalent | <input type="radio"/> | <input type="radio"/> |
| Obtain a Ph.D., M.D, or other advance degree | <input type="radio"/> | <input type="radio"/> |
| Don't know | <input type="radio"/> | <input type="radio"/> |
| Does not apply | <input type="radio"/> | <input type="radio"/> |

38. What do the following people think is the most important thing for you to do right after high school?
(MARK ONE RESPONSE ON EACH LINE)

| | Does not apply | Go to college | Get a full-time job | Enter a trade school or an apprenticeship | Enter military school | Get married | They think I should do what I want | They don't care | I don't know |
|-----------------------|-----------------------|-----------------------|-----------------------|---|-----------------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| Your mother | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Your father | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Your friends | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| A close relative | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| School counselor | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Your favorite teacher | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Coach | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

39. Have you ever worked for pay, not counting work around your house?
(MARK ONE RESPONSE)

- No → (SKIP TO INSTRUCTION BOX BEFORE QUESTION 47)
- Yes, I am currently employed → (SKIP TO QUESTION 41)
- Yes, but I am not currently employed → (GO TO QUESTION 40)

40. When did you last work for pay, not counting work around the house?

| | |
|---|---|
| Month | Year |
| <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |

41. When did you start your current or most recent job?

| | |
|---|---|
| Month | Year |
| <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |

42. How many hours do/did you usually work each week on your current or most recent job?

| |
|---|
| Hours |
| <input type="text"/> <input type="text"/> |

43. How many of those hours each week are/were on the weekend (Saturday or Sunday)?

Weekends (Saturday or Sunday)

| |
|---|
| Hours |
| <input type="text"/> <input type="text"/> |

44. What kind of work do/did you do for pay on your current job or most recent job? (If you have two or more jobs, answer for the job that pays the most per hour. Do not include work around your house.)

(MARK ONE RESPONSE)

- Fast food worker, waiter/waitress, host/hostess, dishwasher/busboy
- Babysitter or child care
- Cashier, grocery clerk/bagger
- Salesperson, customer service
- Lawn work or odd jobs
- Camp counselor, lifeguard, coach, umpire, or referee
- Farm worker
- Construction work
- Computer related job (e.g., repair, Web-design, network installation)
- General office or clerical worker
- Warehouse worker
- House cleaning or janitorial work
- Hospital or health worker
- Beautician, hair stylist, barber
- Other

45. How did you get this job?
(MARK ONE RESPONSE)

- School-arranged co-op program
- Other assistance from school or teacher
- Family
- Friends
- Read an ad, sign or notice
- Placed an advertisement
- Other

46. Is this job related to the job you want to have when you have completed your education?
(MARK ONE RESPONSE)

- Closely related
- Somewhat related
- Not related at all

WHEN WE SAY PARENT(S), MOTHER, OR FATHER, ANSWER FOR THE PARENT, GUARDIAN, OR STEPPARENT WITH WHOM YOU LIVE MOST OF THE TIME. IN THE FOLLOWING QUESTIONS, "GUARDIAN(S)" MAY INCLUDE FOSTER PARENTS, LEGAL GUARDIANS, OR OTHER OLDER ADULTS LIVING IN YOUR HOUSEHOLD, SUCH AS GRANDPARENTS, WHO ARE RESPONSIBLE FOR YOU.

47. a. What kind of work does your mother normally do? That is, what is the job called? (If she is unemployed, retired or disabled, answer for her most recent job. If she works more than one job, answer for the job you consider to be her major activity.)

- My mother/female guardian is a full-time homemaker
- Does not apply

Occupation: _____

b. What does she actually do in that job? That is, what are her main duties?

48. a. What kind of work does your father normally do? That is, what is the job called? (If he is unemployed, retired or disabled, answer for his most recent job. If he works more than one job, answer for the job you consider to be his major activity.)

- My father/male guardian is a full-time homemaker
- Does not apply

Occupation: _____

b. What does he actually do in that job? That is, what are his main duties?

49. How far in school did your parents go? Indicate your mother's and father's highest level of education.

(MARK ONE RESPONSE IN EACH COLUMN)

| | Mother (or female guardian) | Father (or male guardian) |
|---|-----------------------------------|---------------------------------|
| Did not finish high school | <input type="radio"/> | <input type="radio"/> |
| Graduated from high school or equivalent (GED) | <input type="radio"/> | <input type="radio"/> |
| Graduated from high school and attended a two-year school (such as a vocational or technical school, a junior college, or a community college), but did not complete a degree | <input type="radio"/> | <input type="radio"/> |
| Graduated from a two-year school (such as a vocational or technical school, a junior college, or a community college) | <input type="radio"/> | <input type="radio"/> |
| Graduated from high school and went to college, but did not complete a four-year degree | <input type="radio"/> | <input type="radio"/> |
| Graduated from college | <input type="radio"/> | <input type="radio"/> |
| Completed a Master's degree or equivalent | <input type="radio"/> | <input type="radio"/> |
| Completed a Ph.D., M.D, or other advance professional degree | <input type="radio"/> | <input type="radio"/> |
| Does not apply | <input type="radio"/> | <input type="radio"/> |

50. Since the beginning of the year, has either of your parents done the following:

| | Yes | No |
|--|-----------------------|-----------------------|
| a. Attended a school event such as a play, concert, exhibit, sports competition, honor ceremony, where YOU participated. | <input type="radio"/> | <input type="radio"/> |
| b. Visited your school | <input type="radio"/> | <input type="radio"/> |
| c. Volunteered at your school | <input type="radio"/> | <input type="radio"/> |
| d. Been a member of the School Council or PTA | | |
| e. Been a member of a parent group responsible for a sports team | <input type="radio"/> | <input type="radio"/> |
| f. Been a member of a parent group responsible for Grad | <input type="radio"/> | <input type="radio"/> |

51. How often do your parents do the following?
(MARK ONE RESPONSE ON EACH LINE)

| | Never | Rarely | Sometimes | Often |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| a. Check on whether you have done your homework | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Help you with your homework | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Give you privileges as a reward for good grades | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Limit privileges because of poor grades | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Require you to do work or chores | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Limit the amount of time watching TV/playing video games | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. Limit the amount of time going out with friends on school nights | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. Phone or speak to teacher or school counselor | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. Attend meetings at the school | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

52. In the first semester or term of this school year, how often have you discussed the following with either or both of your parents or guardians?
(MARK ONE RESPONSE ON EACH LINE)

| | Never | Sometimes | Often |
|--|-----------------------|-----------------------|-----------------------|
| a. Selecting courses or programs at school | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. School activities or events of particular interest to you | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Things you've studied in class | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Your grades | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Transferring to another school | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Plans and preparation for ACT or SAT tests | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. Going to college | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. Community, national and world events | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. Things that are troubling you | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

53. Among your close friends, how important is it to them that they ...?
(MARK ONE RESPONSE ON EACH LINE)

| | Not important | Somewhat important | Very important |
|--|-----------------------|-----------------------|-----------------------|
| a. attend classes regularly | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. study | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. play sports | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. get good grades | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. be popular/well-liked by others | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. finish high school | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. have a steady boyfriend/girlfriend | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. continue their education past high school | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. do community work or volunteering | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| j. have a regular job | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| k. get together with friends | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| l. go to parties | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| m. make money | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

54. Altogether, how many of your close friends have dropped out of school before graduating? (Do not include those who have transferred to another school.)
(MARK ONE RESPONSE)

- None of them
- Some of them
- Most of them
- All of them

55. Please look at your transcript of marks provided by your school. For each of the following courses **taken this school year** please write down your final school based mark and the number of days absent in that course.

| | Mark | Absences | | | | | |
|----------------|---|----------|--|--|--|--|--|
| English | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | |
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| Social Studies | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | |
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| Math | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | |
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| Science 10 | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | |
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| Biology | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | |
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| Chemistry | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | |
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| Physics | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | | | <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> | | |
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APPENDIX B. SUPERINTENDENT AUTHORIZATION LETTER

Request for Jurisdiction Permission to Conduct Study

Carmen Mombourquette
111 Tudor Crescent
Lethbridge, Alberta, Canada
T1K 5C7

Date

School Superintendent Name
School Jurisdiction Address

Dear _____:

I am a doctoral student in educational leadership studies at The University of Montana. The topic of my dissertation is “The Relationship between Parent Involvement and High School Student Engagement, Academic Success, Attendance and Attitude toward School.” In 2003 a recommendation was put forth by the Alberta Commission on Learning for all public schools in Alberta to actively increase the involvement of parents in schools. The recommendation was accepted by the provincial government, and schools throughout Alberta have been encouraged to proceed with the accepted recommendation. The purpose of this study is to determine if there is a relationship between a particular type of parent involvement and student engagement, academic success, attendance and attitude toward school.

The research design identifies the target population as high school students located in Southern Alberta, Zone 6. I am requesting permission to conduct research on the topic of parent involvement and its relationship to high school student engagement, academic success, attendance and attitude toward school in your jurisdiction. Schools within jurisdictions that receive Superintendent permission to proceed with study will be included in the pool of accessible population schools. Letters will be sent to the principals of the schools selected through stratified sampling. Once school approval has been obtained from the principal, questionnaires will be sent to randomly selected students of the sample schools.

The student questionnaire that will be used will contain questions from the National Educational Longitudinal Survey (2002) and the School Attitude Assessment Survey-Revised (2003) along with a couple of questions requesting students to transpose information from their provided transcript of marks. The questionnaire combining the instruments will take approximately 45 minutes to complete. Each student will receive an envelope with a copy of your letter of permission, an informed consent form, the questionnaire and a copy of his or her most recent transcript of marks. I assure you that

anonymity and confidentiality will be maintained. Reporting of results will not identify jurisdictions or schools.

Thank you for your consideration in providing permission to include schools within your jurisdiction as part of this study. If you have any questions, please contact me at (403) 327-4596, or my advisor, Dr. Don Robson at (406) 243-4893. I look forward to your response.

Respectfully,

Carmen Mombourquette
Graduate Student
University of Montana

Enclosures

- ♣ Research Questionnaire
- ♣ Letter to principals
- ♣ Letter to students
- ♣ Dissertation Proposal Approval

APPENDIX C. LETTER TO PRINCIPALS

Request for Principal Permission to Conduct Study

Carmen Mombourquette
111 Tudor Crescent.
Lethbridge, Alberta Canada T1K 5C7

Date

School Principal Name
School Address

Dear _____:

Your jurisdiction Superintendent, _____, has granted permission for me to elicit collection of data from schools within the jurisdiction. The data collected will be used to complete my doctoral studies in educational leadership through The University of Montana. The topic of my dissertation is “The Relationship between Parent Involvement and High School Student Engagement, Academic Success, Attendance and Attitude Toward School.”

In 2003 a recommendation was put forth by the Alberta Commission on Learning for all public schools in Alberta to actively increase the involvement of parents in schools. The recommendation was accepted by the provincial government, and schools throughout Alberta have been encouraged to proceed with the accepted recommendation. The purpose of this study is to determine if there is a relationship between type of parent involvement and high school student engagement, academic success, attendance, and attitude toward school. Your school was selected using stratified random sampling from an accessible population of all public schools in Southern Alberta, Zone 6.

I am requesting permission to elicit data on this topic from your students. Specifically, I would like to collect data from your students through the use of a questionnaire. The student questionnaire that will be used will contain questions from the National Educational Longitudinal Survey (2002) and the School Attitude Assessment Survey-Revised (2003), along with a couple of questions requesting students to transpose information from their provided transcript of marks.

Upon approval, a package of questionnaires for distribution to randomly selected students will be mailed directly to you at your school. Questionnaire packages are to be distributed to randomly selected students within the school by yourself or a designate. The questionnaire will take about 45 minutes for students to complete. Each student will receive the questionnaire, a letter of permission, and a Human Subjects Informed Consent

Form. Return envelopes with postage will also be included with each package to facilitate direct mailing to the researcher.

Thank you for your consideration in providing permission to survey students in your school. I will be very appreciative of your participation and support. I assure you that anonymity and confidentiality will be maintained. Reporting of results will not identify jurisdictions or schools or any information that can identify schools.

If you have any questions, please contact me at (403) 327 4596 or my advisor, Dr. Don Robson, at (406) 243-4893. I look forward to your response.

Respectfully,

Carmen Mombourquette
Graduate Student
University of Montana

Enclosures:

- ♣ Letter to students
- ♣ Questionnaire
- ♣ Human Subjects Informed Consent Form
- ♣ Letter of approval for study from jurisdiction Superintendent

APPENDIX D. LETTER ON INFORMED CONSENT

The Relationship Between Parent Involvement and High School Student Engagement, Academic Success, Attendance, and Attitude Toward School

Investigator: Carmen Mombourquette
Contact Information: e-mail: carmen.mombourquette@holyspirit.ab.ca
phone: (403) 327 4596 or (403) 329 6122
111 Tudor Crescent Lethbridge, AB. Canada T1K 5C7
Committee Chairperson: Dr. Don Robson
Telephone Number: (406) 243-4893

I. INTRODUCTION

You are invited to take part in a research study. Before you decide to take part in this study, you need to understand the risks and benefits. This form provides information about the research study. The investigator of the research study will be available to answer your questions and provide further explanations. If you agree to take part in the research study, you will proceed to completing the enclosed questionnaire and returning the questionnaire to your teacher.

Your decision to take part in the study is voluntary. You are free to choose whether or not you will proceed with filling out the questionnaire in order to take part in the study.

II. PURPOSE

As a doctoral student in the Graduate School of Education of The University of Montana, the investigator is carrying out a research study to investigate the relationship between the type of parent involvement and high school student engagement, academic success, attendance, and attitude toward school. The investigator (person in charge of this research study) is Carmen Mombourquette.

III. PROCEDURES

Your school was selected using stratified random sampling from an accessible population of all public schools in Southern Alberta, Zone 6. Following approval to conduct this research from your school Superintendent and principal, packages containing the enclosed information and questionnaires were mailed for distribution to selected students at your school. The total amount of time needed for you to participate in this study is approximately 45 minutes for the purpose of filling out and returning the enclosed questionnaire.

IV. POSSIBLE RISKS

To the best of the investigator's knowledge, the research activity that you will participate in will pose no more psychological (stress) risk of harm than you would experience in everyday life.

VI. POSSIBLE BENEFITS

There are no expected personal benefits associated with taking part in this research study. The information gained from this study, however, may enhance knowledge and benefit other individuals in the future. Research that focuses on an examination of the relationship between the type of parent involvement and high school student engagement, academic success, attendance, and attitude toward school may help school personnel in advising parents and parents themselves in forming their relationships with their adolescent children.

VII. COSTS

There are no costs associated with taking part in this research study.

VIII. COMPENSATION

You will not receive any financial compensation for participating in this study.

IX. RIGHT TO WITHDRAW FROM THE STUDY

Your participation in this research study is strictly voluntary. You may choose to stop participation or withdraw from the study at any time. Once questionnaires are returned to your teacher, they become indistinguishable to the investigator with respect to identification of individual respondents. You will be told of any new information about the research study that may cause you to change your mind about participation.

X. CONFIDENTIALITY OF RESEARCH RECORDS

Your responses will be held confidential. Your personal information is not provided to the investigator on the questionnaire. Your responses will only be used for research purposes.

XI. QUESTIONS

If you have any questions about the procedures of this research study, please contact Carmen Mombourquette by telephoning (403-327-4596) during the workday or (403-329-6122) during the evening. You may also e-mail any questions to carmen.mombourquette@holyspirit.ab.ca

You may also contact my research advisor, Dr. Don Robson by telephoning (406-243-4893).

APPENDIX E. LETTER TO STUDENTS

Date

Dear Student:

Your school Superintendent and principal have granted permission for me to gather data from the students at your school. I am requesting your assistance by completing the enclosed questionnaire. In 2003 a recommendation was put forth by the Alberta Commission on Learning for all public schools in Alberta to actively increase the involvement of parents in schools. The recommendation was accepted by the provincial government, and schools throughout Alberta have been encouraged to proceed with the accepted recommendation. The purpose of this study is to determine if there is a relationship between type of parent involvement and high school student engagement, academic success, attendance, and attitude toward school.

Your participation is entirely voluntary and anonymous. Reporting of results in this study will not identify individual participants, schools or jurisdictions. Your opinion is indeed valued. Through your role as a student you can provide information as to the role of parents in helping students achieve success in school. You are asked to take approximately 45 minutes to complete the enclosed questionnaire. Instructions for the questionnaire are located on the first few pages. Please be honest in your responses to the questionnaire. Your responses will be anonymous, held strictly confidential, and used only for my research study.

Please complete the questionnaire and then return it to your teacher or to the person monitoring you. You may keep your transcript of marks, destroy it, or return it to your teacher.

I encourage you to contact me directly if you have any questions or concerns regarding the study. Contact information is as follows:

e-mail: carmen.mombourquette@holyspirit.ab.ca

phone: (403) 327 4596 or (403) 329 6122

mailing address: 111 Tudor Crescent Lethbridge Alberta T1K 5C7

You may also contact my research advisor, Dr. Don Robson, at (406) 243-4893.

Thank you in advance for your time and significant contribution to this study.

Respectfully,

Carmen Mombourquette
Doctoral Student
The University of Montana

APPENDIX F. UNIVERSITY OF MONTANA STUDY APPROVAL LETTER



#12-07

Legal Counsel
133 University Hall
The University of Montana
Missoula MT 59812
Phone (406) 243-4742
Fax (406) 243-2797

Date: January 7, 2007

To: Carmen Mombourquette, Educational Leadership

From: Claudia D. Denker, IRB Chair

Re: IRB proposal titled: "A Study of the Relationship Between Parent Involvement and High School Student Engagement, Academic Success, and Attitude Toward School"

This study has been approved on the date that the "checklist" was signed. If the study requires an Informed Consent Form, please use the "signed and dated" ICF forms as "masters" for preparing copies for your study. **Approval continues for one year.** If the study runs more than one year, a continuation form must be approved by **January 6, 2008** or it will need to be resubmitted.

Also, you are required to notify the IRB if there are any significant changes or if unanticipated or adverse events occur during the study. Finally, when you terminate the study, please notify our office in writing so that we can close the file.



Claudia D. Denker

Attachments

APPENDIX G. PERMISSION TO USE SCHOOL ATTITUDE ASSESSMENT
SURVEY, REVISED (SAAS-R)

Dear Carmen:

You have permission to use the School Attitude Assessment Survey - Revised (SAAS-R) for your dissertation research. Please cite the instrument within your manuscript as follows:

McCoach, D. B. (2002). School Attitude Assessment Survey- Revised (SAAS-R). Unpublished instrument.

Finally, I would love to read about your research findings. Please send me a copy of your dissertation in whatever format is most convenient.

Congratulations on completing your dissertation, and best of luck for your future endeavors!

Betsy McCoach

From: Carmen Mombourquette [mailto:carmen.mombourquette@holyspirit.ab.ca]
Sent: Sat 5/5/2007 12:54 PM
To: Mccoach, D. Betsy
Subject: Permission for use

Good Morning Dr. McCoach, In the fall I wrote to you asking permission to use your School Attitude Assessment Survey - Revised. At that time you granted me permission to do so. I did use the survey as part of my Dissertation. The survey was very helpful and I was able to glean a lot of good information from its use. However, I misplaced the email you sent to me authorizing my use of your survey. Could you please email to me another statement giving me permission to use your survey so that I can include that note in my list of appendices? If you would like a copy of my Dissertation I would be more than happy to send you one. Carmen Mombourquette