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Factors Associated with Minor Misbehavior in Adolescent Males

A Project Presented to
The Faculty of the Undergraduate
College of Health and Behavioral Studies
James Madison University

In Partial Fulfillment of the Requirements
for the Degree of Bachelor of Science

by Hunter William Greer

May 2014

Accepted by the faculty of the Department of Psychology, James Madison University, in partial fulfillment of the requirements for the Degree of Bachelor of Science.

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Introduction

The U.S Department of Justice (2014) reported that in 2011, there were 4,367 arrests for every 100,000 youths aged 10-17. Also in 2010, there were 170,600 juvenile arrests involving drug abuse. Even more sobering is that, youth under the age of 15 accounted for 25% of violent crimes and property crimes. As for more serious crimes, in 2010 juveniles accounted for one-tenth of murder arrests, one-fourth of arrests for robbery and burglary, and one-fifth of the arrests involving larceny or theft of a motor vehicle (Department of Justice, 2014). Psychologists have attempted to identify common trends among these adolescents and one trend seems to be a nontraditional family structure. Research has stated that, “nontraditional family structures were related to increased odds of every type of delinquent behavior...” (Kierkus & Hewitt, 2009, pg. 128).

Tichovolsky, Arnold, and Baker (2013) reported that between 1970 and 2011, the proportion of children living in single parent homes rose from 12% to 27%. They found that single parenthood is related to fewer financial resources, significantly increased stress, and less organized, more chaotic home environments. Most single parent homes are led by the mother, but between 1970 and 2011 the rate of single-father homes increased from 1% to 4%. The percentage of children living with a never married parent increased from 7% in 1970 to 43% in 2011. The single parent issue is not a new phenomenon. In 1984 the U.S Census Bureau estimated that there were 8.5 million children under the age of 18, living in a single parent home (Hanson, 1986). It is often difficult for the single parent to support a family on a single income, so almost half of

these families fall below the poverty line, compared to only 14% of children living in a two-parent home.

Vanassche et al. (2013) found that youth living in “non-intact” families are more likely to engage in misbehavior and to drink before the legal age, but I believe there are too many concatenated variables to blame family structure directly. In fact, sometimes parental divorce or separation is better for the children in the home. For example, Vanassche et al. (2013) reports that children who observe persistent, parental conflict in their home face just as many negative outcomes as children from non-intact families, and sometimes children are better off after a divorce that decreases the level of observed conflict. Jablonska and Lindberg (2007) observed that being raised in a single parent home is correlated with negative results such as higher risk for substance abuse, adjustment problems, emotional problems, and low level misbehavior. This same study suggests that it may not be just the single parent that pushes these children to turn to misbehavior. They suggest that adolescents in two parent families where the parents show characteristics of low social and economic status and poor physical or mental health still act out and show increased rate of misbehavior.

Thompson (2013) compared children’s outcomes on various literacy tests in 18 countries. Children from two parent homes scored higher than children from mother-only families on reading literacy in 12 countries, mathematics literacy in 15 countries and scientific literacy in 10 countries. This gap was decreased in countries where the economic policy favored lower income families. This finding suggests that there are many factors that contribute to the single parent home and every situation will be different.

There are also many different ways a child can end up in a single parent home and these different pathways can show different results. Common causes include death of a parent, divorce, separation, incarceration, and, in recent years, we have seen a great increase in parents who have never been married at all (Cookston, 1999). Research has found that children who experience changes in family structure have more behavioral problems than children in stable home environments (Ryan & Claessens, 2013). The authors of this study also found that the type of change may also be important, as they found that even when children went from a single parent family to a blended family, they displayed higher rates of misbehavior.

Another possible difference in single parent homes is which sex parent is present. Cookston (1999) declared that adolescents from single-father homes were much more likely to show signs of conduct disorder than children from intact families, while children from single mother homes had much higher rates of illicit drug use than children from intact families. One explanation for this finding comes from a study by Smollar and Youniss (1985) that found the children from divorced homes felt that their fathers could not connect with them on a more personal level and the child felt negatively towards discussing feelings, self-doubts or other problems with their fathers. These children saw their mother as much more accepting and thought their mother was more helpful in problem-solving. A final difference must also be considered; a single parent home that was formed by a violent divorce seems to leave the child worse off than a mother who simply never married. Research shows that a divorce that consists of high levels of conflict may be a very stressful experience for the child. This extreme stress has been found to have long term psychological effects on the youth (Jablonska & Lindberg, 2007).

Thompson (2013) found that divorce not only leads to emotional distress, but may also lead to the child having to take on adult responsibilities and sometimes these children show signs of learning difficulties and behavioral issues.

Cookston (1999) found that some adolescents from intact families report just as many problem behaviors as children from single parent homes. This suggests that the single parent cannot be the only factor influencing these children to act out. Research has found that children from intact families actually do worse on certain measures than children from single parent families. Amato and Ochiltree (2008) found that children from intact families scored lower on tests of “everyday skills.” This measure included behaviors such as cooking and cleaning, and these researchers suggested that these results may simply suggest that children from single parent homes are forced to care for themselves more.

Some research has found no significant differences between children from disrupted homes and intact homes (e.g., Amato & Ochiltree, 2008). This area of research has been clouded by bias and sampling error. A few examples of these include: the use of convenience and clinical samples rather than random or representative samples, failure to distinguish the different ways the child came into a single parent home; failure to distinguish between intact families and families that may include a step-parent, the use of subjective rating systems by teachers or parents; and failure to control for multiple other confounding variables (Amato & Ochiltree, 2008). While there is a great deal of research pointing to family structure as a major predictor of negative outcomes for children, there does not seem to be much research that attempts to target what area within this household is really correlated with the problematic behavior.

In the present study I would like to investigate whether single parent homes are indeed the main problem in low level adolescent misbehavior. My goal is to investigate alternative variables that surround these children such as a lack of supervision, existing parent-child relationships, poverty, and negative attitudes towards the child's school. If we find that the single parent and the parenting practices are not the main source of problem behavior then future interventions can better focus on the real predictors of misbehavior. If we do find that family structure is the main cause than our findings will support those of past research.

Supervision

One major issue that single parents face is providing enough supervision and monitoring of their child. Cookston (1999) declared that a lack of parental monitoring and presence in the home leads to multiple problem behaviors, including decreased academic achievement, increased sexual behavior, and substance abuse. Other studies have cited additional areas where this lack of supervision can be seen. For example, Fong et al., (2008) stated that a lack of supervision after school and on the weekends was a significant predictor of acts of assault and theft. Jablonska and Lindberg (2007) reported in their study that a lack of sufficient parental monitoring can lead to a great increase in anti-social and other delinquent behaviors. Herrenkohl et al. (2001) stated that in their study they found that it is very important for parents or other caregivers to keep an eye on the youth's social interactions and reduce long periods of unsupervised activities when the child returns home from school. Another study relating to supervision reported that children are more likely to engage in misbehavior when they are continuously presented

with opportunities to commit these behaviors, and that these opportunities are made more readily available when there is a lack of parental monitoring (Cookston, 1999).

Mahatmya and Lohman (2011) found that adolescents who are involved in after school programs and other forms of structure, show more positive behaviors resulting in an increase in academic achievement and self-esteem due to the increased supervision. This study also found that the youths' participation in after school activities not only increased positive behaviors, but also decreased levels of misbehavior. These after-school programs provide some structure to the child, but also hinder the opportunity to engage in misbehavior in the unsupervised time after school while the single parent is most likely at work. This study states that there is a negative relationship between after-school activities and misbehavior. As the participant is involved in more activities, we can predict that they will be involved in less misbehavior

Cookston (1999) affirmed that when the child reported high levels of supervision in single mother homes, they were no more likely to misbehave than children from intact families. This leads me to believe that lack of supervision is one of the greatest predictors of negative outcomes. I am interested in specific facets of supervision that I believe are correlated with low level misbehavior such as the amount of supervision that the child had before school, after school, and if they were involved in sports.

Parental Relationships

Stacer and Perucci (2013) found that when parents spend more time with their children it may lead to emotional and physical benefits. These benefits may also lead to increases in social and intellectual development. This same study states that if a parent is involved in the child's schooling and attends meeting at the institution, than this may

show the child that their education is valued and may lead to positive results. On the other hand, if the parent spends more time with the child outside of school, this can build emotional bonds and increase the influence that the parent may have over the child (Stacer & Perucci, 2013). Tichovolsky, Arnold and Baker (2013) stated that in several cross sectional studies, data has supported the hypothesis that higher levels of parental involvement may be associated with decreased levels of behavioral problems. This was supported in their study as they found a negative correlation between amount of support and levels of behavioral problems. One limitation to this finding was that it was only significant for African American and Puerto Rican populations.

There are many possible reasons for this contribution. Studies have found that one real difference in a single parent home and a two parent home is the restructuring of the division of labor. This may lead to certain jobs not being taken care of or at least not being done well. In this new division of labor the single parent has to still do all of his or her own household jobs, but he or she must also compensate for the now missing other parent (Smollar & Youniss, 1985). This finding suggests that it is the actual parenting practices that are affecting the child, rather than the type of family where the child resides (Amato & Ochiltree, 2008). Negative characteristics of a parent may include but are not limited to, poor mental or emotional health, interpersonal issues, and problems with employment (Ryan & Claessen, 2013). All of these characteristics can contribute to a poor home environment and negative parental attachment. Research has found that one of the main reasons that single parent homes may influence misbehavior is due to negative interpersonal relationships. The parent- child relationship may be weak which makes it

more likely that the adolescent will form relations with delinquent peers (Kierkus and Hewitt, 2009).

Murray et al. (2012) addressed a parent's absence from the home by incarceration states that youth that end up acting out are normally victims of bad parental and peer relationships after the incarceration. This means that it is not the missing parent that hinders the child, but the newly existing parenting style and development of more negative peer relations. One theory from this study suggests that the conviction or arrest of a parent can place economic and emotional strain on the family and the child, which can then lead to the development of behavioral problems. The economic strain of poverty and the emotional strain of not being able to reach material success increase the likelihood of a child displaying low level misbehavior (Murray, et al., 2012).

Vanassche et al. (2013) discuss parental divorce or separation as a crisis that is accompanied by many other changing life circumstances. These crisis include the dissolution of original family relationships, parental conflicts, and a decrease in living standards. This study also addresses the relationship between the existing parent and the child. Smollar and Youniss, (1985) found that the only real difference they found between single parent homes and two parent homes was the quality of communication, with the one parent homes showing declined quality. Vanassche et al. (2013) reports that if the child had a good relationship with the single parent, especially if the parent was of the same sex, this led to less misbehavior. Parental relationships seem to be so crucial in the socialization process and many studies have ignored them. In the present study I investigate the youth's perception of their relationship with their parents and investigate the correlation among this variable and the child's behaviors. The participant will

determine if their parent was highly involved in their life and also the amount of warmth that the participant felt from this relationship. It is possible for the participant to choose the option of a highly involved, but cold relationship.

Poverty

Vandivere, Moore, and Zaslow (2000) found that in 1999, 41% of low income children came from a home led by a single parent, particularly single mothers. These authors state that single mothers are overrepresented in the part of our population that falls under the poverty line. Stacer and Perucci (2013) also stated that socioeconomic factors may influence parental involvement. Studies have shown that lower income families report lower levels of involvement. Stacer and Perucci (2013) also found that parents with lower levels of education had lower levels of involvement with their children. Herrenkohl et al. (2001) cites the problems of poverty coming from the general lack of opportunities and lower access to basic resources that are necessary for general well-being. Higher income families seem to have more resources that allow them to be involved more in their child's life. These resources may include something as simple as more time off or paid leave than the lower income parent. Mahatmya and Lohman (2011) found that acting out may actually be a possible coping mechanism for these disadvantaged youths.

Hanson (1986) reported that single mothers had significantly lower levels of education and income than single fathers. The increased stress of poverty may do harm to many areas of the child's life such as parent-child relationships. This study found that low income children are twice as likely to live with a parent who is highly agitated or

frustrated. Research has also found a positive correlation between family economic status and the child's score on a reading competency test (Amato & Ochiltree, 2008).

Hoffman (2006) found that many single parent families live in communities that contain more impoverished residents, female headed households, and higher unemployment, which research shows all lead to misbehavior even in adolescents from two parent homes. The author also found that communities that are impoverished and contain a high proportion of unemployed residents or female headed households are normally much less cohesive, display fewer adult role models, have less trust in community members, and much fewer opportunities for youth. Hoffman (2006) claims socially that single mothers often have fewer resources and are over-represented in these disorganized neighborhoods. In an organized, cohesive community there are often other adults who can provide support for the single mother. Tichovolsky, Arnold, and Baker (2013) define this support as either emotional support from friends, or even support such as child care.

Hoffman (2006) also states that in these disorganized communities there is increased ethnic heterogeneity and mobility among community residents. Hoffman (2006) found that this lack of social support may correlate with lower levels of supervision and more access to negative social behaviors such as gangs or violence in general. A study by Hanson (1986) found a significant positive correlation between a parent's social support and mental health. This same study found a similar positive correlation between children's social support and overall health.

Many studies have investigated socioeconomic status in order to predict negative outcomes and have found many correlations, but in this study I am asking the participant about their own perception of times of economic need and comparing this to misbehavior.

School Engagement

Hirschfield and Gasper (2010) report that research on school engagement consistently states that children who perform poorly in school and who feel less engaged, are more likely to participate in misbehavior. School engagement is defined by how involved the student is in the institution and how important they view their schooling. Saner and Ellickson (1996) applied this specifically to violence when they found that weak institutional attachment had a great impact on the child's likelihood to commit a violent act. The authors also suggest that positive attachments to school and family provide a child with a sense of resilience, but the lack of this attachment to these two major institutions can predict problem behavior. Herrenkohl et al. (2001) proposes a theory that could possibly explain this finding. This model believes that antisocial behavior develops from weak bonds to "prosocial" institutions such as schools, and the individuals who support the values of these institutions. This model posits that negative influences from peers are the strongest when the youth has a weak bond with these institutions and a strong bond with the peer group.

Hirschfield and Gasper (2010) address three different types of school engagement and they are behavioral, emotional and cognitive. The authors define behavioral engagement as a student's involvement in school sponsored activities, both in an academic setting and an extracurricular setting. Emotional engagement is defined by feelings and thoughts towards the institution itself, the institutions goals, and the actors

within the institution. Finally, cognitive engagement describes the effort and motivation the student invests in various school related tasks.

Mahatmya and Lohman, (2011) declared that a youth's monthly attendance in school was positively correlated with academic achievement and even the child's enjoyment of the school day, while at the same time being negatively correlated with truancy and a youth's feelings towards deviant behaviors.

Fong, et al. (2008) addressed different factors that contribute to school violence including: the individual, the family, the community, and the environment. Some of the individual factors included the gender of the child, the child's self-control and anger management skills, and the child's coping skills. Next, the family, and these factors included relationship with parents, parenting style, and attachment to parent. Ineffective parenting styles are said to lead to lowered self-control and therefore increased antisocial attitudes and deviant or aggressive behaviors. The factors in the school include the amount of damage or graffiti present, lack of attachment to teachers, and punitive methods. These can all also inhibit the feeling of school safety. Finally in the environment there are a multitude of factors but a few from this list include media violence, access to weapons, and the cultural norms of the community (Fong, et al., 2008). This study then stated that these risk factors are additive and the more risk factors that a child is exposed to, then the greater the chance that aggressive behavior develops.

Perception Matters

Saner and Ellickson (1996) stated that supervision, parental relationships, attachment to school and family economic status are all based on the youth's perception. Belendiuk et al. (2009) discussed peer involvement in alcohol and drugs and went on to

state that most youth actually underreport their peer's drug and alcohol use. Findings like these may be a positive thing because Saner and Ellickson (1996) stated that the only thing that mattered was the student's perceptions, but this could also be a very bad thing because this could mean that the students do not see their friend's use of alcohol or other drugs to be a reportable problem. Another interpretation is that the student may not see the peers as troublesome and continue to identify with this group. Saner and Ellickson (1996) stated that even if the adolescent is unaware of the friend's behavior, they may still be influenced by their friend's negative behaviors such as lower inhibition, poor judgment, and poor school performance.

The Current Study

Not all children from single parents display decreased academic achievement and increased rates of misbehavior, but there has been little research on what makes a single parent home supportive of normal development. Research has defined multiple areas that characterize healthy two parent homes. These areas include: strong social support, higher economic status, effective communication, some degree of religiosity, and finally, good problem solving skills (Hanson, 1986).

There are many differences in the lives of children, in addition to family structure, that can affect the development of misbehavior. In order to increase the validity of the study, I will focus on specific groups. One of the main differences is gender. Kierkus and Hewitt (2009) suggested that the negative effect of nontraditional family structure may be greater for males. Vanassche et al. (2013) states that boys report higher levels of deviance than their female counter parts. It has also been found that boys from single parent homes show more externalizing behaviors including delinquent acts, while girls typically

respond with internalizing behaviors such as depression, suicide, and drug use (Kierkus & Hewitt, 2009). I believe that boys and girls must be studied separately to properly observe the effects. In this study, our sample will consist of male participants in order to gather the most consistent data.

In this study I will be asking college students to reflect on their lives during middle and high school. In the present study, Middle school years are defined by grades 6-8 and high school years are defined as grades 9-12. Some research, such as that done by Huang, Kosterman, Castalano, Hawkins, and Abbott (2001), shows that the factors that lead to misbehavior at the middle school level may be different than those at the high school level. Family structure is also something that is subject to change. In order to investigate the effects of family structure on the child's development, I believe that acting out must be assessed at both levels.

I will be asking the college aged students to recall their involvement in low level misbehavior rather than serious crimes at the middle school and high school level. For the present study I have defined low level misbehavior as the following: bullying, skipping class, being suspended, smoking cigarettes, drinking alcohol, smoking marijuana, shoplifting, vandalizing, and fighting. I have picked these low level acts to study because they are much more prevalent in this young population and likely to be higher than felonies in the population being studied. Another interesting aspect about this low level misbehavior will be the changes that we see over time. Behaviors such as fighting and vandalism in middle school are somewhat expected and may not be a red flag, but if this behavior continues through high school then there may be a serious issue.

Hypothesis

^ Children from single parent homes will have higher rates of community and school misbehavior than children from two parent homes.

^ Participants who report a low level of supervision in their home will have an increased self- report of community and school misbehavior.

^ We will see high rates of community and school misbehavior among participants who report negative parent- child relationships as defined by parenting style and interactions.

^ We will observe increased rates of community and school misbehavior in participants who report low economic status.

^ We will see higher rates of community and school misbehavior among participants who report low engagement and attachment levels to their school and neighborhood.

Method

Participants

For this study I surveyed 71 students from a medium sized comprehensive university, James Madison University. These students were obtained through the psychology participant pool. I also distributed the survey to 41 students at a community college. I surveyed students from a university and a community college to enhance the external validity of the study. The participants were asked to report their parent's level of furthest education. For James Madison student's mothers, 4 did not finish high school, 12 obtained a high school degree or equivalent, 16 had some college, 24 received bachelor's degrees, and 14 continued to further education. As for the fathers of JMU, 5 did not finish high school, 11 finished high school or obtained equivalent, 7 had some college, 28 received bachelor's degrees and 19 continued to further education. The statistics for the community college were quite different. As for the mothers, 4 did not finish high school, 22 finished high school or obtained the equivalent, 11 had some college, 3 received bachelor's degrees and only 1 continued to pursue an advanced degree. As for the fathers, 7 did not finish high school, 13 finished or received an equivalent degree, 15 had some college, 5 obtained bachelor's degrees and none pursued further education.

All of my participants were male. In the present study, all participants are enrolled in the institutions that I obtained for the sample and are between the ages of 18- 24 with a mean age of 19.

Materials

To gather information for this study I distributed an electronic copy of my survey through the Qualtrics survey program. My survey is composed of questions that I have created based on common trends in past research and a scale by Hirschfield and Gasper (2010) to evaluate school engagement. The survey is made up of demographic questions, questions concerning family structure, parent-child relationship, school attachment, supervision, poverty, and participation in misbehavior throughout middle and high school. The survey is listed in the appendix section for reference.

Independent Variables:

Family Structure and the Parent- Child Relationship I originally divided family structure into three categories of two parents, single mother, and single father. Participants were asked what type of family structure was present in their home during their middle and high school years. As expected, there were not enough single father homes to meet the requirements for the statistical analysis, so these groups were collapsed into two parents or single parent. Question number 30 was used to evaluate family structure in middle school and question 69 was used to evaluate family structure in high school. I asked questions concerning parenting style in middle school and high school. Question number 31 was used to investigate parental relationships in middle school and question number 70 was used to investigate parental relationships in high school. Responses were rated on an item involving parental warmth and involvement. The four choices on this scale included: high involvement and warm, high involvement but cold, low involvement but warm, low involvement and cold.

Supervision In these questions, I asked four questions concerning supervision throughout the participant's day. In question number 32, I asked who made sure the participant got to school in the morning with the answer choices being: parents/guardians, some other adult, or the participant themselves. In question number 33, I asked if the student participated in sports or other after school activities in high school. Next, in question 34, I asked the participant if they participated in any other after school activities including clubs or some other organization. Questions number 33 and 34 were answered by a yes or a no. Question number 35 pertained to the type of supervision the participant usually had after school. These answers included: Unsupervised, Poor supervision, and Supervised. These questions can be found on numbers 71- 74 in the high school years.

School Engagement. I used questions provided in the Hirschfield and Gasper (2010) study to evaluate school engagement. This scale originally contains three subscales, each evaluating a different aspect of school engagement. These three subscales were intended to measure emotional, behavioral, and cognitive engagement. This scale consists of 20, Likert style questions. We asked the participants to complete the scale at both the middle school and high school years. In the middle school years, this scale is found in questions 9- 28. In the high school years, this scale is found in questions 48- 67.

Poverty. In order to evaluate family economic status, I asked the participants about their mother and father's furthest level of education. This question can be found at the very beginning of the survey. Question 7 concerned mother's highest level of education and question 8 concerned father's furthest education. The answer choices for these questions will include: Did not finish high school, High school degree or equivalent, some college, Bachelor's degree, and Advanced degree (masters, Ph.D). This

question was used as a descriptor in the participants section. We also asked the students a subjective question concerning economic status in middle school and high school years. This question asked the participant if their family struggled financially during that certain time period. Question 47 will address financial struggles in Middle school and question 86 will pertain to high school years. The answers for this question were never, occasionally, and often.

Dependent Variables:

Community Misbehavior. Community misbehavior was defined by questions 39-44 in middle school and 78- 83 in high school. Question numbers 39- 41 concerned petty substance abuse in middle school and 78- 80 in high school. I asked participants about cigarettes, alcohol and marijuana. The answer choices consisted of never, occasionally, and often. Questions number 42 and 43 in middle school and 81- 82 in high school investigated the individual's involvement in petty crime. Question numbers 42 and 81 asked the participant if they ever shoplifted in middle school and high school, and the answers consisted of never, occasionally and, often. Question number 43 and 82 asked the participants if they ever vandalized property in high school. These answers also consisted of never, occasionally, and often. Our final question of this category pertained to aggressive behaviors. Question number 44 in middle school and 83 in high school, asked the participant if they ever got into fights in this time period.

School Misbehavior. School misbehavior was evaluated by questions 36-38 in middle school and 75- 77 in high school. Questions number 36 and 75 asked the participant if they bullied others in high school. The answers to this question were never, occasionally, and often. Question numbers 37 and 76 asked the participant if they ever

skipped class, and the answers to this question were never, occasionally, and often. Our final questions, numbers 38 and 77, asked the participant if they were ever suspended. The answers to this question was yes or no.

Results

In the following section I have tables to show the results of all hypothesis. Note that in order to obtain correct statistics, for questions concerning family structure, single mother and single father were grouped into a single parent variable. For questions concerning misbehavior, the original answer choices were never, occasionally, and often. In order to collect proper statistics, the choices occasionally and often were collapsed into one variable. After this collapse, the question became a simple yes or no. All results are presented at an unadjusted alpha level. This means that in categories where we find significant differences, some may be spurious.

Family Structure

Table 1 represents the relationship among family structure and 9 categories of misbehavior. The chi squared statistic did not find significant differences between participants from two parent homes and participants from single parent homes in 7 of our 9 areas. The areas where we did not find a significant difference include bullying, skipping class, being suspended from class, smoking marijuana, shoplifting, vandalizing property and fighting in school. On the other hand, participants from single parent homes reported significantly higher amounts of cigarette smoking and alcohol use.

Table 1. *The Relation of Family Structure and Nine Categories of Misbehavior during Middle School.*

<i>Misbehavior</i>	<i>Percent Never</i>		<i>Chi-Square</i>	<i>p</i>
	<i>Two-Parent</i>	<i>Single Parent</i>		
Bullying	71	77	0.42	.52
Skip Class	78	70	0.77	.38
Suspended	80	85	0.25	.62
Cigarettes	83	59	6.79	.01**
Alcohol	78	51	7.25	.01**
Marijuana	82	77	0.25	.61
Shoplift	85	85	0.00	.95
Vandalism	77	81	0.20	.65
Fights	66	51	1.93	.17

Table 2 represents the relationship among our 9 categories of misbehavior and family structure in high school. The analysis in the high school years revealed no significant differences in any of the 9 areas between participants from single parent versus participants from two parent homes. This means that the students from single parent homes did not report any more or any less misbehavior than did children from two parent homes.

Table 2. The Relation of Family Structure and Nine Categories of Misbehavior Behavior during High School.

<i>Misbehavior</i>	<i>Percent Never</i>		<i>Chi-Square</i>	<i>p</i>
	<i>Two Parent</i>	<i>Single Parent</i>		
Bullying	75	90	2.97	.08
Skip Class	44	63	3.15	.08
Suspended	86	93	1.05	.31
Cigarettes	74	56	3.34	.07
Alcohol	33	16	3.09	.08
Marijuana	60	53	0.40	.53
Shoplift	90	100	3.24	.07
Vandalize	88	100	3.68	.06
Fights	81	90	1.22	.27

Supervision

Before School Supervision

Table 3. Shows the relationship between the amount of supervision that the individual had before school and nine categories of misbehavior. Participants who reported taking care of themselves in the mornings (making sure they got to school), reported significantly higher rates of misbehavior in eight of the nine categories. These individuals reported higher rates of bullying, skipping class, being suspended, smoking cigarettes, drinking alcohol, smoking marijuana, shoplifting, and vandalizing property.

Table 3. *The Relation of Before School Supervision and Nine Categories of Misbehavior in Middle School.*

<i>Misbehavior</i>	<i>Percent Never</i>		<i>Chi-Square</i>	<i>p</i>
	<i>Supervised before school</i>	<i>Unsupervised</i>		
Bullying	79	54	6.96	.01**
Skip Class	84	54	11.08	.00**
Suspended	88	64	8.69	.00**
Cigarettes	86	54	12.37	.00**
Alcohol	82	48	12.89	.00**
Marijuana	86	67	4.84	.03**
Shoplift	89	74	4.40	.04**
Vandalism	87	54	13.79	.00**
Fights	67	51	2.28	.13

Table 4 shows that at the high school level, there are no significant relationships between morning (before school) supervision and the nine categories of Misbehavior. Participants who were responsible for themselves did not score any different on any of the nine categories of Misbehavior.

Table 4. *The Relation of Before School Supervision and Nine Categories of Misbehavior in High School.*

<i>Misbehavior</i>	<i>Percent Never</i>		<i>Chi-Square</i>	<i>p</i>
	<i>Supervised before school</i>	<i>Unsupervised</i>		
Bullying	79	78	0.01	.92
Skip Class	54	46	0.74	.39
Suspended	11	12	0.01	.90
Cigarettes	76	65	1.66	.20
Alcohol	31	27	0.26	.61
Marijuana	65	53	1.80	.18
Shoplift	90	93	0.36	.55
Vandalism	86	95	2.90	.09
Fights	86	81	0.40	.53

Involvement in Sports

Table 5 shows the relationship between participation in sports at the middle school level and the nine categories of misbehavior. There were no significant differences in individuals who were involved in sports and those who were not.

Table 5. *The Relation of Involvement in Sports and Nine Categories of Misbehavior in Middle School.*

<i>Misbehavior</i>	<i>Percent Never</i>		<i>Chi-Square</i>	<i>p</i>
	<i>Sport</i>	<i>No Sport</i>		
Bullying	75	71	0.15	.70
Skip Class	82	67	3.53	.06
Suspended	85	76	1.75	.19
Cigarettes	82	69	2.67	.10
Alcohol	78	65	2.25	.13
Marijuana	84	78	0.67	.41
Shoplift	85	84	0.03	.87
Vandalism	82	71	1.92	.17
Fights	65	58	0.55	.46

Table 6 shows the relationship between involvement in high school sports and the nine categories of misbehavior. These results show no significant difference in seven of the nine areas. The two areas where we found significant differences were in cigarette smoking and vandalism. Students who were involved in sports reported lower rates of cigarette smoking. On the other hand, students who were involved in high school sports reported higher levels of vandalism.

Table 6. *The Relation of Involvement in Sports and Nine Categories of Misbehavior in High School.*

<i>Misbehavior</i>	<i>Percent Never</i>		<i>Chi-Square</i>	<i>p</i>
	<i>Sport</i>	<i>No Sport</i>		
Bullying	79	77	0.07	.79
Skip Class	52	41	1.00	.32
Suspended	89	83	0.77	.38
Cigarettes	78	48	9.34	.00**
Alcohol	27	32	0.21	.65
Marijuana	62	48	1.70	.19
Shoplift	89	100	3.39	.07
Vandalism	88	100	3.85	.05**
Fights	86	77	1.22	.27

After School Supervision

Table 7 shows the relationship between the type of supervision the participant had after school and the nine categories of misbehavior. Students who reported being completely unsupervised after school scored significantly worse than those who reported at least poor supervision in the categories of bullying and vandalism. Students who reported no supervision or poor supervision showed higher rates of being suspended, cigarette smoking, and fighting than did students who reported being supervised.

Table 7. *The Relation Between After School Supervision and Nine Categories of Misbehavior in Middle School.*

<i>Misbehavior</i>	<i>Percent Never</i>			<i>Chi-Square</i>	<i>p</i>
	<i>Unsupervised</i>	<i>Poor</i>	<i>Supervised</i>		
Bullying	54	84	83	11.37	.00**
Skip Class	69	73	86	3.65	.16
Suspended	71	76	95	8.82	.01**
Cigarettes	71	61	93	10.62	.00**
Alcohol	64	65	83	4.74	.09
Marijuana	76	76	88	2.44	.30
Shoplift	78	92	88	2.90	.23
Vandalism	64	80	90	8.86	.01**
Fights	59	42	79	9.76	.01**

Table 8 shows us the relationship between the type of supervision the participant had after school and the nine categories of misbehavior in high school. Students who reported being unsupervised after school scored significantly worse than students who reported any type of supervision in terms of skipping class, smoking cigarettes, and smoking marijuana. Furthermore, students who reported being supervised after school reported much less skipping class, cigarette smoking, and marijuana use than did those students who reported poor or no supervision.

Table 8. *The Relation Between After School Supervision and Nine Categories of Misbehavior in High School.*

<i>Misbehavior</i>	<i>Percent Never</i>			<i>Chi-Square</i>	<i>p</i>
	<i>Unsupervised</i>	<i>Poor</i>	<i>Supervised</i>		
Bullying	76	90	78	1.81	.41
Skip Class	37	60	73	9.93	.01**
Suspended	85	90	95	1.92	.38
Cigarettes	60	70	95	9.92	.01**
Alcohol	23	30	43	3.20	.20
Marijuana	49	60	82	7.86	.02**
Shoplift	88	100	100	5.54	.06
Vandalism	89	100	91	2.25	.32
Fights	77	90	95	4.79	.09

Parental Relationship

Table 9 shows us the interaction between the type of relationship that is present between the parent and the student, in relation to the nine categories of misbehavior, at the middle school level. Students who reported highly involved, warm relationships reported significantly lower rates of misbehavior in all nine categories. Furthermore, even students who reported a low involvement, but warm relationship reported significantly lower levels of cigarette smoking and marijuana use than student who reported highly involved but cold relationships. Students who reported low involvement and a cold relationship reported significantly higher rates of misbehavior in all nine of the categories with extremely high rates of alcohol use and fighting.

Table 9. *The Interaction between Existing Parent- Child Relationship and Nine Categories of Misbehavior in Middle School.*

<i>Misbehavior</i>	<i>Percent Never</i>				<i>Chi-Square</i>	<i>p</i>
	<i>High Involvement</i>		<i>Low Involvement</i>			
	<i>Warm</i>	<i>Cold</i>	<i>Warm</i>	<i>Cold</i>		
Bullying	85	64	53	27	21.15	.00**
Skip Class	91	71	53	18	34.51	.00**
Suspended	92	71	73	63	23.10	.00**
Cigarettes	92	50	73	18	38.12	.00**
Alcohol	88	57	53	9	35.64	.00**
Marijuana	91	64	80	36	22.00	.00**
Shoplift	94	71	73	63	12.83	.01**
Vandalism	94	57	53	36	31.44	.00**
Fights	84	21	40	9	41.62	.00**

Table 10 shows us the interaction between the type of relationship that is present between the parent and the student, in relation to the nine categories of misbehavior, at the high school level. Our results show significant difference in seven of the nine categories. Students who reported high involvement and warm relationships with their parents reported significantly lower rates of misbehavior when it came to cigarettes and marijuana smoking. Students who reported a warm relationship, whether it was high or low involvement, reported significantly lower rates of misbehavior in categories pertaining to bullying, skipping class, cigarette smoking, and fighting. One significant finding to report is that students who reported a low involvement relationship reported extremely high rates of alcohol use.

Table 10. *The Interaction between Existing Parent- Child Relationship and Nine Categories of Misbehavior in High School.*

<i>Misbehavior</i>	<i>Percent Never</i>				<i>Chi-Square</i>	<i>p</i>
	<i>High Involvement</i>		<i>Low Involvement</i>			
	<i>Warm</i>	<i>Cold</i>	<i>Warm</i>	<i>Cold</i>		
Bullying	89	46	87	50	20.81	.00**
Skip Class	59	38	50	14	10.01	.02**
Suspended	91	92	100	57	15.83	.00**
Cigarettes	83	38	68	35	19.49	.00**
Alcohol	40	23	6	7	11.62	.01**
Marijuana	70	46	50	21	12.93	.00**
Shoplift	92	92	100	85	2.28	.52
Vandalism	92	92	81	100	3.68	.30
Fights	88	76	100	50	16.09	.00**

Poverty

Table 11 shows the relationship between a student's report of financial struggles and nine categories of misbehavior in middle school. Students who reported financial struggles through middle school reported significantly higher rates of misbehavior in eight of the nine categories. The categories where the students who struggled did worse include bullying, skipping class, being suspended from school, cigarette smoking, alcohol use, marijuana use, vandalism, and fighting. The only area where we did not see a significant difference in those who struggled and those who did not was in the area of shoplifting.

Table 11. *The Relation between Socioeconomic Status and Nine Categories of Misbehavior in Middle School*

<i>Misbehavior</i>	<i>Percent Never</i>		<i>Chi-Square</i>	<i>p</i>
	<i>No Struggles</i>	<i>Struggled</i>		
Bullying	80	63	4.19	.04**
Skip Class	88	61	11.53	.00**
Suspended	88	73	4.30	.04**
Cigarettes	88	63	10.15	.00**
Alcohol	87	53	15.75	.00**
Marijuana	88	71	5.33	.02**
Shoplift	85	85	0.00	.97
Vandalism	90	63	11.82	.00**
Fight	74	48	7.47	.01**

Table 12 shows the relationship between a student’s report of financial struggles and nine categories of misbehavior in high school. Our results show a significant relationship between the student’s reports of financial struggles in two of the nine areas. The two areas where a significant relationship was found are cigarette smoking and alcohol use. There were no significant differences found in the other seven categories.

Table 12. *The Relation between Socioeconomic Status and Nine Categories of Misbehavior in High School*

<i>Misbehavior</i>	<i>Percent Never</i>		<i>Chi-Square</i>	<i>p</i>
	No Struggles	Struggled		
Bullying	77	80	0.11	.74
Skip Class	55	43	1.55	.21
Suspended	90	85	0.67	.41
Cigarettes	83	57	8.64	.00**
Alcohol	40	17	6.98	.01**
Marijuana	62	53	1.00	.32
Shoplift	92	92	0.00	.96
Vandalism	88	94	1.21	.27
Fight	88	78	2.14	.14

School Engagement

Table 13 shows the relationship between a student's engagement in school and nine categories of misbehavior at the middle school level. Our results do not show significant correlations in seven of the nine categories. We found a small, positive correlation between skipping class and school engagement and a negative correlation between school engagement and being suspended.

Table 13. *The Correlation between School Engagement and Nine Categories of Misbehavior in Middle School*

Misbehavior	Correlation with School Engagement Score
Bullying	.124
Skip Class	.192*
Suspended	-.281**
Cigarette	.053
Alcohol	.096
Marijuana	.040
Shoplift	.159
Vandalism	.112
Fight	-.001

*Correlation is significant at the .05 level (2- tailed)

**Correlation is significant at the .01 level (2- tailed)

Table 14 shows the relationship between a student’s engagement in school and nine categories of misbehavior at the high school level. Our results show us a small correlation between participant’s school engagement score and five of the categories of misbehavior. We found small positive correlations between school engagement and bullying, skipping class, smoking cigarettes, and smoking marijuana. We found a small negative correlation between being suspended and school engagement.

Table 14. *The Correlation between School Engagement and Nine Categories of Misbehavior in High School*

Misbehavior	Correlation with School Engagement Score
Bullying	.256**
Skip Class	.232*
Suspended	-.187*
Cigarette	.232*
Alcohol	-.005
Marijuana	.231*
Shoplift	.020
Vandalism	.072
Fight	.113

*Correlation is significant at the .05 level (2- tailed)

**Correlation is significant at the .01 level (2- tailed)

Discussion

Family Structure

Almost all previous research has found significant differences in misbehavior between adolescents from single parent homes and two parent homes. Here, at the middle school level, adolescents from single parent homes reported significantly more cigarette smoking and alcohol use, but at the high school level, there were no significant differences found. This lack of significant findings is contrary to prior research and to our hypothesis that adolescents from single parent homes will display increased levels of misbehavior in all of the nine categories. One interesting finding pertaining to family structure is in school misbehavior. In middle school, 78 percent of adolescents from two parent homes report never skipping class. At the high school level these numbers greatly decrease as, only 44 percent report never skipping class. The use of alcohol also greatly increased from middle to high school. At the middle school level, 78 percent of adolescents from two parent homes and 51 percent from single parent homes reported never using alcohol. These numbers shifted to only 33 percent of adolescents from two parent homes and 16 percent from single parent homes at the high school level. This can most likely be attributed to the expected increase of alcohol use between the middle and high school levels. This change is a trend that we see across groups.

The family structure variable also shows a decreasing trend in some of the categories of misbehavior from middle to high school. For example, in middle school 66 percent of adolescents from two parent homes and 51 percent from single parent homes reported never getting into fights. At the high school level this number greatly increased as 81 percent of adolescents from single parent homes and 90 percent from single parent

homes reported never getting into fights. This is an example of how we expect some categories of misbehavior to decrease through maturation. This means that behaviors such as vandalism and fighting may be expected at the middle school level, but it is not normal for these behaviors to carry on into high school. If these behaviors do persist than there may be a serious problem.

These findings show us that family structure is not the area where we need to intervene. We cannot add a parent to the adolescent's life, but we may be able to educate the parents about what changes can be made.

Supervision

The results pertaining to supervision were more expected. Children who reported taking care of themselves before school at the middle school level reported higher levels of misbehavior across eight of the nine categories than those who were taken care of by adults. Individuals who cared for themselves in the morning reported significantly more bullying, skipping class, being suspended from school, smoking cigarettes, using alcohol, smoking marijuana, shoplifting, and vandalism. The most interesting aspect of this finding is that at the high school level, this variable seemed to have no predictability as there were no significant differences on any of the nine categories of misbehavior. This may be due to the fact that at the high school level, it is developmentally appropriate for a student to have to take care of themselves before school and not a sign of family dysfunction. This tells us that even though morning supervision may not be a big deal at the high school level, it is one of the most crucial aspects that we should focus on at the middle school level. I also believe that at the middle school level, one thing that is damaging to these students is the school bus. Individuals who are riding the bus every day

are hearing and seeing much worse things than those students who are supervised to the point where their parent is even taking them to school. One area where we may need to focus is on the school bus.

The largest differences found at the middle school level once again pertain to alcohol and cigarette use as the students who were unsupervised in the morning reported over 30 percent more use in both of these categories. At the high school level these differences decreased to approximately 10 percent. These results show that morning supervision is much more important at the middle school level, so if someone were to attempt an intervention on this variable, it must be done before or during the middle school years in order to have any success.

As for involvement in sports, there were no significant differences found at the middle school level, contrary to my hypothesis. Students who were involved in sports reported no more and no less misbehavior than students who were not involved. At the high school level, we found significant differences in two of the nine categories. These categories were cigarette smoking and vandalism. Individuals who were involved in sports reported significantly less cigarette use, but significantly more vandalism. This finding may be due to our small sample size or due to vandalism through sports rivalries. The cigarette use is also not surprising as the adolescents involved in sports may be more health focused.

Sports are always thought of as a protective variable, but in the current study, we found no evidence to support this. This is another important finding because this can tell us that an area that we believe to be protective, actually has no significant effect.

The last aspect of supervision that we analyzed was the amount of supervision that the adolescent had after school. This question revealed significant differences in five of the nine categories at the middle school level. Individuals who reported being unsupervised or having poor supervision reported significantly more bullying, being suspended from school, cigarette use, vandalism, and fighting. Individuals with poor supervision actually reported more fighting and cigarette use than did individuals who were unsupervised. At the high school level, this analysis revealed significant differences in three of the nine categories. Students who were unsupervised reported an extremely high amount of skipping class and significantly more cigarette and marijuana use. These results reveal that any supervision is better than none, and once again we see that supervision has a greater effect on the youth at the middle school level and not so much in high school.

These findings support that supervision is extremely significant, especially at the middle school level. This means that in order to make for effective interventions, policy must occur while the adolescent is still young. Our findings support the need for some type of before school care for adolescents whose parents or parent are not able to supervise them in the mornings.

Parent- Child Relationship

The analysis of parent- child relationship revealed the most significant results. Students who reported a highly involved and warm relationship reported less misbehavior at every level in middle school. Students who reported a low involvement and cold relationship performed very poorly on all measures. For example, 88 percent of students from highly involved families never drank alcohol at the middle school level, 57 percent

from a highly involved but cold family, 53 percent from a low involvement and warm family, and then only 9 percent from a low involvement and cold family. This means that at the middle school level, 91 percent of children from a low involvement, cold home used alcohol. This can be compared to 12 percent using alcohol from highly involved, warm families.

These results are consistent through high school as there were significant differences at seven of the nine levels. These differences were found in bullying, skipping class, being suspended, cigarette use, alcohol use, smoking marijuana, and fighting. One interesting finding to note is in cigarette use. For this variable, along with bullying, skipping class, and fighting seems to be more controlled by the warmth of the family rather than how involved they are. For these four variables, students who reported warm relationships, even if they also reported low involvement, showed decreased levels of misbehavior. At the high school level, 83 percent from warm, highly involved families and 68 percent from low involvement but warm families reported never using alcohol. This can be compared to 38 percent of students who reported a highly involved but cold household and 35 percent of students who reported low involvement and a cold relationship.

A finding to note is that at the middle school level, involvement is much more important than at the high school level. When the adolescent is in high school, they spend a lot more time with their peers rather than their family. This means that the involvement factor may go down, but it is not due to poor parenting. At this level, it seems that involvement is not as necessary, but when interactions do occur, adolescents benefit from warmth.

This is an area where parents definitely need to be educated. A lot of families just think that they need to be around or involved, but our findings show us that involvement is not all that matters. Parents need to be educated in warmth and compassion. Many parents feel that their child is too mature for this at the high school level, when really this is when warmth is the most important.

Poverty

Finally, we asked the participant a subjective question concerning their family's financial struggles through middle school and high school. Students who reported financial troubles at the middle school level showed significantly higher amounts of misbehavior in eight out of nine categories. The one category that was not significant was shoplifting. This is a rather interesting finding because lower income adolescents would be expected to report more stealing. This finding may be due to many things. For example, shoplifting may be a typically female crime and all of our participants are males.

The largest difference under this variable is found in alcohol use. At the middle school level, 87 percent of children who did not struggle reported alcohol use in comparison to only 53 percent who did report struggles. This variable seemed to be much less significant at the high school level as there were only significant differences found in two of the nine categories. These categories were cigarette smoking and alcohol use. This is yet another example of a variable that seems much more significant at the middle school level. These findings tell us that the earlier an intervention occurs in a child's life than the better the chance of success.

The difference at the middle school and high school level is also very interesting. I would believe that financial struggles would affect the adolescent more at the high school level due to the increased awareness, but this is not what we found. Financial struggles may affect high school students less because they have become more independent. Their family is no longer providing the adolescent with all of their needs, so the financial struggles may affect the adolescent less. Another reason that this may affect older adolescents less is the possibility of making their own money. It is likely that these adolescents may have started working at the high school level and began to pay for their own needs.

Poverty is a difficult area to suggest policy change. We cannot just give these families money or jobs, but we can evaluate the student's situation and at certain levels intervene. This intervention may be as severe as taking the child out of the situation, or simply educating the parent on how to make the struggles affect the child less.

Limitations

The primary limitation to this study is my sample. My sample was not large, and it was gathered through convenience sampling. I used populations that were made available to me through the JMU participant pool and students enrolled in psychology classes at the community college. This study may be representative of male college students age 18- 24, but not of all adolescents. This is yet another limitation as I am studying misbehavior. Even though these students reported delinquency, more serious misbehavior may be more prevalent in a population that did not display enough resilience to make it to college. A final limitation of the study was in response type. Due to the small sample, I was forced to collapse responses pertaining to family structure and the misbehavior questions. A final limitation is the way I surveyed participants. For this study I used self- report data and asked participants to recall things from their middle and high school years. Some student may not be able to remember the answer to all of my questions and this may introduce some memory bias.

Some ideas for future research would be to investigate the parent- child relationship further. This seemed to be the best predictor of misbehavior at both levels and I would like to ask more questions concerning parenting styles and disciplinary practices to investigate why. Rather than suggesting that future research study higher levels of misbehavior, I believe that research needs to continue to focus on low level misbehavior before the serious crimes occur.

Family structure was not predictive of any misbehavior in this study, so I believe future research should continue to investigate the confounding variables that surround these families, rather than the number of parents present in the home.

Appendix

Questionnaire

In this questionnaire I will be asking you various questions concerning the family structure within your home. I will also ask questions concerning parental relationships. These will be followed by questions concerning feelings and attitudes towards school and finally community and school behavior. For questions with blanks, check which answer applies. For the multiple choice questions, answer with the choice that best applies.

1. Sex – M__ F__

2. Age__

3. Institution- James Madison____ Community College_____

4. Current year in school- Freshman, Sophomore, Junior, Senior

5. What was your approximate GPA in high school? _____

6. What was your SAT score in high school? _____ (Verbal and Math)

SES:

7. Mother's furthest education?

- A. Did not finish high school
- B. High school or equivalent (GED)
- C. Some college
- D. Bachelor's degree
- E. Advanced degrees (masters, Ph.D.)

8. Father's furthest education?

- A. Did not finish high school
- B. High school or equivalent (GED)
- C. Some college
- D. Bachelor's degree
- E. Advanced degrees (masters, Ph.D.)

9. Social class consists of a cluster of behaviors and attitudes for example:

Upper middle class:

- College education
- Home ownership
- Professional work
- Destination vacations
- Interests in art, literature, theatre, and history

Lower middle class:

- High School or some college
- Home ownership or long term rental
- Salaried work with benefits
- Leisure focused vacation
- Interests in movies and television

Working Class:

- High school or less education
- Rental homes/ apartment
- Skilled or semi- skilled work
- Vacations often visiting relatives
- Social activities involve neighborhood and church

During middle school and high school years, which one of these categories was most like your family?

- A. Upper middle class
- B. Lower middle class
- C. Working class

Middle School Years (normally grades 6-8)

School Engagement:

Circle number that best applies according to memory of middle school:

Emotional engagement: scale from 1-5, 1: a lot/ 5: not at all

10.If you had to stop going to this school how much would you miss your fellow students:

1 2 3 4 5

11. If you had to stop going to this school how much would you miss your teachers:

1 2 3 4 5

12.If you had to stop going to this school how much would you miss the principal:

1 2 3 4 5

13.If you had to stop going to this school how much would you miss other school staff:

1 2 3 4 5

13.If you had to stop going to this school how much would you miss the way this school treated students: 1 2 3 4 5

Behavioral engagement: scale from 1-5, 1: none/ 3: 2-3 hours/ 5: 6-7 hours

14. c hanging out with friends: 1 2 3 4 5

15. On a school day, how many hours do you spend talking on the phone: 1 2 3 4 5

16. On a school day, how many hours do you spend listening to music: 1 2 3 4 5

17. On a school day, how many hours do you spend watching TV or videos: 1 2 3 4 5

18. On a school day, how many hours do you spend playing computer/ video games:

1 2 3 4 5

19. On a school day, how many hours do you spend playing pick-up games out of school:

1 2 3 4 5

20. On a school day, how many hours do you spend doing homework: 1 2 3 4 5

Cognitive engagement: scale from 1- 5, 1: all the time/ 5: never

21. When you don't do well on school work (test, questions in class), how often do you tell yourself you will do better next time: 1 2 3 4 5

22. When you don't do well on school work (test, questions in class), how often do you try to think of what you did wrong, so it won't happen again: 1 2 3 4 5

23. When you don't do well on school work (test, questions in class), how often do you study harder to do better next time: 1 2 3 4 5

New scale 1-5, 1: not well at all/ 5: very well

24. How well can you learn math: 1 2 3 4 5

25. How well can you learn reading and writing skills: 1 2 3 4 5

26. How well can you remember things taught in class and school books: 1 2 3 4 5

New Scale 1-5, 1: strongly disagree/ 5: strongly agree

27. School is boring: 1 2 3 4 5

28. It is important to do well in school: 1 2 3 4 5

29. Did you feel safe in your middle school?

A. Never

B. Occasionally

C. Often

Family Structure:

30. Who lived in your home during the majority of your middle school years?

A.Two Parents

B.Single Mother

C.Single Father

Parental Relationship:

31. How was your relationship with your parent(s)/ guardian(s)?

A.High involvement and warm

B.High involvement but cold

C.Low involvement but warm

D.Low involvement and cold

Supervision:

32. Who made sure you got to school in the morning?

A. Parent(s)/ Guardian(s)

B. Other Adult

C. Yourself

33. Did you participate in sports in middle school?

- A. Yes
- B. No

34. Did you participate in other after school activities? (Clubs, teams, etc.)

- A. Yes
- B. No

35. After school, were you unsupervised or did you have some type of supervision?

- A. Unsupervised
- B. Poor supervision- someone was there but didn't watch
- C. Supervised

School Misbehavior:

36. Did you bully people in middle school?

- A.Never
- B.Occasionally
- C.Often

37. Did you ever skip class in middle school?

- A.Never
- B.Occasionally
- C.Often

38. Were you ever suspended in middle school?

- A.Yes
- B.No

Community Delinquency:

39. Did you ever smoke cigarettes in middle school?

- A.Never
- B.Occasionally
- C.Often

40. Did you drink alcohol in middle school?

- A.Never
- B.Occasionally
- C.Often

41. Did you smoke marijuana in middle school?

- A.Never
- B.Occasionally
- C.Often

42. Did you ever shoplift in middle school?
 A.Never
 B.Occasionally
 C.Often
43. Did you ever vandalize property in middle school?
 A.Never
 B.Occasionally
 C.Often
44. Did you get into fights in middle school?
 A.Never
 B.Occasionally
 C.Often

Attitudes toward Neighborhood:

45. Did you feel safe in your neighborhood?
 A.Never
 B.Occasionally
 C.Often
46. Was there substance abuse in your neighborhood?
 A.Never
 B.Occasionally
 C.Often

SES:

47. Did your family struggle financially in your middle school years?
 A. Never
 B. Occasionally
 C. Often

High school years (normally grades 9- 12)

School Engagement:

Circle number that best applies according to your memory of high school:

Emotional engagement: scale from 1-5, 1: a lot/ 5: not at all

48. If you had to stop going to this school how much would you miss your fellow students:
 1 2 3 4 5
49. If you had to stop going to this school how much would you miss your teachers: 1 2 3
 4 5
50. If you had to stop going to this school how much would you miss the principal: 1 2 3
 4 5

51. If you had to stop going to this school how much would you miss other school staff: 1
2 3 4 5

52. If you had to stop going to this school how much would you miss the way this school
treated
students: 1 2 3 4 5

Behavioral engagement: scale from 1-5, 1: none/ 3: 2-3 hours/ 5: 6-7 hours

53. On a school day, how many hours do you spend hanging out with friends: 1 2 3 4 5

54. On a school day, how many hours do you spend talking on the phone: 1 2 3 4 5

55. On a school day, how many hours do you spend listening to music: 1 2 3 4 5

56. On a school day, how many hours do you spend watching TV or videos: 1 2 3 4 5

57. On a school day, how many hours do you spend playing computer/ video games: 1 2 3
4 5

58. On a school day, how many hours do you spend playing pick-up games out of school:
1 2 3 4 5

59. On a school day, how many hours do you spend doing homework: 1 2 3 4 5

Cognitive engagement: scale from 1- 5, 1: all the time/ 5: never

60. When you don't do well on school work (test, questions in class), how often do you
tell yourself you will do better next time: 1 2 3 4 5

61. When you don't do well on school work (test, questions in class), how often do you
try to think of what you did wrong, so it won't happen again: 1 2 3 4 5

62. When you don't do well on school work (test, questions in class), how often do you
study harder to do better next time: 1 2 3 4 5

New scale 1-5, 1: not well at all/ 5: very well

63. How well can you learn math: 1 2 3 4 5

64. How well can you learn reading and writing skills: 1 2 3 4 5

65. How well can you remember things taught in class and school books: 1 2 3 4 5

New Scale 1-5, 1: strongly disagree/ 5: strongly agree

66. School is boring: 1 2 3 4 5

67. It is important to do well in school: 1 2 3 4 5

68. Did you feel safe in your high school?

A.Never

B.Occasionally

C.Often

Family Structure:

69. Who lived in your home during the majority of your high school years?

A.Two Parents

B.Single Mother

C.Single Father

Parental Relationships:

70. How was your relationship with your parent(s)/ guardian(s)?
- A.High involvement and warm
 - B.High involvement but cold
 - C.Low involvement but warm
 - D.Low involvement and cold

Supervision:

71. Did you participate in sports in high school?
- A.Yes
 - B.No

72. Who made sure you got to school in the morning?
- A.Parent(s)/ Guardian(s)
 - B.Other Adult
 - C.Yourself

73. Did you participate in other after school activities? (Clubs, teams, etc.)
- A.Yes
 - B.No

74. After school, were you unsupervised or did you have some type of supervision?
- a.Unsupervised
 - b.Poor supervision
 - c.Supervised

School Misbehavior:

75. Did you bully people in high school?
- A.Never
 - B.Occasionally
 - C.Often

76. Did you ever skip class in high school?
- A.Never
 - B.Occasionally
 - C.Often

77. Were you ever suspended in high school?
- A. Yes
 - B. No

Community Delinquency:

78. Did you smoke cigarettes in high school?
- A.Never
 - B.Occasionally
 - C.Often

79. Did you drink alcohol in high school?

- A.Never
- B.Occasionally
- C.Often

80. Did you smoke marijuana in high school?

- A.Never
- B.Occasionally
- C.Ofen

81. Did you ever shoplift in high school?

- A.Never
- B.Occasionally
- C.Often

82. Did you ever vandalize property in high school?

- A.Never
- B.Occasionally
- C.Often

83. Did you get into fights in high school?

- A.Never
- B.Occasionally
- C.Often

Attitudes toward Neighborhood:

84. Did you feel safe in your neighborhood?

- A.Never
- B.Occasionally
- C.Often

85. Was there substance abuse in your neighborhood?

- A.Never
- B.Occasionally
- C.Often

SES:

86. Did your family struggle financially in your high school year?

- A. Never
- B. Occasionally
- C. Often

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