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# **A Correlation Study on Attachment Style and GPA of Students at an Alternative Education Center**

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## **ABSTRACT**

Adolescents in America are dropping out of school in alarming rates. In the school year 2009-2010, 514,238 adolescents dropped out of high school. While alternative education centers have been created to meet the needs of these individuals, they are not always successful as evidenced by a graduation rate below 5% in several alternative centers in Florida. Previous studies have shown that students with a positive attachment style have higher grade point averages (GPA) and perform better in school. This study determined the attachment rate of students in an alternative center and performed a correlation with GPA. The results of this study showed there was no significant correlation between attachment style and GPA ( $p = .297$ ). Caution is advised to draw a firm conclusion as participating students may have benefited from services put in place that could have amended their attachment style. It is recommended this study be replicated with students as they enter the alternative education center before exposure to services.

Keywords: Attachment Style, Grade Point Average, Alternative Education Center, Correlation

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## **1. INTRODUCTION**

### **1.1. Background of the Problem**

Dropping out of high school is still prevalent with adolescents in America today. A high school dropout refers to 16-24 year olds who have not earned a high school diploma or its equivalency such as a General Education Degree (GED) (National Center for Educational Statistics [NCES], 2012). In the school year 2007-2008, 584,515 adolescents dropped out of high school (NCES, 2010). There was a slight decrease in dropouts at 514,238 in 2009-2010 (NCES, 2013), but the number is still high. Students have the option of going to alternative schools before or after they drop out.

Reasons for placement in alternative schools include truancy, education failure, suspension or pregnancy (NCES, 2012). Therefore it may behoove researchers to look at other factors that may have a relationship with school success. This study will address the relationship between attachment and Grade Point Average (GPA) among students in an alternative education center using attachment theory as the theoretical framework to guide the study.

According to the tenets of attachment theory, the attachment of an infant with their primary caregiver has a direct impact on how that child will form relationships in the future. The attachment style of the infant can be favorable or unfavorable and can lead to adaptive or maladaptive social information processing respectively. The understanding of how an individual attaches can explain how and why an individual processes other social interactions (Dykas & Cassidy, 2011) including school.

School attachment can be defined as the extent in which a student feels a part of their school or a sense of belongingness. Students attached to their schools are more likely to try harder in class and participate in extracurricular activities (Johnson, Crosnoe & Elder, 2001). In addition these students have higher GPAs (LeCroy & Krysik, 2008). What remains to be understood is the relationship of attachment with students in an alternative center and their GPAs.

## **1.2. Statement of the Problem**

Students who are not successful in a regular public high school are often sent to alternative schools. While alternative education centers offer small class sizes and competency based learning, according to NCES (2011) placement in these programs is still highly fluid. Students who are not successful in high school end up dropping out. The results of this study can help alternative schools gain an understanding of the potential impact attachment style has on GPA, a measure of school success which leads to graduation, in order to enhance their existing programs and assist students in earning a high school diploma.

In the school year 1990-1991 there were 134,161 students enrolled in alternative schools across the country. This number rose to 491,738 in the school year 2000-2001 and finally to 574,381 in the school year 2009-2010 (NCES, 2011). Alternative programs offered within traditional schools had a larger number of enrolled students at 612,900 in the school year 2000-2001, but they had a smaller increase of 5.3% to 645,500 in the school year 2009-2010 (NCES, 2012). Combined, this means 1,219,881 were out of traditional high schools in the 2009-2010 school year.

An alternative education center, located in Florida, was used as the focus of this study. This alternative education center had a graduation rate in the school year 2010-2011 of 10.8%. The following school year, 2011-2012 this alternative education center had a decreased graduation rate of 8.17%. In the same county another alternative school, for the school year 2011-2012, had a graduation rate of 1.8. Two alternative centers in the county south of the one in which the study was conducted, had similar results with their alternative schools. One had a graduation rate of 1.1% while the other had a graduation rate of 4.3%. Two alternative centers located in a county north of where the study was conducted also had similar results in the school year 2011-2012. At one school there was a graduation rate of 1.03% while another had

a graduation rate of 1.43% (Florida Department of Education [FLDOE], 2013). What this shows is that although special schools and centers are in place to meet the needs of students who do not do well in traditional school, they are not successful in terms of getting students to graduate. It will therefore be useful to know if attachment style correlates to GPA of students in an alternative center due to the increasing number of students enrolling in these schools each year and the lack of success in terms of graduation.

### **1.3. Purpose of the Study**

The purpose of this study is to address the gap in the literature on the older adolescents attending alternative schools and whether there is a correlation between attachment style and GPA. If a correlation between attachment style and GPA is found it could conceivably lead to changes made in elementary school through high school to address the needs of students with negative attachment styles in order to prevent them from dropping out of high school or moving to an alternative school where the chance of graduating is slim.

In addition this study seeks to extend the knowledge base of work by LeCroy and Krysik (2008) who found school attachment to be one of the significant predictors of an adolescents GPA. The study also seeks to extend the knowledge base of the work by Johnson et al. (2001) who found students perform at higher levels in school when they feel attached to the school or possess a sense of belongingness. The extension of knowledge will be done by looking at an under studied population, the older adolescents in an alternative center.

While Crosnoe and Needham (2004) found students disengaged from school are more likely than those who are engaged to have lower levels of academic achievement and extracurricular participation, their study was not done with alternative center students. Typically alternative centers do not offer extracurricular or even intra-curricular activities; instead the focus is strictly on working on specific credits needed to obtain a high school diploma. Therefore the proposed study seeks to extend the knowledge based on the work of others who do find a high correlation between positive attachment and high GPAs, but with this special population, the older adolescent in an alternative center. What makes this population different are the characteristics and responsibilities of the students, such as attendance, age or pregnancy (NCES, 2012). Some students may have additional responsibilities of working full time jobs in order to help care for their families. Combined, these characteristics and life situations make traditional high school a less viable option. In addition, the educational content and delivery methods as well as activities typically used to assist with the formation of attachment are different or not offered as in traditional school. An example of the differences are the use of competency based learning and lack of extracurricular activities.

### **1.4. Significance of the Study**

What makes this study significant are the numbers of students entering alternative schools, dropping out of school and having low graduation rates. In the school year 2009-2010 574,381 students enrolled in alternative school (NCES, 2010) while 514,238 dropped out of school (NCES, 2013). Students who drop out of school are more likely to be unemployed, make less money and end up in the judicial system (NCES, 2011). Students at alternative centers although

they keep trying to obtain their high school diplomas are not always successful and are in jeopardy of falling into the above category as evidenced by the 8.17% graduation rate in the school year 2011-2012 at the alternative education center where the study was conducted (FLDOE, 2013). The latest national graduation rates from school year 2010-2011 show a 78.6% graduation rate (NCES, 2012). The graduation rate for Florida in the school year 2010-2011 was 80.1 %. The same year the graduation rate in the county where the district was conducted was 76.5 %. In the school year 2010-2011 the school where the study was conducted had a graduation rate of 10.8% (FLDOE, 2013). At 10.8% the graduation rate at the alternative education center where the study was conducted is significantly lower than the National, Florida and County graduation rates for the school year 2010-2011. It would therefore behoove researchers to look at a possible correlation between attachment style and GPA. If a correlation is found then changes can be made within the school system to address negative behaviors associated with a negative attachment style.

This research will examine if there is a significant correlation between attachment style and GPA. If a positive correlation is found then the school system can begin to address some of the issues associated with attachment style. Some of these options include the following: teachers in elementary or middle school can refer a student to counseling if they notice any negative behaviors associated with a negative attachment style and services can be provided to parents to help them learn how to positively attach to their children. Additional counselors or therapists will be needed in to address these attachment issues early on in a child's academic life and prevent the child from dropping out in the future by teaching child or adolescent appropriate support seeking behaviors.

According to Rosenthal and Kobak (2010) support seeking behaviors differ from attachment behaviors as they are not a product of an enduring relationship, but rather are influenced by immediate needs, expertise and physical proximity. Learning these behaviors can provide the child or adolescent with a supportive context which may lead to a commitment to the individual. Some of these supportive relationships may eventually lead to an attachment bond which can eventually lead to a peer attachment bond. Finally, this study seeks to expand existing attachment theory by uncovering something new about the application of attachment theory in a specific population, namely the older adolescents who attend an alternative education center.

### **1.5. Research Design**

A quantitative approach using a non-experimental correlational design has been selected. A quantitative approach will be used as it is a way of testing a theory by looking at the relationship among variables (Creswell, 2009) using a correlational design. A correlational design looks at surface relationships, but does not determine cause (Leedy & Ormrod, 2010). The purpose of the correlational design is to see if two variables have a relationship and to what strength (Bordens & Abbott, 2011). If a correlation is found, future studies can be done to look at cause

The design of this study is intended to determine if there is a correlation between attachment style and GPA. The independent variables are the attachment styles secure, anxious/ambivalent and avoidant. The dependent variable is GPA. This design will look at

students ages 18 and over attending an alternative education center. This study will determine the attachment style by administering the Adolescent Friendship Attachment Scale (AFAS) to the students. The GPA data will be obtained first by self-disclosure and then a review of the educational records obtained through the school boards electronic database.

## **1.6. Research Questions and Hypotheses**

Question:

To what extent does attachment style correlate with the GPA of students in an alternative education center?

Hypothesis:

H<sub>1</sub>: There is a significant correlation between attachment style and GPA of students at the alternative education center.

H<sub>0</sub>: There is not a significant correlation between attachment style and GPA of students at the alternative education center.

Additional hypotheses were added in order to test for the external factors. These were as follows:

H<sub>1</sub>: The different attachment styles result in different GPAs.

H<sub>0</sub>: The different attachment styles yield the same GPAs.

H<sub>1</sub>: The different ages result in different GPAs.

H<sub>0</sub>: The different ages yield the same GPAs.

H<sub>1</sub>: The different genders result in different GPAs.

H<sub>0</sub>: The different genders yield the same GPAs.

H<sub>1</sub>: The different races result in different GPAs.

H<sub>0</sub>: The different races yield the same GPAs.

H<sub>1</sub>: The different ethnic groups result in different GPAs.

H<sub>0</sub>: The different ethnic groups yield the same GPAs.

## **1.7. Assumptions and Limitations**

This study will take place at an alternative education center in Florida. Although the students come from all over the county, they may not be a representative of students in alternative centers in other counties or in other states. Therefore the results of the study may only apply to students attending school in the same county. Secondly limitations can be found in the use of a correlational design. One has to understand a correlation is used to look for a relationship not a cause and be careful not to infer cause (Leedy & Ormrod, 2010).

A third limitation lies in the students themselves. Skipping school, truancy and being disruptive in class are all associated with dropping out of school (Finn, 1989). Some of the students at the alternative education center may be enrolled there because they have dropped out of traditional school therefore it may be difficult to reach these students because they may not have steady attendance.

## **1.8. Definition of Terms**

Definitions of terms used in this study are as follows.

**1.8.1. Alternative Programs.** Programs designed to meet the needs of students who are not successful in traditional school programs. These programs are usually housed within the traditional school (NCES, 2010).

**1.8.2. Alternative Schools or Centers.** Refer to schools created to meet the needs of students who are not successful in traditional schools. These schools are not housed within traditional schools, but are housed in a separate location (NCES, 2010).

**1.8.3. Attachment.** Refers to the way an infant attaches to their primary caregiver. This attachment pattern will determine attachment patterns later in life (Brown & Wright, 2003).

**1.8.4. Competency Based Learning.** Unlike traditional school where students take a full course to earn credits, in competency based learning students work on specific skill sets in smaller chunks in order to earn credits needed. If students can show mastery of a specific skill, they may be able to skip that particular skill set. Work is done as independent study with the assistance of a teacher as a facilitator. Students work at their own pace which prevents them from having to wait on an entire class to master a lesson before moving on.

**1.8.5. Grade Point Average (GPA).** Grade point average.

**1.8.6. Negative Attachment Behaviors and Feelings as Measured by the AFAS** Anxious/Ambivalent--worry, uncertainty and anger. Avoidant--avoiding people, non-reliance or dependence on others (Wilkinson, 2004).

**1.8.7. Older Adolescent in an Alternative Education Center.** Refers to students ages 18-21 attending an alternative education center. While the students ages 20 and 21 are not usually considered adolescents, they will be included in this definition and study as they are part of the K-12 system.

**1.8.8. Positive Attachment Behaviors and Feelings as Measured by the AFAS.**

Secure--closeness with people, ability to share and talk and confidence (Wilkinson, 2004).

**1.8.9. School Attachment.** Refers to the degree in which a student feels part of their school or a sense of belongingness (Johnson et al., 2001).

**1.8.9.1. Support Seeking Behaviors.** Ability to seek out the support of others when problems arise.

**1.8.9.2. Truant Students.** Students who do not attend school for regular periods of time for extended periods or those who do not come to school at all.



## **1.9. Expected Findings**

The expected results were based on recent research that has shown that traditional students who have formed a secure attachment with their school are more likely to have higher grade point averages (LeCroy & Krysik, 2008). Therefore it was expected that most of the students attending the alternative education center did not have a secure attachment style. In addition was expected that a correlation between attachment and GPA of students attending the center will be found with students reporting a secure attachment as having a higher GPA than those with an anxious/ambivalent or avoidant attachment as having a lower GPA.

## **2. LITERATURE REVIEW**

### **2.1. Introduction to the Literature Review**

The topic studied was attachment style and how it correlates to grade point average of students ages 18 and above at an alternative education center. School engagement, also known as school connectedness or school attachment (Bryan et al., 2012) is a predictor of academic achievement (Dotterer & Lowe, 2011). Students who are engaged in school are more likely than those not engaged to do better academically and make greater strides in academic achievements (Finn, 1989). Students attached to their schools are more likely to have higher grade point averages (LeCroy & Krysik, 2008) due to their persistence in trying their hardest and handing in their assignment (Motti-Stefanidi & Masten, 2013). Students disengaged from school are more likely than those who are engaged to have lower levels of academic achievement and extracurricular participation (Crosnoe & Needham, 2004). These disengaged students are often found in alternative centers (NCES, 2011).

Students who are not successful in a regular public high school are often sent to alternative placements such as alternative education centers. Reasons for placement in these programs include truancy, education failure, suspension or pregnancy. In the school year 1990-1991 there were 134,161 students enrolled in alternative schools across the country. This number rose by 275% to 491,738 in the school year 2000-2001 and finally by 338% to 574,381 in the school year 2009-2010 (NCES, 2011).

While enrollment in alternative schools and programs are high, graduation rates are low, even with the inclusion of delivery methods designed to meet the needs of the students. Alternative education centers offer small class sizes and competency based learning (NCES, 2011). The graduation rate at the alternative education center, where the study was performed, in the school year 2011-2012 was 8.17% (FLDOE, 2013). The results of this study can help alternative schools gain an understanding of the potential impact attachment style has on GPA, a measure of school success which leads to graduation, in order to enhance their existing programs and assist students in earning a high school diploma by using attachment theory as the theoretical framework.

Success or failure in traditional school has been studied using attachment as the theoretical framework. The SocINDEX and Sage Publications databases provided examples of empirical

data highlighting such studies. A review of the empirical studies on the fundamentals of attachment, attachment and the adolescent and school attachment has shown a gap in literature addressing attachment style and the older adolescent at alternative education centers.

This literature review provides information on the theoretical framework of attachment theory and a review the fundamentals of attachment. Also included are reviews on adolescents/attachment and reactions to stress, effects of attachment and peer relationships and psychological health, adolescents and school attachment, predictors of academic achievement and school attachment, negative outcome for students dropping out of school, the potential to amend attachment style, and finally a review of the methodological literature. Following the review will be a synthesis of research findings, a critique of the findings and a summary.

## **2.2. Theoretical Orientation for the Study**

Attachment theory was the theoretical framework used to guide this study. The central proposition was that the way in which individuals form future attachment relationships are based on the attachment experiences they had with their primary caregivers when they were young. John Bowlby can be regarded as the originator of attachment theory based on his findings that the way an individual processes social information processing patterns are a direct result of the ways they mentally internalized their experiences with their primary caregiver (Dykas & Cassidy, 2011).

In the 1950s Bowlby developed an interest in the impact parents had on their child's personality development while volunteering in a residential school before his graduate training. The interest was stimulated by two children. One of the children, who never had a stable relationship, was often isolated from the other children and was affectionless. The other appeared anxious and followed Bowlby around constantly. Because of his involvement with these two children Bowlby decided to specialize in child psychiatry and psychotherapy. It was from his early experiences where he saw the significant way in which the parent's interactions with the child influenced the child's personality and how the parent's interaction with their child was influenced by their own parents (Ainsworth & Bowlby, 1991).

Searching to explain how a young child responds to separation and reunion or even to how a child forms a tie to the primary caregiver, Bowlby found nothing to explain this phenomenon in psychoanalytic theory (Ainsworth & Bowlby, 1991). Differing from psychoanalytic theory where the concepts were derived from historical reconstruction from adults about their childhood, Bowlby believed observation of how very young children behave towards their mother was a more effective method of understanding the child's personality development (Bowlby, 1969). This caused Bowlby to continue his theory-oriented exploration in ethology, evolution, systems theory and cognitive theory (Ainsworth & Bowlby, 1991). Bowlby's work laid the foundation for future work in attachment.

According to the tenets of attachment theory an individual's attachment style begins developing within the first nine months of a child's life and is centered around interactions with



the primary caregiver (Brown & Wright, 2003). Infants are biologically predisposed to form attachment to their adult caregiver (Bowlby, 1969). The infant will look to this person as their safe haven, the one to whom they turn when they need to be soothed when they are upset, comforted when they are ill or in pain and the one with whom they explore their environment through everyday normal activities (Goldberg, Gruesc, & Jenkins, 1999). The formation of attachment does not include all aspects of the relationship between the infant and the caregiver. It includes behaviors stemming from the activation of stress in the infant and the response given to the infant by the primary caregiver. The reaction of the caregiver should reduce the arousal sensation of stress and reinstate a sense of security. This is usually done by close physical contact with the caregiver (Bowlby, 1969; Lyons-Ruth, 1996).

### **2.3. Overview of Attachment Styles**

For the purpose of this study the Adolescent Friendship Attachment Scale (AFAS) will be used. The AFAS results will show a secure, anxious/ambivalent or avoidant attachment style. A secure attachment is the positive attachment style. A secure attachment means that during infancy one learned their needs would be met and that caretakers were reliable and provided a safe environment (Orlans & Levy, 2006). Anxious/ambivalent and avoidant are the negative attachment styles measured by the AFAS. A negative attachment styles means that the infant did not have their needs met during infancy or early childhood (Cole-Detke & Kobak, 1996; Kindsvatter & Desmond, 2013). Caretakers of anxious/ambivalent attachment style individuals were inconstant in response to their infant's needs. Caretakers of the avoidant attachment style individuals rejected the needs of their infants (Brown & Wright, 2003).

### **2.4. Fundamentals of Attachment**

Children form a secure attachment with their primary caregivers when they get their needs met in response to a stressful situation. For example a secure attachment is formed when an upset, ill or in pain child gets soothed (Bowlby, 1969). A secure attachment is also formed when the children are allowed to explore their environment (Goldberg et al., 1999). When in distress, a securely attached infant or toddler will maneuver themselves to gain close proximity to their primary caregiver (Bowlby, 1982). The process of forming the secure attachment is as follows: when children find themselves in a stressful or frightening situation, which could include something as simple as a new event or person, children look to their parents for comfort. If comforted, these children can resume their exploration of new events. Secure infants and children, due to the response of their primary caregiver, will form the ability to acknowledge distress, but will be comfortable knowing their primary caregiver will be there to work them through this stress (Beck, Pietomonaco, Debuse, Powers & Saver, 2013; Kobac & Sceery, 1988).

In addition, securely attached infants, due to the response by their caregivers understand their needs will be met, they learn patience, trust and how to manage their impulses and

feelings. Because of the nature of the secure attachment infants grow to be independent, resilient optimistic and empathic individuals (Orlans & Levy, 2006). As adults when in relationships and faced with stressful situations they are able to retain their emotional well-being and rely on their significant other for comfort and support (Beck et al., 2013). Having the characteristics of being confident and comfortable in relationship stems from having parents who were caring and responsive (Gore & Rogers, 2010). Similarly, the formation of the negative types of attachment is formed through the type of relationship with the primary caregiver.

The negative attachment styles are also centered around interactions with the primary caregiver. Negatively attached infants, due to the response by their caregivers understand their needs will not be met, they learn to be cynical, untrusting, and lack confidence. They also do not grow on target developmentally. Because of the nature of the negative attachment, infants grow up lacking the ability to handle stress and become depressed or violent. These individuals lack the independence, resiliency optimism and empathy individuals found in individuals who formed a secure attachment (Orlans & Levy, 2006). Both of the negative types, anxious/ambivalent and avoidant, of attachment style measured by the AFAS stem from the behaviors of the primary caregiver. While the AFAS names one of the attachment styles anxious/ambivalent, others use the term insecure/ambivalent, but they have similar characteristics and are similar in the ways they are formed. The AFAS also refers to an avoidant type, while others refer to an anxious/avoidant type. Again the characteristics and formation are similar.

If the primary caregiver is unpredictable in their response to their children an insecure/ambivalent attachment is formed. These children have found their efforts to be comforted by their parents in the past have failed. These children see their parents as unpredictable and they are unable to reengage successfully in their exploration during the time of stress or fright (Cassidy & Berlin, 1994).

Mary Ainsworth also found individuals with the anxious/ambivalent type to have mothers who were inconsistent in their responses to them. When separated from their mother as babies, these individuals were angry and hard to calm down when reunited (Brown & Wright, 2001). As adults, these individuals when in relationships were obsessive, their emotions ran from high to low and they had extreme jealousy in their relationships with others (Hazan & Shaver, 1987). These individuals when faced with stressors draw attention to their distress and continually seek reassurance from their significant other (Beck et al., 2013). This tendency to lack confidence and worry about losing their significant other may come from their parents being inconsistent in their responses to them when they were younger (Gore & Rogers, 2010).

Individuals with an anxious/avoidant type according to Ainsworth, had mothers who were rejecting. As babies, these individuals were ambivalent in the return of their mother after a brief separation (Brown & Wright, 2001). As adults, these individuals were found to have a fear of intimacy and as in the anxious/avoidant type their emotions ran from high to low and they had extreme jealousy in their relationships with others (Hazan and Shaver, 1987). Different from the anxious avoidant type individuals with an avoidant attachment style are uncomfortable relying on others and tend to rely on themselves exclusively. In order to deal with stress, they restrain their reactions to the stress (Beck et al., 2013). This tendency to

withdraw from others stems from having parents that may have neglected them when they were younger (Gore & Rogers, 2010).

In slight contrast, Bartholomew and Horwiz (1991) found four attachment styles; secure, preoccupied, fearful/avoidant and dismissive/avoidant with secure being the positive attachment and the others negative. The secure type has the same characteristics and formations with the secure types found by other researchers. Those with a preoccupied attachment pattern feel unloved yet they have a positive regard for others. They try to foster their own self-acceptance by attempting to gain the acceptance of others whom they see as valued individuals. Those with a fearful/avoidant attachment style have a hard time understanding why they have the feelings they do and cannot regulate negative emotions. People with this type of attachment style feel they are unlovable and feel others will reject them. While these individuals may dream of a relationship they are afraid to try due to fear of rejection. Those with a dismissive/avoidant style on the other hand have a sense of worthiness, but feel negatively towards other people. Individuals with this type of attachment style see close relationships as dangerous and will avoid relationships with others and tend to be extremely independent.

Whether researchers utilize a two or three negative attachment style classification system, all negative styles had a commonality that individuals with the negative attachment style grow up with a cynical view of the world. They see others as untrustworthy, feel like a victim and take no personal responsibility for their actions. In contrast, those with a secure attachment grow up to be responsible and compassionate (Orlans & Levy, 2006).

The common thread here is it is the problematic or lack of response by the parent that promotes the negative, anxious/ambivalent and avoidant, attachment style. Whereas the consistent and nurturing response from the parent promotes the positive, secure attachment style. Securely attached individuals have lower levels of negative interactions than their counterparts with a negative attachment style (Branstetter, Furman & Cottrell, 2009). Securely attached individuals are able to turn to others for support (Beck et al., 2013; Kobak & Sceery, 1988). Individuals with a negative attachment style, anxious/ambivalent, avoidant (Cole-DeTke & Kobak, 1996) and insecure (Kindsvatter & Desmond, 2012) did not have their needs met during infancy or early childhood. These individuals have trouble with relationships (Hazen & Shaver, 1987) and do deal with stressors in a healthy manner (Beck et al, 2013).

## **2.5. Adolescents /Attachment and Reaction to Stress**

The way adolescents react to stress in their lives is based upon their attachment style. A secure attachment style is formed when a child learns to work through stressful situations by utilizing their primary caregiver to help them move through their stress (Connors, 2011); it is the comfort from the primary caregiver that helps the child process the stressful situation (Koback & Sceery, 1988). In adolescence, according to Bettmann and Jasperson (2010) when an adolescent with a secure attachment style experiences a distressful event they are able to work through it because of the secure base they established with their primary caregiver during early childhood. This is also due in part to their ability to process social information with

flexibility, a skill learned from having a secure attachment (Dykas & Cassidy, 2011). Furthermore, adolescents with a secure attachment style had mothers who showed more sensitivity during times of conflict than those without a secure attachment style (Beijersbergen, Juffer, Bakermans-Kranenburg & van IJzendoorn, 2012).

Likewise adolescents with an avoidant or insecure attachment style react to stressful situations based upon their attachment style, yet the outcome is different. An avoidant attachment style is formed when a child's efforts to be comforted by their primary caregiver during a stressful situation fails. Because of this failure they do not learn how to work stressful situations (Cassidy & Berlin, 1994). Adolescents with an avoidant attachment style, according to Cole-Detke and Kobak (1996) tend to minimize and overlook any difficulties in their life in order to avoid distress.

In slight contrast, adolescents with an insecure or preoccupied attachment style had parents who were intermittent in their responses; sometimes the parents rejected their child's need for comfort and other times offered the comfort (Connors, 2011). In turn, these children saw their parents as dangerous or frightening (Cassidy & Berlin, 1994). In adolescence these individuals exhibit anxiety when faced with stressful events (Kobak & Sceery, 1988) and some develop symptoms of neuroses or depression (Bettmann & Jasperson, 2010). In addition, according to Dykas and Cassidy (2011) individuals with an insecure attachment style will suppress any information that could bring them pain. The negative effects of attachment style are also seen in the older adolescent attending college.

These effects of attachment style on stress have been known for some time. Kobak and Sceery (1988) conducted a study with college students on how the parent/child relationship influenced their adjustment during the freshman year of college. Their study utilized the Adult Attachment Inventory (AAI) on 54 first year college students averaging 18.2 years old. Patterns were matched up with patterns of the attachment classification system. Results showed students with a secure attachment style reported loving and available parents with whom they could turn in times of stress. The students who were found to have a preoccupied attachment style reported loving parents, but they were also found to have feelings of anxiety stemming from their continual efforts to try and gain support from their parents. Those who were found to have a dismissing pattern reported rejection and lack of love from their parents; even though they did not recall specific distressing events. This lack of recall of distressing events can be associated with their attempt to minimize their feelings of rejections.

In addition to attachment style having an impact on how an individual processes stress in adolescents, attachment style also has an impact on adolescents needing psychological services. Brown and Wright (2003) investigated attachment and psychology in adolescents with two groups of adolescents. The first group consisted of a clinical group of 15 adolescents receiving psychotherapy services and the second, 30 adolescents from local schools and colleges. The adolescents were matched as best as possible between the two groups in terms of age, gender, family background, social class and ethnicity. Attachment status using the Adolescent Separation Anxiety Interview (ASAI) determined attachment style and interpersonal difficulties. The short version of the Inventory of Interpersonal Problems (IIP-32) was used to measure the difficulties adolescents face in their interpersonal relationships. The Youth Self-Report form (YSR) was used to address adolescent psychopathology. Chi-square tests were

used to compare attachment classification in the two groups and Mann-Whitney test compared the IIP-32 and the YSR between the two groups. The Kruskal-Wallis test was used to compare scores of the IIP-32 and YSR in each of the different attachment styles regardless of clinical status. Results showed the clinical group consisted of mainly ambivalent and avoidant attachment patterns and the majority of the control group had a secure pattern. These studies emphasize the impact the primary caregiver has on the child's personality development (Bowlby, 1969; Dykas & Cassidy, 2011) as it is the attachment experiences on has as a child that lays the foundation for future behaviors including reaction to stress.

## **2.6. Effects of Attachment on Peer Relationships and Psychological Health**

Adolescents who form positive peer friendships are more likely to have a secure attachment style. According to Hall-Lande, Eisenberg, Christenson & Neumark-Sztainer (2007) adolescents with a secure attachment style display better social competencies are more active in school, have stronger feelings of self-worth, have less behavioral problems and perform better in school. In addition they possess the ability to share with peers and work through distressful events when they occur (Waters, Wippman & Sroufe, 1979). In contrast the more negative styles of attachment according to Kobac and Sceery (1988) found students with dismissing, anxious/ambivalent attachment style were described by their peers as being concerned with personal adequacy, anxious, hostile or condescending. Those classified as dismissing or anxious/avoidant were only described as hostile and condescending by their fellow classmates. In regard to the perception of themselves, the dismissing, anxious/ambivalent individuals saw themselves as being anxious and less socially adequate, but they did not see themselves as being concerned with personal adequacy or as anxious, hostile or condescending. On the other hand anxious/avoidant individuals did not perceive themselves as being less anxious or socially adequate, but similarly they did not feel they were hostile or condescending as their anxious/ambivalent counterparts. What accounts for the difference between anxious/ambivalent and the anxious/avoidant individuals stems from the attachment style itself. Those with an anxious/ambivalent style seek reassurance from others where the avoidant type is uncomfortable relying on others (Beck et al., 2013). Therefore if one needs to have reassurance from others, as in the anxious/ambivalent type, they cannot be hostile as they would push others away. By not needing reassurance from others, they avoidant individuals can be seen as hostile due to their lack of reliance on others and no desire for assistance. The feelings and behaviors described above stem back to the tenets of attachment style where it has been found that affected by attachment style are formations of friendship, romantic love and future parenting styles (Wampler & Downs, 2010).

A sense of belonging and an individual's psychological health are also related to attachment style. One of the most important indicators of psychological health according to Parker and Asher (1993) is the formation of peer relationships formed in childhood and adolescence. Positive peer relationships are influenced by the attachment formed with the primary caregiver according to the tenets of attachment theory as Dykas and Cassidy (2011) found the relationship and more specifically the attachment style has a direct impact on how the child will form relationships in the future. In addition individuals with higher levels of secure attachment



are more likely to experience lower levels of negative interactions (Bransetter, et al., 2009). These lower levels of negative interactions may be related to friendships with others who have lower level of negative interactions and secure attachment styles.

While the secure attachment is associated with lower levels of negative interactions (Bransetter et al., 2009), the more negative types are associated with higher levels of negative interactions. Wampler and Downs (2010) used the Inventory of Parent and Peer Attachment (IPPA) which measures the isolated, disconnected and connected attachment groups on a group of 164 adolescent boys from a low socioeconomic neighborhood who also attended an alternative school. The purpose was to look at the peer and parent attachments in Hispanic males who had an increased risk for delinquency. They found the group of boys classified as having an isolated attachment style to be more estranged from both parents and peers than those classified with a disconnected and connected attachment style. The boys in the isolated group were more likely to report more violent behaviors and participation in fights. They also reported more depressive symptoms and struggled with feelings of being alone and misunderstood. In addition, the adolescent boys in the disconnected group were least likely to have a trusting relation with not only parents, but peers as well. They cited lack of communication with both groups, but did not perceive themselves as being alienated, although they did not trust them and did maintain a distance. The connected group reported fewer psychological distress or symptoms of depression and reported less delinquency. These studies illustrate the negative effects a negative attachment and the positive impact a secure attachment can have on peer relationships and psychological health.

## **2.7. Adolescents and School Attachment**

The attachment an adolescent has to their school can be predicted by attachment style. Johnson et al. (2001) defines school attachment as the extent in which a student feels a part of their school or a sense of belongingness. This is supported by LeCroy and Krisik (2008) findings that a student's attachment to their school is strongly predicted by the relationship they have with their parents. In slight contrast Elmore and Huebner (2010) found this attachment is not only predicted by the relationship they have with parents, but also with the relationship with their peers. Whether influenced by parents or peers, attachment can impact school success.

Attachment style has an impact on success or failure in school. Students with a secure attachment are more embedded in school, try harder, participate more in class, complete their homework assignments, participate in extracurricular activities and have the ability to avoid distracting events. It is the secure attachment style that helps them do this as an individual with a secure attachment style has the ability to process attachment relevant social information for the most part fully and with flexibility; they also have the ability to work through situations that may cause them pain (Dykas & Cassidy, 2011) and school can be a stressful situation. These students, those with a secure attachment style, also have higher GPAs (LeCroy & Krysik, 2008).

On the other hand, students with a negative attachment style may not feel comfortable in school. Individuals with a negative attachment style tend to suppress information that could bring them pain (Dykas & Cassidy, 2011). If school is a place where an individual feels pain, they are less likely to be successful. This is supported by Johnson et al. (2001) findings that



individuals who feel uncomfortable in school for either social or academic reasons individuals are more likely to withdraw or skip their classes.

In order to explore the factors that predict academic success in Hispanic adolescents, LeCroy and Krysik (2008) surveyed 170 middle school students, of these 46 were white and 124 Hispanic. For all the students, the researchers found students who placed more importance on academics to have a greater attachment to the school and had higher levels of parental support. Attachment to the school was found to be more strongly predicted by the relationship the adolescent had with their parent and their peers. This study supports Liska and Reed (1985) findings that the bond with the parent to be strongly correlated with whether or not an adolescent would stay in school. These findings further show the impact attachment style has on success in school.

Using data from the ELS:2002, a national data set for public use collected by the NCES, Bryan et al. (2011) examined the effects of school bonding and academic success on 10, 424 high school seniors. In this study school bonding was measured by attachment to teachers, school commitment-beliefs, school commitment-behaviors, attachment to school-satisfaction, attachment to school-fairness and attachment to school safety, Utilizing a simple regression analyses, the authors found the school bonding significantly related to academic achievement in all areas except attachment to school-fairness.

In addition to attachment style and school success, attachment style also has an impact on delinquency. Liska and Reed (1985) used data from the Youth in Transition study and measured the attachment between a group of 1886 adolescent boys from 87 high schools and their parents. The purpose of the study was to look at school attachment and delinquency. School attachment was measured through participation in extracurricular activities and immediate satisfaction with the entire school experience. The authors found a cyclical pattern between attachment to parents and delinquency with school. They concluded the relationship with the parent had a strong tie to retention in school as well as relationships the adolescent formed at the school which in turn affects the relationship with the parent. School attachment they found to be a factor in the relationship with the parent, but school attachment was not a major reason for delinquency, parental attachment played the major role. Students with higher secure attachment with their parent were more likely to stay in school.

In contrast, another study found attachment to school to be a predictor in school success. Finn (1989) found students who are active in their school identify with the school which causes them to internalize a feeling of belongingness. Students who drop out of school are more likely not to participate in school activities and lack educational aspirations. These students do not study, receive poor grades and feel alienated by the school itself. Furthermore, the Bryan et al. (2012) study showed students who reported disliking school had significantly lower academic achievement scores. Whether emphasizing the relationship between student and school or student and parent, all studies have one thing in common, attachment is the influencing factor.

## **2.8. Predictors of Academic Achievement and School Attachment**

School attachment, characteristics of peer group and parental support have been found to be significant predictors of an adolescent's grade point average. The greater attachment to the

school, the more academic the peer, and the higher levels of parent support result in a higher grade point average in the student. Attachment to school was found to be most strongly predicted by the adolescent parent relationship (LeCroy & Krysik, 2008) and according to Elmore and Huebner (2010) by both the parents and the peers. Yet others found different predictors.

Other studies have shown the peer relationship plays a role in the success or lack of success in school. Carbonaro (1998) found students whose friends drop out of school increase their risk of dropping out of school. Looking at data from the National Education Longitudinal Study of 1988 (NELS: 88) the authors looked at 25,000 8<sup>th</sup> graders, their progress two years later and at graduation. Using a structural equation modeling (SEM) technique the authors tested the variables of student engagement, friendship networks and school completion. Friendship networks did turn out to be a mediating factor for student engagements and the probability of a student dropping out of school with Mexican Americans to be slightly less involved than their non-Latino counterparts in extracurricular activities. According to NCES (2011) minority students have greater risk of dropping out of school.

In addition to relationships with parents and peers, school involvement also plays a part in school attachment. According to Johnson et al. (2001) students are more likely to perform at higher levels when they are embedded or attached to their school. This supports an earlier study by Finn (1989) who found students who are actively involved in their school actually identify with the school and internalize a feeling of belongingness. Students who drop out of school have a lack of commitment to the school. They lack educational aspirations and values and do not participate in school activities. These students do not study, receive poor grades and feel alienated by the school itself. Looking at 13,000 school aged children ages 12-16, Janosz, Archambault, Morizot & Pagani (2006) used the New Approaches New Solutions (NANS) longitudinal data set from 2000-2005 to look at school engagement and high school completion. They found risk of drop out to be increased with an unstable pathway of school engagement, meaning students who had low levels of engagement were determined to be more likely to drop out of school. All three authors found it was the involvement, activities and attachment students had with their schools that kept them in school.

## **2.9. Negative Outcomes for Students Dropping Out of School**

The National Center for Education Statistics (NCES) Common Core of Data (2010) defines a high school dropout as one who had been enrolled at some time during the previous school year, but not currently enrolled in the current school year. This student has not successfully completed school, transferred, moved to another country, died or was prevented from attending to an illness NCES further postulates that in the school year 2007-2008, 2,916,936 students graduated from high school while 8% or 584,515 dropped out of school during the same year.

There are a number of negative outcomes for the high school dropout. The median income for a high school dropout ages 18-67 is \$23,000. A person earning their high school diploma or GED has a median income of \$42,000. This is a loss of \$630,000 over a lifetime of working. The

high school dropout costs the American tax payer \$240,000 over his or her life time due to reliance on Medicaid and Medicare and welfare and interactions with the criminal justice system. They also contribute the least amount of tax to the government, have the worst health and make up the highest number of people in the United States in the prison system and on death row (NCES, 2011). According to the US Department of Labor (2013) high school dropout have the highest level of unemployment. Not having a high school diploma can impact negatively on one's life. These individuals often live in poverty and earn less money than individuals with high school diplomas (Hawkins, Jaccard, & Needle, 2013). Ream and Rumberger (2008) found people who do find work, even though they do not have a high school diploma have limited pay advancement and limited access to health insurance.

## **2.10. Potential to Amend Attachment Style**

Adolescence may be the time period to assist individuals in amending their attachment styles. Brown and Wright (2001) feel the adolescent time period may offer one the opportunity to amend their attachment strategy. They found as adolescents become more aware and are able to access their inner thoughts, feeling and memories they begin to possess the ability to reflect on aspects of themselves and others. Brown and Wright (2003) further these findings as they find as adolescents mature it opens the opportunity for intervention which could include revision and consolidation of attachment related information. Furthermore, Beijersbergen et al. (2012) in their longitudinal study with 125 adopted adolescents also found the attachment style can be modified. They concluded that an adolescent can change from an insecure attachment style to a secure attachment style when the mother figure, that has shown less maternal sensitivity support in the early childhood years, increases their sensitivity support in adolescence. All three studies support the potential for attachment style to be modified or changed which could in turn enhance the findings that it is the attachment style formed during infancy that lays the foundation for future attachments (Dykas & Cassidy, 2011) as these studies show the adolescent time period can amend the earlier formation.

## **2.11. Review of Methodological Literature**

Similar to previous studies, this study utilized a quantitative method of determining an aspect of attachment and performing a correlation of the findings with another facet. For example Brown and Wright (2003) used a two sample comparative design sample to look at attachment and the relevance to developmental psychology with 45 individuals. The authors used the Adolescent Separation Anxiety Interview (ASI), the Youth Self Report Form (YSR) and the Inventory of Interpersonal Problems (IIP-32). Chi-Square tests were used in order to compare the results of the ASI classifications between the two groups. Likewise this study will use a Chi-Square test to assess the association between the variables. A Kruskal-Wallis test was utilized in the above study order to see any comparisons between the results of the IPP-32 and the YSR. A Kruskal-Wallis test will not be performed as it is not appropriate for this study, but an

ANOVA will be conducted to look at the demographic information in regard to attachment and GPA.

Unlike the Brown and Wright (2003) study where the ASI was used to determine attachment style, Wampler and Downs (2010) used the Inventory of Parent and Peer Attachment (IPPA) to determine attachment style. For this study the AFAS will be used. Although the instruments are different, they all measure some aspect of attachment. This study however will use the AFAS to measure attachment style due to its ease and quickness in administration as students participating in the study will only be allowed out of the classroom once for a short period of time and due to the fact that the AFAS measures attachment based on current relationships (Wilkinson, 2008). It is important to look at current relationships with this population as it is during this time period when the adolescent moves away from the parent and turns to peers for social and emotional support (Wilkinson, 2004). Even though the attachment style will be based on the attachment with the peer, it is relevant as it is the attachment style formed during infancy that lays the foundation for future attachments (Dykas & Cassidy, 2011).

## **2.12. Synthesis of Research Findings**

An adolescent's success or lack of success in school can be predicted by attachment style no matter who is the stronger influencer on their lives. While LeCroy and Krisik (2008) find a student's attachment to their school to be strongly predicted by the relationship they have with their parents and Elmore and Huebner (2010) find the predictor to be both parents and peers they are both due in fact to the attachment style formed during infancy and early childhood as according to Dykas and Cassidy (2011) it is this early attachment style that lays the predictor for future relationships. Children who do not form secure attachment style do not have the ability to adequately work through stressful situations (Cassidy & Berlin, 1994). One very stressful situation is school.

The negative attachment styles, avoidant and insecure can lead to failure in relationships and in school. An adolescent with an avoidant or insecure attachment style, has learned adults will fail them, based on lack of comfort by the primary caregiver during a stressful event (Cassidy & Berlin, 1994). In addition an adolescent with an avoidant attachment style when confronted by a teacher to perform according to Cole-Detke and Kobak (1996) will minimize the situation and overlook the difficulties in order to avoid distress.

In other words the adolescent may ignore prompts by the teacher to study or seek help or may not bother because they will be met with failure anyway. Not only has an adolescent with an insecure attachment style learned adults will fail them, based on lack of comfort by the primary caregiver during a stressful event (Cassidy & Berlin, 1994) when confronted by a teacher to perform according to Cole-Detke and Kobak (1996) they will exhibit anxiety (Kobak & Sceery, 1988) as this adolescent according to Cassidy and Berlin (1994) adults as dangerous or frightening. Therefore how one cannot expect a student to turn to a teacher when they have learned adults can be dangerous or frightening. Not only does the relationship with the teacher impact success in school, but the relationship with peers does as well.

The question left to answer is why students with a negative attachment style lack in friendship ability and academic performance. This goes back to Bowlby's original work where it was discovered the way in which an individual forms future attachment relationship is based on the attachment experiences they had with their primary caregiver (Dykas & Cassidy, 2011). Therefore if one forms an avoidant or insecure attachment it is because they were not comforted by their parents in times of stress and learned of failure. In addition the adolescent with an insecure style learned fear (Cassidy & Berlin, 1994). Later on in life the individual with a dismissing or anxious avoidant style will be seen as hostile or condescending by their peers and the individual with a dismissing, anxious or ambivalent style will be seen as being anxious, hostile, condescending or overly concerned with personal adequacy (Kobak & Sceery, 1988). Since Hall-Lande et al (2007) found adolescents are more likely to stay in school are those who have formed supportive friendships it would stand to reason those with a negative style would therefore be at a disadvantage in school because of how their peers see them. The claim that the adolescents with a negative attachment style would not perform as well in school as the adolescent with a secure style is substantiated by Johnson et al. (2001) findings that students who do not feel comfortable at their school for social reasons are more likely to withdraw or skip class.

### **2.13. Critique of Previous Research**

The purpose of this study is to look at the different attachment styles of adolescents attending an alternative center and to see to what extent the independent variable, attachment style average, predicts the dependant variable, GPA. It is known students whom have formed attachments to their school are more likely to have higher grade point averages (LeCroy & Krisk, 2008) and those disengaged from schools are more likely to show lower levels of academic achievement (Crosnoe & Needham, 2004), but these studies were performed on traditional school students. Researchers have primarily focused on attachment with infants and adults (Brown & Wright, 2001). While Brown and Wright (2003) used alternative education students in their study, the purpose of their study was to look at attachment style and its relevance to psychological development, not GPA. In addition to Attachment Theory there are other theories relevant to the issue of students not completing their education, even in alternative centers.

Other studies found in research have opposing viewpoints on why students act and behave the way they do. The following paragraphs will review Social Learning Theory and the socio-cultural models approach to help explain why adolescents relate to others the way they do and drop out of school. In addition limitations to both Social Learning Theory and the socio-cultural models approach will be discussed.

Social Learning Theory holds people learn through interactions with a number of socializing agents. Through these interactions, behaviors are either taken on or ignored (Brown et al., 2005). McHale, Dotterer and Ji-Yeon (2009) support these findings as they find children learn from what they do in their everyday activities. It is within these everyday activities where children begin to acknowledge and develop their own abilities. Therefore Social Learning

Theory could be an explanation to Carbonaro's (1998) findings that students who have friends who drop out of school are also more likely to drop out of school. It could be reasoned that it is not because of attachment style, but because these individuals copied behaviors they learned from their peers, which ultimately resulted in their dropping out of school as well. What this theory does not explain is what led the individual to interact with the negative socializing agents in the beginning. This theory does not explain why there are some individuals who live in high crime areas or who have siblings who drop out of school, yet they do not.

Another possible theory to help understand why students do not perform well in school is the socio-cultural models approach. This approach takes a look at the external world in which one develops. Learning comes through cognitive and commutative functions embedded in social and cultural events (Martin, Bremner, Salmon, Rosenberg & Giles-Conte 2008). This model gives direction to individual experience. This model provides guidelines to individuals on how they should be or how they should act (Markus & Hamedani, 2007). This model can help explain why some groups of individuals, such as students who have dropped out of school, behave or act the way they do. Students who have dropped out of school may be more likely to live a world where there are fewer opportunities for control and choice and less access to services or material things. Therefore their socio-cultural experience may not encourage education as other obligations take precedence.

Human beings are social beings. They are both interdependent and dependent on the social world in which they live and engage (Marcus & Hamedani, 2007). Take for example maltreated children. They are more likely to do poorly on tests, repeat grades and be refereed for disciplinary more often than non-maltreated children (Ecenrode, Laird & Doris, 1993). The socio-cultural models approach can help understand the individual experiences of the children. Their socio-cultural history may be different than that of the teachers or administrators who do not understand why they behave or act the way they do. Again, this theory does not explain individual differences, but it does not explain why some individuals within the same social-cultural atmosphere are successful and why some are not.

#### **2.14. Summary**

Understanding attachment can help one understand how individuals process social interactions, (Dykas & Cassidy, 2011) such as school and according to Wampler and Downs (2010) form friendships. The different types of attachments influences these interactions and friendships as it has been found those with secure attachments can share with peers and can work through distressing events (Waters et al., 1979) and grow up to be responsible and compassionate (Orlans & Levy, 2006). Those with a negative attachment style fall behind their positively attached peers as their academic performance is not as high and in terms of their placement in school these students may find it difficult as they are often shunned (Granic & Peterson, 2006).

Findings have shown students attached to their school feel they belong there (Johnson et al., 2001) and this impacts their education attainment in a positive way with higher GPAs (LeCroy & Krysik, 2008). Those who do not feel they belong tend to withdraw or skip class (Johnson et al., 2001). No matter the predictor value for adolescents staying in school, the parent relationship



as found by LeCroy and Krysik, (2008), the parent and peer relationship as found by Elmore & Huebner (2010) or from cyclical relationship of parents and peers influencing each other as found by Lyska and Reed (1985) they all have attachment in common.

The literature shows there is a relationship between school engagement and attachment (Finn, 1989) and that disengaged students are more likely to have lower levels of academic achievement (LeCroy & Krisik, 2008). The literature also shows there is the potential for the attachment patterns to be changed in adolescence as Brown and Wright (2003) feel as the adolescent matures they are open to the opportunity for intervention which could include revision and consolidation of attachment information. Taking a look at past and current literature one can see that attachment has been known to be an influencing factor on educational attainment, yet these findings have not been acted upon in the school system nor has enough research been conducted on those in alternative education centers. In addition, according to Connors (2011) attachment theory remains vastly unexplored in the clinical world. Although attachment theory has a strong research base, it is often ignored for more traditional psychoanalytical theories. Therefore discovering the attachment patterns of adolescents in the alternative center and developing interventions could be life changing for these individuals as Brown and Wright (2001) find it is during adolescence when the attachment strategies can be amended.

### **3. METHODOLOGY**

#### **3.1. Purpose of the Study**

The purpose of this current study was to determine the attachment style of the older adolescents in an alternative education center and to see to what extent attachment correlates with GPA. Secondly, this study sought to extend the work by LeCroy and Krysik (2008) who found attachment to be a significant predictor of an adolescent's GPA. In addition as well as extend the work by Johnson et al. (2001) who found students perform at higher levels when they feel attached to their school, but with an understudied population, older adolescents in an alternative education center. The reason for looking at the older students in the alternative center is due to their personal characteristics. These students tend to share some of these characteristics: they are transient, too old for their grade level, parents themselves, truant or have other obligations and responsibilities outside the school beyond those of a typical high school student. In addition, the number of students attending alternative schools is rising while the graduation rates from these alternative programs are very low. In the school year 2012-2013 there were 257 potential graduates at the alternative education center where the study was conducted, yet only 21 received a diploma. This is a graduation rate of 8.17% (FLDOE, 2013).

Previous studies have shown attachment to the school to be a significant predictor of GPA (Johnson et al., 2001). According to Dykas and Cassidy (2011) gaining an understanding of an individual's attachment style can help explain how and why the individual processes other

social interactions. This is significant because school is a place where social interactions occur and gaining understanding of an individual's attachment style can help explain what attachment styles correlate to higher or lower GPAs. A statistically significant correlation between attachment style and GPA may offer educational leaders the ability to make changes or additions in school programs to address the needs of individuals who have attachment styles correlated to lower GPAs. In addition results of correlational study between attachment style and GPA of the older adolescent will add to the literature and may open the door to potential causal studies that could lead to changes made in parenting classes and pre-school classes to help parents or primary caregivers understand the importance of attachment and teach parents and primary caregivers how to foster a secure attachment with their child.

### **3.2. Research Design**

A quantitative approach using a non-experimental correlational design was selected to answer the research question: To what extent does attachment style correlate with the GPA of students in an alternative education center? A quantitative approach was deemed the most appropriate as it was a way of testing a theory by looking at the relationship among variables (Creswell, 2009) using a correlational design. The correlational design met the needs of this study as this type of design looked at surface relationships, but did not determine cause or effect (Leedy & Ormrod, 2010). In this study it was first necessary to determine the attachment style of the older adolescent and then perform a correlation between attachment style and GPA using data from this understudied population, the older adolescent in an alternative center.

The independent variable in the study was attachment style (Secure, Anxious/Ambivalent and Avoidant) and the dependent variable GPA. The Adolescent Friendship Attachment Scale (AFAS) was given in order to determine the students' attachment styles. The AFAS was an appropriate instrument as it measured the quality of close friendships of adolescents conceptualized as that of an attachment relationship (Wilkinson, 2008). Self-disclosure and a review of the school system's electronic records database was utilized in order to determine GPA.

The rationale for using this type of approach stemmed from the ease of using the AFAS. Students in the alternative center could not be out of class for long periods of time in order to participate in a research study. The AFAS consists of 30 questions and can be answered in less than 15 minutes. Secondly, the AFAS determined attachment style based on the relationship with a best friend. It is during the time of adolescence when an individual becomes more independent from the family and peers take on a more essential role in their lives (Wilkinson, 2008). It is also in the time period of adolescence where an individual is more likely to spend less time with their parents and more time with friends. Friends become the people where the adolescent turns to for social and emotional support (Wilkinson, 2004). Because attachment style developed during infancy with the primary caregiver has a direct impact on how relationships will be formed in the future (Dykas & Cassidy, 2011), the use of the AFAS is appropriate as it will determine attachment style based on current relationships. In addition, demographic data was collected in order to control for influences not related to the research

questions and to ensure populations excluded from the study, those under the age of 18 or court ordered to attend the school, did not participate.

### **3.3. Target Population and Participant Selection**

The population participating in the study came from one alternative education center in where currently there are 424 students in attendance. The alternative education center is a minority majority school meaning the majority of students are from minority races. At the time the data was gathered the make-up of the school was as follows: 65% Black, 28% White, 2% Multi Racial, 1% Asian and 2% other. Of these races, 24% are of Hispanic origin. In addition 53% of the population is male and 47% female. These students attend the alternative education center for a variety of reasons.

Adolescent students attend this school because of academic failure, excessive suspensions, lack of credit, a court order or because they are too old to attend a traditional school as they lack the credits to be on target with their grade level. Only students who attend the school voluntarily were allowed to participate, those court ordered to attend were not allowed to participate. The sample therefore consisted of the non-traditional students ages 18 and over less the court ordered students. Their participation was strictly voluntary and students were allowed to leave or stop their participation at any time. The guidance director was on hand in case the students needed to speak with her.

The number of adolescent students sampled, aged 18 and over, was selected based on Leedy and Ormond's (2010) suggestion using the largest sample size as possible. Bock, Velleman and De Veaux (2004) also recommend using the largest number possible in order to decrease the margin of error. At the time of the study there were 259 students aged 18 and older at the alternative center and all who were there voluntarily were invited to participate.

In addition, it was imperative to invite the entire population to participate due to the characteristics of the population itself. These students do not always come to school and therefore creating a sample size out of the population would not have worked as they may not have been in attendance that week. It was important that out of the population of 259 to have at least 71 students to participate in order to get a 10% margin of error with a 95% confidence level (Rasoft.com, 2004).

### **3.4. Procedures**

In order to initiate this study, the researcher needed to be granted permission to conduct research from the school board's research department. The researcher filled out the required paperwork and provided the research department with an approval letter from Capella's IRB. Because the researcher currently works for the school system, she has access to the school systems electronic records database, TERMS and did not need the research department to pull the GPA for participating students. However, the researcher needed to be granted permission to look at individual student grades from the students themselves and permission was asked via the consent form.

After permission was granted from the school board to conduct research the researcher contacted the principal at the alternative school for permission to collect data in her school. The principal granted permission with one change, instead of having the researcher go to the individual classrooms, the principal wanted the researcher to meet the students in the cafeteria. The researcher then contacted the guidance director to set up some dates for data collection. Due to the upcoming holidays and end of course exams, the guidance director could only spare two days instead of three. She also suggested including a lollipop for all students as it would keep them quiet as the researcher read the script explaining the study. The researcher created an announcement for the secretary to read over the school's intercom.

Shortly after the announcement was read students began entering the cafeteria. The researcher gave all students a recruitment letter, the consent form, demographic information sheet, attachment scale, pen and a lollipop; all were inside an envelope. After all students were settled the researcher read the recruitment script and answered all the questions. Students interested in participating completed the consent form, demographic information sheet and AFAS, while those who were not left. Students were instructed to place the consent and assent forms, the demographic information sheet and the attachment scale in the envelope, seal it and hand it in on their way out the door or hand it to the guidance counselor within two days. All those who wished to participate filled out the forms in the cafeteria, no one kept them to hand to the guidance counselor at a later date.

Later on that day, the researcher opened each envelope individually and checked in the electronic database to make sure the GPA information was correct; GPAs were corrected as necessary. Students who do not give assent and consent, but turned in the forms were excluded the study. Of the 76 envelopes collected, 64 were viable and 12 were incomplete. The researcher then placed the consent form and demographic sheet and attachment sheet in two separate piles so there would be no way to see what demographic and attachment scale sheet correlated with the consent and assent forms. The demographic information sheet and the AFAS were coded with corresponding numbers. The researcher then tallied up the AFAS scores.

Three days later the researcher returned to the school for the second day of data collection. The guidance director informed the researcher the study needed to be moved to the media center. The announcement was adjusted and made. Again shortly after the announcement was made the students made their way to the media center. Students who had already participated were turned away. The same procedures were followed in terms of explaining the study, collecting data and verifying GPA. This day 14 envelopes were collected and all were viable.

### **3.5. Instruments**

The instrument used to collect data on attachment style was the AFAS. The AFAS is a 30 item self-administered questionnaire measuring the quality of close friendships of adolescents conceptualized as that of an attachment relationship. There are three attachment styles measured by the AFAS, secure, anxious/ambivalent and avoidant. A person with a secure attachment style has the ability to be close with people and be able to share and talk with them

in confidence (Wilkinson, 2008). Individuals with a secure attachment style have less negative interactions with others in comparison with other negative attachment styles (Branstetter et al., 2009) and grow up to be responsible and compassionate (Orlans & Levy, 2006).

The second attachment styles include the anxious/ambivalent style. A person with this style is often worried, uncertain and angry (Wilkinson, 2008). Their emotions run from high to low and they experience extreme jealousy. When in relationships, they become obsessive (Hazan & Shaver, 1987) and they grow up with a cynical view of the world (Orlans & Levy, 2006).

The third type is avoidant. A person with an avoidant attachment style avoids people and will not rely or depend on others (Wilkinson, 2005). They have a fear of intimacy and similar to the anxious/ambivalent type their emotions run from high to low and they experience extreme jealousy when in relationships (Hazan & Shaver, 1987). Individuals with this attachment style take no personal responsibility for their actions (Orlans & Levy, 2006).

The AFAS was specifically designed to focus on the attachment aspects of the adolescent with their best friend. The AFAS has been validated against other self-reporting survey instruments such as the Relationship Questionnaire and the Inventory of Parent and Peer attachment and was found to be reliable and demonstrated the necessary convergent and discriminate validity upon comparison. On the scale questions 1, 2, 4, 8, 9, 10, 15, 21, 22, 23, 26, 27 and 30 relate to a secure attachment style. "When I have a bad day my friend cheers me up" (p. 1278) is an example of a secure question. Questions 3, 6, 13, 14, 17, 20, 24, and 25 relate to an avoidant style. "I don't like depending on my friends" (p. 1278) is an example of an avoidant question. Questions 5, 7, 11, 12, 16, 18, 19, 28, and 29 relate to the anxious/ambivalent attachment style. "I worry my friend doesn't really like me" (p. 1278) is an example of an anxious/ambivalent question (Wilkinson, 2008). The AFAS was easily administered in the school setting and did not require students to be out of class for a prolonged period of time. GPA data was collected on the demographic information sheet as well as information to identify external factors; age, gender, race and ethnic group.

### **3.6. Research Questions and Hypotheses**

To what extent does attachment style correlate with the GPA of students in an alternative education center?

Question:

To what extent does attachment style correlate with the GPA of students in an alternative education center?

Hypothesis:

H<sub>1</sub>: There is a significant correlation between attachment style and GPA of students at the alternative education center.

H<sub>0</sub>: There is not a significant correlation between attachment style and GPA of students at the alternative education center.

Additional hypotheses were added in order to test for the external factors. These were as follows:

H<sub>1</sub>: The different attachment styles result in different GPAs.

H<sub>0</sub>: The different attachment styles yield the same GPAs.

H<sub>1</sub>: The different ages result in different GPAs.

H<sub>0</sub>: The different ages yield the same GPAs.

H<sub>1</sub>: The different genders result in different GPAs.

H<sub>0</sub>: The different genders yield the same GPAs.

H<sub>1</sub>: The different races result in different GPAs.

H<sub>0</sub>: The different races yield the same GPAs.

H<sub>1</sub>: The different ethnic groups result in different GPAs.

H<sub>0</sub>: The different ethnic groups yield the same GPAs.

### **3.7. Data Analysis**

Data gained from the AFAS and the demographic sheet was placed into the Statistical Package for the Social Sciences (SPSS). The data to be analyzed included the Attachment Scale results. "The Secure attachment style was identified with a 1, the Anxious/Ambivalent a 2 and the Avoidant a 3". The GPA is a ratio and was entered as is.

The demographic information was also coded. Age is ratio and therefore was taken as recorded. "Gender was identified with a 0 for male and 1 for female." "For race, 0 was the identifier for left blank, 1 for White, 2 for Black, 3 for Asian, 4 for Indian/Pacific Islander, 5 for Multiracial and 6 for Other." "The ethnic group Non-Hispanic was identified with a 0 and a 1 for Hispanic."

After the data was entered into SPSS a Chi Square test was performed to assess the association between the two categorical variables (Algase et al., 2009). Chi square was deemed most appropriate as it can be computed for nominal and ratio data (Leedy & Ormrod, 2010) in other words, compare the relative frequency of attachment style (nominal data) and GPA (ratio data). This type of test showed to what extent attachment style correlated with the GPA of students in an alternative education center. In addition, an ANOVA was performed on the information gathered from the demographic information in regard to attachment and GPA. The common level of confidence level was an alpha level of .05. This means if the probabilities or p-values of the statistical tests performed are less than .05, then the null hypotheses can be rejected. If instead the probabilities or p-values of the statistical tests are greater or equal to .05%, the null hypothesis will not be rejected.

### **3.8. Expected Findings**

The findings from this study were expected to be consistent with previous studies on attachment style and GPA. While there has been an abundance of studies on attachment style and GPA, resulting in conclusions that indicate a correlation, a review of the literature revealed a lack in the literature addressing attachment and GPA with the older adolescent in an alternative school. This study will answer the question: To what extent does attachment style



correlate with GPA of students in an alternative center? Additionally it is expected to find adolescents with the secure attachment style to correlate with a higher GPA, a GPA above a 2.0 and those with the anxious/ambivalent and avoidant styles to correlating with a lower GPA, lower than a 2.0.

## **4. DATA COLLECTION AND ANALYSIS**

### **4.1. Introduction**

This purpose of this study was to determine the attachment style of the students at an alternative education center and to examine the correlation between attachment style and GPA. A quantitative non-experimental design was utilized for answering the research question and testing the hypothesis. Data was collected through a face to face meeting with the students at the alternative education center where the Adolescent Friendship Attachment Survey (AFAS) was administered. The researcher herself was authorized through the school board and the students themselves to access their GPA through the school system's electronic data base. Further information was gathered on the demographic information sheet to ensure no participant was ineligible to participate, i.e. if they were court ordered to attend or if they were too young. This chapter will present the study's results in examining how and to what extent attachment correlates GPA in students attending the alternative education center. The research question and hypothesis that guided the study were as follows:

Question:

To what extent does attachment style correlate with the GPA of students in an alternative education center?

Hypothesis:

H<sub>1</sub>: There is a significant correlation between attachment style and GPA of students at the alternative education center.

H<sub>0</sub>: There is not a significant correlation between attachment style and GPA of students at the alternative education center.

Additional data was gathered from the participants to identify external factors that may impact the study results. This data was collected through the demographic information sheet. An ANOVA was run to see if the means were the same across the groups. The hypotheses were as follows:

H<sub>1</sub>: The different attachment styles result in different GPAs.

H<sub>0</sub>: The different attachment styles yield the same GPAs.

H<sub>1</sub>: The different ages result in different GPAs.

H<sub>0</sub>: The different ages yield the same GPAs.

H<sub>1</sub>: The different genders result in different GPAs.

H<sub>0</sub>: The different genders yield the same GPAs.

- H<sub>1</sub>: The different races result in different GPAs.  
 H<sub>0</sub>: The different races yield the same GPAs.  
 H<sub>1</sub>: The different ethnic groups result in different GPAs.  
 H<sub>0</sub>: The different ethnic groups yield the same GPAs.

#### **4.2. Description of the Sample**

Participants in the study were all current students in an alternative education center in Florida where at the time of the study there were 424 students in attendance with 259 students aged 18 and over. Before any data could be collected permission needed to be granted from the school board in order to conduct the study. Once permission was granted from the school board, the principal of the school needed to grant permission to collect data on her site. Once the principal granted permission the guidance director set up a meeting time and place for the researcher to meet with the students and explain the study.

All students over the aged 18 and over were invited to participate in the study through an announcement over the intercom. The data was gathered over a period of two days. Attachment data was gathered through the use of the AFAS. The researcher then calculated the results of the survey in order to determine the attachment style. GPA was verified by the researcher using the school board's electronic student records database. While 90 participants handed in the required paperwork, only 78 handed in completed paperwork, thus making 78 the sample size. Initially when the study was proposed there were 297 students ages 18 and over at the education center. The study however was conducted in the next school year where there were only 259 students ages 18 and over, thus when running the numbers through Raosoft® (Raosoft.com, 2004) it was determined that 71 students were needed to participate in order to tolerate a 10% margin of error with a 95% confidence level.

Of the 78 participants, 44 (56.4%) were 18 years of age, 24 (30.8%) were 19 years of age, 8 (10.3%) were 20 years of age and 2 (2.6%) were 21 years of age. The demographic breakdown of age is presented in Table 1. Gender as presented in Table 2, shows 46 (59%) of the participants were male and 32 (41%) were female. Shown in Table 3, race was indicated as 4 (5.1%) no race, 2 (2.6%) were White, 52 (66.7%) were Black, 1 (1.3%) was Asian, 12 (15.4%) were Multiracial and 7 (9%) indicated other. Of these 78 students, as presented in Table 4, 61 (78.2%) indicated they were non-Hispanic and 17 (21.8%) indicated they were Hispanic; this is presented in Table 4.

**Table 1. Age**

Age	Frequency	Percent	Cumulative Percent
18	44	56.4	57.7
19	24	30.8	88.5

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20	8	10.3	97.4
21	2	2.6	100.0
Total	78	100.0	

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**Table 2. Gender**

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Sex	Frequency	Percent	Cumulative
			Percent
Male	46	59.0	59.0
Female	32	41.0	100.0
Total	78	100.0	

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**Table 3. Race**

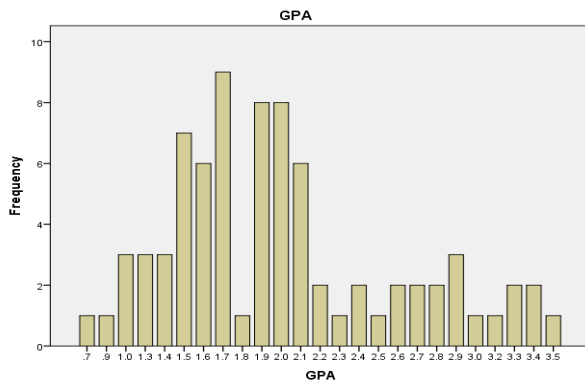
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Race	Frequency	Percent	Cumulative
			Percent
Blank	4	5.1	5.1
White	2	2.6	7.7
Black	52	66.7	74.4
Asian	1	1.3	75.6
Multiracial	12	15.4	91.0
Other	7	9.0	100.0
Total	78	100.0	

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**Table 4. Ethnicity**

Figure 1 shows the GPA frequencies of the 78 participants. The GPAs of the students ranged from .7 to 3.5. One student (1.3%) had a .7 GPA, 1 student (1.3%) had a .9 GPA, 3 students (3.8%) had a 1.0 GPA, 3 students (3.8%) had a 1.3 GPA, 3 students (3.8%) had a 1.4 GPA, 7 students (9.0%) had a 1.5 GPA, 6 students (7.7%) had a 1.6 GPA, 9 students (11.5%) had a 1.7 GPA, 1 student (1.3%) had a 1.8 GPA, 8 students (10.3%) had a 1.9 GPA, 8 students (10.3%) had a 2.0 GPA, 6 students (7.7%) had a 2.1 GPA, 2 students (2.6%) had a 2.2 GPA, 1 student (1.3%) had a 2.3 GPA, 2 students (2.6%) had a 2.4 GPA, 1 student (1.3%) had a 2.5 GPA, 2 students (2.6%) had a 2.6 GPA, 2 students (2.6%) had a 2.7 GPA, 2 students (2.6%) had a 2.8 GPA, 3 students (2.8%) had a 2.9 GPA, 1 student (1.3%) had a 3.0 GPA, 1 student (1.6%) had a 3.2 GPA, 2 students (2.6%) had a 3.3 GPA, 2 students (2.6%) had a 3.4 GPA and 1 student (1.3%) had a 3.5 GPA.



**Figure 1.** GPA Range of participants

Ethnicity	Frequency	Percent	Cumulative
			Percent
Non-Hispanic	61	78.2	78.2
Hispanic	17	21.8	100.0
Total	78	100.0	

Shown on Table 5, results of the AFAS survey. Of the 78 participants, 53 (68%) the survey indicated a Secure Attachment, 3 (3.8%) the survey indicated an Anxious/Ambivalent Attachment and 22 (28.2%) the survey indicated an Avoidant Attachment.

**Table 5.** Number of participants in each attachment style

Attachment Style	Frequency	Percent	Cumulative Percent
Secure	53	67.9	67.9
Anxious/Ambivalent	3	3.8	71.8
Avoidant	22	28.2	100.0
Total	78	100.0	

## **Summary of the Results**

To determine the significance of the correlation between attachment style and GPA, the following hypothesis was tested:

H<sub>1</sub> There is a significant correlation between attachment style and GPA of students at the alternative Education center.

H<sub>0</sub> There is not a significant correlation between attachment style and GPA of students at the alternative education center.

To examine the correlation between attachment style and GPA a multiple correlation analysis was conducted. Table 6 presents the results. Of the 78 students, 53 had a Secure Attachment and had a .7-3.5 GPA range. One student had a GPA of .7, one a .9, two a 1.0, two a 1.3, one a 1.4, four a 1.5, three a 1.6, seven a 1.7, four a 1.9, seven a 2.0, five a 2.1, two a 2.2, one a 2.3, two a 2.4, one 2.5, one a 2.6, one a 2.8, three a 2.9, one a 3.2, one a 3.3, two a 3.4, and one a 3.5.

Three students had an Anxious/Ambivalent Attachment style and they each had a 1.7, 2.6 and a 3.3 GPA. The 22 students with the Avoidant Attachment style had GPAs scattered across the range with 17 students ranging from a 1.0-2.0 GPA and 4 students ranging from a 2.7 to a 3.0 GPA. Individually, one student had a GPA of 1.0, one a 1.3, two a 1.4, three a 1.5, three a 1.6, one a 1.7, one a 1.8, four a 1.9, one a 2.0, one a 2.1, two a 2.7, one a 2.8, and one a 3.0



**Table 6.** *GPA/attachment crosstabulation*

GPA	Attachment			Total
	Anxious/		Avoidant	
	Secure	Ambivalent		
.7	1	0	0	1
.9	1	0	0	1
1.0	2	0	1	3
1.3	2	0	1	3
1.4	1	0	2	3
1.5	4	0	3	7
1.6	3	0	3	6
1.7	7	1	1	9
1.8	0	0	1	1
1.9	4	0	4	8
2.0	7	0	1	8
2.1	5	0	1	6
2.2	2	0	0	2
2.3	1	0	0	1
2.4	2	0	0	2
2.5	1	0	0	1
2.6	1	1	0	2
2.7	0	0	2	2
2.8	1	0	1	2
2.9	3	0	0	3
3.0	0	0	1	1

	3.2	1	0	0	1
	3.3	1	1	0	2
	3.4	2	0	0	2
	3.5	1	0	0	1
Total		53	3	22	78

**4.5. Details of the Analysis and the Results**

After reviewing the results of the statistical test for correlation between attachment style and GPA, see Table 7, it was concluded that with a p-value of 0.297, the null hypothesis was not rejected.

**Table 7. Chi Square test**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	52.702 <sup>a</sup>	48	.297
Likelihood Ratio	43.712	48	.649
Linear-by-Linear Association	.865	1	.352
N of Valid Cases 78			

a. 72 cells (96.0%) have expected count less than 5. The minimum expected count is .04.

In addition an ANOVA was performed in order to see if the means are the same across the groups specified on the demographic information sheet. Before the ANOVA could be run, the dependent variable, GPA, needed to be tested for normality. Table 8 shows the results of the Shapiro-Wilk test run for normality on the attachment styles. It can be concluded since the p-value of the Shairo-

Wilk test is less than .05, the data is normal.

**Table 8. Test of normality**

Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
Statistic	df	Sig.	Statistic	df	Sig.
c			c		

GP  
A .152 78 .000 .950 78 .004

a. Lilliefors Significance Correction

In regard to the ANOVA, results showed the same results in each group as shown in Table 9. The p-value in the group attachment was .445, this is greater than .05 and therefore there is failure to reject the null hypotheses. The p-value for the group age is .994, this is greater than .05 and therefore there is failure to reject the null hypotheses. The p-value for the group gender is .526, this is greater than .05 and therefore there is failure to reject the null hypotheses. The p-value for the group race is .637, this is greater than .05 and therefore there is failure to reject the null hypotheses. The p-value for the group ethnic group is .465, this is greater than 0.5 and again there is failure to reject the null hypotheses.

**Table 9.** ANOVA on attachment and demographic information and GPA

		Sum of Squares	df	Mean Square	F	Sig.
Attachment	Between Groups	19.989	24	.833	1.034	.445
	Within Groups	42.690	53	.805		
	Total	62.679	77			
Age	Between Groups	57.254	24	2.386	.385	.994
	Within Groups	328.079	53	6.190		
	Total	385.333	77			
Gender	Between Groups	5.727	24	.239	.962	.526
	Within Groups	13.145	53	.248		
	Total	18.872	77			
Race	Between Groups	56.597	24	2.358	.870	.637

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Within Groups	143.621	53	2.710		
Total	200.218	77			
Ethnic Group					
Between Groups	4.188	24	.174	1.015	.465
Within Groups	9.107	53	.172		
Total	13.295	77			

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#### **4.6. Conclusion**

The purpose of this study was to examine the correlation between attachment style and GPA in students attending an alternative education center and answer the question to what extent does attachment style correlate with the GPA of students in an alternative education center? The hypothesis was tested utilizing a Chi Square test and no significant correlation was found. In addition, data gathered from on the demographic information sheet was run to see if any external factors impacted the study results yielded no significant correlation.

### **5. RESULTS, CONCLUSIONS, AND RECOMMENDATIONS**

#### **5.1 Introduction**

The purpose of this study was to determine the attachment style of the older adolescents at an alternative education center and to see what extent attachment correlated to GPA. The purpose of this final chapter is to discuss whether or not this dissertation addressed the issued targeted in the study in the first place and to recommend directions for future studies. Included in the chapter will be a summary and discussion of the results, discussion of results and conclusion, limitations of the study and recommendations for further intervention.

#### **5.2. Summary of the Results**

This research study set out to answer the question; to what extent does attachment style correlate with the GPA of students in an alternative education center? Adolescents are dropping out of school at alarming rates. The latest data from NCES (2013) shows 514,238 students dropped out in the school year 2009-2010. Many are enrolling in alternative schools and programs, the latest data shows and enrollment of 491,738 in the school year 2000-2001 with an increase to 574,381 in the school year 2009-2010 (NCES, 2011). Although these schools typically use dedicated staff for this population (NCES, 2004), offer intensified support of students (Simpson & Sugai, 2013) and variety of intervention supports, including teaching of pro-social behaviors and social skills and through the use of role modeling (Swain-Bradway, Swoszowski, Boden & Sprague, 2013), the graduation rates in both the schools and programs are quite low in Florida where this study was conducted. According to the FLDE (2013) the school that was the focus of the study had a graduation rate of 8.17% in 2011-2012. Similar results were found in the two surrounding counties. In the county south of where this study was conducted, an alternative center had a graduation rate of 1.1% in 2011-2012 while in the county north of where this study was conducted an alternative center had a graduation rate of 1.4 % in 2011-2012. There are serious consequences for individuals without a high school diploma. These individuals are more apt to be unemployed, have bad health and end up in the judicial system (NCES, 2011). While much is known about attachment and the way each style impacts how one will form relationships in the future (Dykas & Cassidy, 2011), little is known about the attachment styles of adolescents in an alternative education center.

### **5.3. Brief Review of Attachment Style**

Attachment style begins developing within the first nine months of an infant's life (Brown & Wright, 2013). It is the reaction of the caregiver towards the infant while the infant is experiencing stress that creates the particular style. A secure attachment is formed when the primary caregiver provides consistent comfort and soothes the infant when they are upset (Bowlby, 1969). This care satisfies the unmet needs in the infant (Pittman, 2012). If instead the primary caregiver is inconsistent with their responses to the infant's stress, an anxious/ambivalent attachment type is formed as the infant will be left with a feeling of uncertainty of the caregiver's responses (Campbell & Marshall, 2011). Finally if the primary caregiver is rejecting to the infant's stress, an anxious/avoidant attachment type is formed (Brown & Wright, 2001). This style occurs as the infant minimizes emotional expression due to the low quality of interactions between the primary caregiver and the infant (Martins, Soares, Martins, Tereno & Osorio, 2012). What makes these early interactions important to adolescents is due to the fact that individuals form future attachment relationships based upon the attachment experiences they had with their primary caregiver when they were young (Dykas & Cassidy, 2011). This theory helps explain why some individuals with the negative attachment styles have a harder time forming relationships with peers which can lead to poor performance in school.

### **5.4. Impact on Development and Personality**

#### **Traits**

Early work by Kobak and Sceery (1988) showed adolescents with a negative attachment style had some less desirable personality traits. These traits, as described by their peers, included being hostile and condescending. This study is quite significant as school attachment can be predicted by the type of relationship a student has with their peers (Elmore & Huebner 2010). If peers find a particular student hostile and condescending, they are likely to avoid them thus making a positive relationship for the particular student impossible. This increases the potential for the student to feel uncomfortable and according to Johnson et al. (2001) students who feel uncomfortable at their school for social reasons increase their likelihood of skipping class or to withdraw from school.

In addition, there are also other characteristics associated with negative attachment styles that influence peer relations which in turn can impact school performance. Individuals with an avoidant attachment style are uncomfortable relying on others while those with an anxious/ambivalent style seek reassurance from others (Beck et al., 2013). Peers may see the individual with an avoidant attachment as not needing a friend and those with an anxious/ambivalent style as very needy, thus avoiding both. In addition, Branstetter et al. (2009) found that individuals with higher levels of secure attachment are more likely to experience lower levels of negative interactions. Once again these lower levels of negative interactions may be more desirable to peers looking for friendship relationships. All this combined can influence academic success as peers influence school attachment (Elmore & Huebner, 2010). Peer culture can also impact GPA (Lynch, Lerner & Leventhal, 2013) as students tend to associate with peers with a similar level of academic achievement and school engagement (Ryan, 2000) and students with a



secure attachment style tend to have higher GPAs (LeCroy & Krysik, 2008). Therefore if one has an anxious/ambivalent or avoidant style they may be pushed away by a peer who has a secure attachment style in order to associate with peers of a similar attachment style and higher GPAs.

A more recent study since the time of this research has supported the Branstetter et al. (2009) findings. Looking at 106, 4<sup>th</sup> grade to 6<sup>th</sup> grade girls at a Girl Scout camp, Abraham and Kerns (2013) found a correlation between attachment security and positive and negative emotions with securely attached girls having more positive emotions. In addition these authors found girls who had a more secure attachment with their mothers were rated as more competent by both camp counselors on peer competence than those with a more negative attachment style. These same girls, those with a secure attachment, also had higher scores on the best friend positive qualities scale. This study supports the findings that lower levels of negative interactions may be more desirable to peers when looking for friendship relationships which in turn can impact academic success.

### **5.5. Self-Efficacy and Self-Worth**

Other studies, such as that by Hall-Lande et al. (2007) show students with the secure attachment style have strong feelings of self-worth and perform better in school. Students who have a bond or feel an attachment to their school show higher levels of academic achievement (Bryan et al., 2012) and have higher GPAs (LeCroy & Krysik, 2008). This may be due to the fact that students with secure attachment styles are more often embedded in their school and they tend to try harder and participate more in class (Dykas & Cassidy, 2011). In addition, Peers tend to associate with peers of similar academic achievement levels (Ryan, 2000). Therefore if students with secure attachment have higher GPAs (LeCroy & Krysik, 2008) than they are likely associate with peer groups with secure attachments and higher GPAs.

On the other hand, those with a negative attachment style have different perceptions of their self-worth. Those with an anxious/avoidant type describe themselves as anxious and less socially adequate. Those with an anxious/avoidant style while described as hostile by peers reported no negative issues associated with their behavior or self-worth (Elmore & Huebner, 2010). These negative perceptions or inflated feelings of self-worth in terms of an unwillingness to acknowledge how others see them can impact school success in terms of interacting with secure peers who according to Bryan et al. (2012) show higher levels of academic achievement. Again if peers tend to associate with peers of similar academic levels (Ryan, 2000) than these individuals with negative attachment styles are more likely to associate with peers with a negative attachment styles due to the association with the GPA.

### **5.6. Methodology Used**

After gaining an understanding through a through literature review that most studies performed with adolescents and attachment were performed in traditional school settings, it was deemed appropriate to conduct a quantitative non-experimental study in the alternative education arena. A Chi-Square was used to determine if there was a correlation between attachment style and GPA and an ANOVA was used to look at the information collected on the

demographic information sheet to identify any external factors that may impact the study results. Results were consistent for each statistical test.

### **5.7. Recapitulation of Study's Findings**

Seventy eight participants representing the student body of 258 students age 18 and over participated in the study. Results of the Chi Square resulted in no correlation found between attachment style and GPA of students in the alternative education center. In addition, results of the ANOVA showed no correlation between any of the groups, attachment, age, gender, race, or ethnic group with GPA.

### **5.8. Discussion of the Results**

Of the 78 participants in the study 59% were male and 41% were female. This was a good representation of the school as at the time of the study, 53% of the population at the school was male and 47% was female. In regard to race, Whites were underrepresented in the study as only 2.6% made up the participation sample while at the time of the study White students made up 28% of the school's population. While it was expected there would be a low number of White students participating due to the fact this is a minority majority school, it was expected to have more than 2.6% participate. Black students were appropriately represented with 66.7% participants and 65% making up the population of the school. According to school records students classified as Multi Racial make up 1% of the school, yet during the data collection 15.4% indicated they were Multi Racial. The Asian population was fairly represented as there was a 1% Asian population at the school at the time and 1.3% made up the participants in the study. Nothing was indicated for race in 4.1% of the sample and 9.0% indicated a race of other, yet only 2% of the population at the school indicated other. In regard to ethnicity, at the time of the study, the student population according to school records was 24% Hispanic. These students were adequately represented with 21.8% being Hispanic in the participant population. These findings can be found in Tables 1 through 4.

The result of the initial hypothesis was failure to reject the null; this can be seen in Table 7. This conclusion was drawn from the results of the Chi-Square test where the p-value at .297 was greater than .05. What this means is within this population there is no correlation between attachment style and GPA, but caution is advised in deeming this as an adequate conclusion as many factors could have impacted these results.

The factors that could have impacted results include how the data was collected and the fickle nature of the students themselves. The students filled out the attachment scale in one large group session and one small group session. There was a great deal of chatter and sharing of answers while the scale was being completed during the large group session. Although constant reminders to stay quiet and to keep answers to themselves were made, students did not comply. Answers may have been compared and shared during this large group session. During the small group session however, students were quiet and it appeared as if there was no sharing of answers. In addition, during the large group session, one student asked if she could take the attachment scale again the next time the researcher was there as she said, "I may feel differently about my best friend on Thursday." Her statement was extremely

enlightening as it indicated she may answer differently if she was feeling differently about her best friend. The AFAS was selected due to its ease and quickness of administration and because as according to Wilkinson (2008) it measures the quality of close friendships of adolescents conceptualized as that of an attachment relationship. What the scale may not take into account is how fickle adolescents can be about their best friends and the potential for results to change according to mood. If things are going well between the student and their best friend there is a potential for the AFAS to be answered in a positive regard, yet if they are having a bad day with their best friend the AFAS may be answered in a negative regard.

In addition to the data gathering sessions, use of the AFAS and attitude of the adolescent at the time of the study one also needs to look at the timing of the study itself. The question to be answered was, to what extent does attachment style correlate with the GPA of students in an alternative education center? The answer according to the results of the study was no correlation was found. Yet the answer may have been different if the students were given the attachment scale upon their entry to the school. It is plausible that the small class size, competency based learning and individualized plans made a positive impact on this particular group. It is during the time period of adolescence where the original attachment style may be amended (Brown & Wright, 2001) as the adolescent is maturing and interventions could revise and consolidate attachment related information (Brown & Wright, 2003). Therefore, giving the students the AFAS upon entry would determine attachment style before the students get exposed to intervention. Exposure to these interventions may have helped students raise their GPAs from their point of entry.

Interestingly only 42 students out of the 78 had a GPA lower than a 2.0, the GPA required for graduation. While 53% below a 2.0 may seem like a large number, it is not if one takes into account the graduation rate at the school. In the school year 2010-2011 the school had a graduation rate of 10.8% yet in the following year, 2011-2012 the graduation rate dropped to 8.17% (FLDOE, 2013). Again, while there was failure to reject the null, caution must be advised as the interventions put in place at the school could have had a positive impact on the students and their GPAs.

In conclusion while results of the study indicated no correlation between attachment style and GPA of students in an alternative education center, this may be due to limitations of the study itself and flaws in the study's design. Several factors limited the results of the study. This study should have been conducted on students as they entered the alternative education or shortly thereafter, not on students who had been there for more than a semester receiving services as their attachment style may have been amended. In addition there was a significant design flaw, the filling out of the attachment survey and demographic information sheet should have been conducted in several small groups, not two large group sessions or the students could have been spread out more in the cafeteria to prevent chatter.

## **5.9. Discussion of the Conclusions**

The results of this study did not find that students with a secure attachment style to have higher GPAs as found by LeCroy and Krysik (2008). Of the 78 participants in this study 53 had a secure attachment. The grade point averages of these participants with a secure attachment ranged from .7 to a 3.5, with 32 or 60% having a GPA lower than a 2.0, these results can be

seen on Table 5. The abundance of participation from this secure group can be explained by the nature of the attachment style. Individuals with a secure attachment are more likely to participate in class and in extracurricular activities. They are good at avoiding distracting events and have the ability to work through stressful situations (Dykas & Cassidy, 2011). These individuals have greater trust in relationships and have an overall sense of safety and comfort with their own emotions (Seedall & Wampler, 2013) thus more likely to participate in a research study.

The range of GPA with the secure attachment style students may have something to do with the reason the students were at the alternative education center in the first place. These individuals may have other factors influencing their academics other than attachment style such as teen pregnancy or mental health issues (NCES, 2013). Those in residential placement may have been abused or neglected or suffer from mental health issues (Seldak & McPherson, 2010). Recent research by Murray and Mitchell (2013) since the time of this study has found some students do not do well in the restrictive environment found in traditional schools because they do not like the mundane rules. Other students found the smaller class size at alternative schools more conducive to learning because there was less distraction from peers and more individual attention from the teachers. In addition, students in alternative schools are more likely to be on task because they are surrounded by students who want to be there. Finally the nature of the school itself that allows for all these factors enabled the students experience mastery.

According to Crosnoe and Needham (2004) students disengaged from school are more likely to have lower levels of academic achievement. Participating students with an Anxious/Ambivalent attachment style were more likely to be found with GPAs over a 2.0 as seen in Table 5, yet with only 3 students with this attachment style participating, it is difficult to make any assumptions. Specifically 2 of the students with an Anxious/Ambivalent style had GPAs over a 2.0 while only one had a GPA lower than a 2.0. Recent research may help explain this phenomenon of lack of participation from this attachment style group. Anxiety is detrimental to the formation of relationships; therefore individuals with an anxious attachment may have difficulty forming relationships with others. This may be due in part because individuals with an anxious attachment style see themselves as less attractive and have greater social disengagement (McClure & Lydon, 2014). Individuals with this attachment style are also more likely to feel worry and uncertainty (Wilkinson, 2004) Therefore students with the anxious/ambivalent attachment style may have turned away from the study due to lack of confidence in themselves, worried about being judged for their looks by the researcher who was a stranger, or just disengaged themselves from any type of social interaction they felt would occur during the study.

Interestingly the avoidant group showed different results. Of the participating students, as shown on Table 5, 16 or 73% of participating students had a GPA lower than a 2.0 while only 6 or 27% had a GPA higher than a 2.0. What makes the avoidant group interesting is that while overall the Chi Square found attachment style did not correlate to GPA, the research question and hypothesis did not differentiate between attachment styles and the avoidant group. With 73% of the participants in the Avoidant attachment group having a GPA below a 2.0 there may have been a correlation. Lack of participation from this group can also be due to characteristics from individuals with an avoidant attachment style. Men with an avoidant

attachment style are more likely to distance themselves from supporting their spouses. In addition individuals with an avoidant attachment style tend to disengage during couple communication (Barry & Lawrence, 2013). Individuals with this attachment style are more likely to avoid people and be non-reliant for others to have their needs met (Wilkinson, 2004). Relating this information to the current study one can see that individuals with an avoidant attachment style may distance themselves from supporting the researcher in her endeavors especially since the beginning portion involved a great deal of commination from the researcher to the students.

### **5.10. Limitations**

Several limitations affected the results of the study. The following limitations will be discussed; method and location of data gathering, student perception of the research study, and use of a broad research question. First the researcher should have stood firm in the original plan to meet with the student in the classrooms instead of two large group sessions where there was a great deal of chatter. This may have resulted in students taking the study a little more seriously and cut down on the potential to share answers. This belief can be justified by Bordens and Abbott (2011) as they also found there are some drawbacks to gathering data in a large group. To begin participants may feel it is not a serious matter as they are surrounded by their peers. In addition some may feel their peers can see their answers and feel there is no way to ensure anonymity. Finally, conformity may occur as the participants may feel pressure to participate as it has become the group norm to do so. Because it is important to ensure there is a representation of the entire range of variation in a population (Maxwell, 2005) visiting the classrooms may have enabled the researcher to have access to students who due to the nature of their attachment style would not bother to walk over to the cafeteria to participate, but would participate if the researcher came to them.

In addition to conducting the data gathering in small group sessions, the research project should have been conducted over a long period of time in order to gather data upon student intake to the school or shortly after they arrived. This would have given a clearer picture of the student before they received services at the school designed to help them overcome the issues that put them there in the first place. Reasoning for conducting the research upon intake stems from Brown and Wright (2001) findings that the adolescent time period may be one time where individuals can amend their attachment strategy. As individuals move into adolescence they become more aware and are able to access their inner thoughts, feelings and memories. This can lead them to reflection on personal aspects. In addition, the time spent at the school may have influenced the student in a positive way. Alternative schools and programs deliver academic content differently than that at traditional high school through the use of credit recovery and increased support personnel. Increased school support programs and organized classrooms made transition more successful and increased likelihood of graduation (Heck & Mahoe, 2006). Changes like these can lead to a positive school engagement which has been shown to lead to higher levels of academic success (Dotterer, McHale & Crouter, 2007) which leads to students staying in school (Janosz et al., 2006).

Finally and most importantly the flaw in the research question affected the way the study was conducted. According to Bordens and Abbott (2011) in a good research question the

observations must be made under defined conditions that are exact. One needs to be wary of questions that are too broad. The research sought to see if there was a relationship between attachment style and GPA. The study should have gone one step further and looked at each attachment style and GPA.

### **5.11. Recommendations for Future Research or Interventions**

The purpose of this study was to examine the correlation between attachment style and GPA of students in an alternative center. This study intended to determine an accurate attachment style for each participant in order to answer the research question. Prior research indicated students in traditional schools with secure attachments would have higher GPAs (LeCroy & Krisik, 2008) while those disengaged to have lower levels of academic achievement (Crosnoe and Needham, 2004). While the implications of this study indicate no correlation to be found between attachment style and GPA, further research is necessary to support these findings. The following recommendations include; change of the research question and hypotheses, change in data collection location, change in timing of data collection and inclusion of court ordered students.

### **5.12. Change in Research Question and Hypotheses**

As observed in Table 5, the null may not have been rejected if each attachment style was correlated separately with GPA. Therefore a new research question and hypotheses need to be created. In this study the use of attachment style in the question was too broad in order to provide the specific information on attachment style and GPA. Instead of, to what extent does attachment style correlate with the GPA of students in an alternative education center, the question should have read, to what extent do each of the three attachment styles as measured by the AFAS correlate with the GPA of students in an alternative education center. This would lead to additional hypotheses. A hypothesis should be a prediction one makes about expected relationships among variables. A hypothesis should allow a researcher to make inferences about the particular population studied (Creswell, 2009). The hypothesis must be precise and testable (Bordens & Abbott, 2011). The new hypotheses to go with the new research question should read as follows:

H<sub>1</sub>: There is a significant correlation between a secure attachment style and GPA of students at an alternative education center

H<sub>0</sub>: There is not a significant correlation between a secure attachment style and GPA of students at an alternative education center.

H<sub>1</sub>: There is a significant correlation between an anxious/ambivalent attachment style and GPA of students at an alternative education center.

H<sub>0</sub>: There is not a significant correlation between an anxious/ambivalent attachment style and GPA of students at the alternative education center.

H<sub>1</sub>: There is a significant correlation between an avoidant attachment style and GPA of students at the alternative education center.



H<sub>0</sub>: There is not a significant correlation between an avoidant attachment style and GPA of students at the alternative education center.

### **5.13. Change in Data Collection Location**

Research strongly shows students in traditional schools with secure attachment style have higher GPAs (LeCroy & Krysik, 2008) and that students disengaged from school are more likely to have lower levels of academic achievement (Crosnoe & Needham, 2004). For these reasons this study should be conducted again, but this time the researcher should visit the classrooms instead of having the participants walk to a central location. Because volunteers are more social than their non-volunteer counterparts (Bordens and Abbott, 2011), having the researcher going to the participants instead of having the participants go to the researcher may increase likelihood of participation.

In addition to the social aspect, participants are less likely to take part in a study if they perceive the situation as stressful (Bordens & Abbott, 2011). This is especially important for the anxious/avoidant individuals who worry about being judged (McClure & Lydon) and feel uncertainty (Wilkinson, 2004) and the avoidant individuals who distance themselves (Barry & Lawrence, 2013) and avoid people (Wilkinson, 2004). By visiting them, the researcher may be able to put their fears at ease as well as make contact with others who would more than likely avoid any type of participation.

### **5.14. Change in Timing of the Data Collection**

Future studies should also concentrate on students as they enter the alternative education centers or shortly after they arrive as the services these schools provide may have already amended the students' attachment styles as found by Brown and Wright (2001) it is in the period of adolescence that an amendment to attachment may happen if students the conditions warrant. Alternative education centers are designed to offer these conditions. In addition it is the support offered in the school and organization of the classrooms that increase the likelihood of graduation (Heck & Mahoe, 2006). Therefore data gathering at the time of student intake to the school, the beginning of the school year or shortly after the students arrive would give a clearer picture of the correlation between attachment style and GPA before services are rendered.

### **5.15. Including Court Ordered Students**

This study excluded court ordered students, but future studies should include these students. There were 259 students over the aged 18 and over attending the school at the time of the study, only 78 participated. It is unclear how many were court ordered to attend and including them could have increased participation numbers. In addition it is plausible that the court ordered students have the negative attachment styles.

The insecure and disorganized attachment styles are most associated with behavior problems in children (Lyons-Ruth, 1996). There is a link between juvenile delinquency and attachment as discovered by Wampler and Downs (2010). In their study they found youth with

an isolated attachment style to be the most distressed and to have reported more delinquent behaviors as compared to the secure and disconnected attachment style of adolescents. The disconnected group although moderate in terms of occurrence of distress and delinquent behaviors, their delinquent behaviors were more severe. For the most part students who are sent to alternative schools are there because they are at risk of failure, truancy, disruptive behavior and suspension (NCES, 2004).

An important risk factor associated with delinquency includes externalizing behavior (Maynard, Salas-Wright, Vaught & Peters, 2012). Kochanska and Kim (2013) found the students with an insecure attachment style to show more externalizing behaviors and more behavior problems as reported by their teachers. In addition Pace and Zappulla (2013) found both internalizing and externalizing behaviors to be associated strongly with an insecure attachment style and moderately associated with the avoidant attachment style. These findings suggest it is highly plausible that the court orders students possess a negative attachment styles, thus warranting their inclusion.

### **5.16. Conclusion**

Earning a high school diploma has a direct impact on how one will live their life.

Those who do not earn a high school diploma increase their chances of lower income, bad health, unemployment, dependence on Medicaid, Medicare and welfare as well as interactions with the criminal justice system (NCES, 2011). People who do indeed find work without a high school diploma often have limited pay advancement (Ream & Rumberger, 2008). Education is the key.

Educators need to push forward in identifying why students are not graduating from high school. New programs and policies need to be introduced in schools to prevent future drop outs as what is currently in place is not working as evidenced by the 514,238 dropouts in the school year 2009-2013 (NCES, 2013). There is some hope within these students. During the school year 2009-2010 645,500 students enrolled in alternative schools and programs (NCES, 2012). While some may be court to be in school or they want to be there to earn their high school diploma.

One area that still needs to be addressed is that of attachment style of adolescents in alternative schools and programs due to the findings of Brown and Wright (2001) that it is during this time period when attachment style can be amended. This is important and due to the characteristics that go along with a secure attachment. Securely attached individuals have lower levels of negative interactions (Bransetter et al., 2009) and higher levels of positive emotions (Abram & Kerns, 2013). These lower levels of negative interactions and higher levels of positive emotions may be what are needed to keep them away from the judicial system or other bad influencing factors. In addition securely attached individuals try harder and are embedded more in school (Dykas & Cassidy, 2011). Finally, students who do feel a bond or attachment to their school have higher levels of academic achievement (Bryan et al, 2012). This is what is needed in order to help them earn their high school diplomas.

While this study found no correlation between attachment style and GPA of students in an alternative education center it may possibly have been due to design flaw. There should have been a separate hypothesis for each attachment style in order to more thoroughly look at the

correlation between attachment style and GPA of students in an alternative education center. In addition, students who were court ordered to attend the school should have been included, and data collection should have been performed with small groups and before students received services. Because of increasing enrolment in alternative education centers and programs it is imperative to leave no stone unturned.

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