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EFFECTS OF FAMILY STRUCTURE & PARENTAL ACTIVITY ON ADOLESCENT SUBSTANCE USE

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This study investigates adolescent substance use behavior in terms of possible effects of parental activity (i.e., parental monitoring, parental caring, and parental disapproval) and family structure (i.e., single parent family and two parent family households). The relationship between active parental caring, parental monitoring, and parental disapproval with the likelihood of peer association with friends who use alcohol, marijuana, and cigarettes is statistically significant in this study. Findings suggest that lack of active parental caring, parental monitoring, and parental disapproval leads to higher likelihood of peer association with friends who use alcohol, marijuana, and cigarettes, controlling the presence of mother and father. Moreover, the higher levels of alcohol, cigarettes and marijuana use is more likely to happen in the single parent family rather than the two parent family. Finally, parental disapproval for adolescent substance use reduces the likelihood of adolescent use of alcohol, cigarettes, and marijuana.

INTRODUCTION

During 2009, 19.5 per cent of high school students smoked cigarettes, 41.8 per cent had consumed alcohol, and 20.8 per cent had used marijuana in the past month (Centers for Disease Control and Prevention, 2010). These statistics illustrate the significance of substance use among US adolescents. Even if adolescents are aware of the detrimental effects of risky behaviors through their family or school, they tend to engage in substance use during this time period. The Centers for Disease Control and Prevention (CDC) has determined six critical risk behaviors, which are alcohol and drug use, injury and violence, tobacco use, nutrition, physical activity, and sexual risk behaviors (2010).

American family structure has evolved over time due to social forces in society such as socio-economic and political changes. Vis-a-vis the international community, the United States has an exceptionally high rate of divorce; as a result of this growing trend, the single parent household has become more prevalent in this country. Adolescents are faced with the consequences of living in a single parent household family.

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The aim of this study is to investigate adolescent substance use behavior in terms of possible effects of parental activity (i.e., parental monitoring, parental caring, and parental disapproval) and family structure (i.e., single parent family and two parent family households). The relationship between active parental caring, parental monitoring, and parental disapproval with the likelihood of peer association with friends who use alcohol, marijuana, and cigarettes is statistically significant in this study. Findings suggest that the lack of active parental caring, parental monitoring, and parental disapproval leads to higher likelihood of peer association with friends who use alcohol, marijuana, and cigarettes, controlling for single parent and two parent household. Furthermore, the higher levels of alcohol, cigarettes and marijuana use are more likely to occur in a single parent family rather than a two parent family. Finally, parental disapproval for adolescent substance use reduces the likelihood of adolescent use of alcohol, cigarettes, and marijuana.

LITERATURE REVIEW

This study focuses on the integrated theoretical framework of social control theories (Longmore *et al.*, 2009) and differential association theory (Akers *et al.*, 1979). Social control theory contends that parents control the behavior of adolescents through parental caring and parental monitoring (Longmore *et al.*, 2009). *Parental caring* implies that adolescents were properly cared for and that adolescents feel close to their family due to familial encouragement and praise. Adolescents are more likely to internalize parental values as they feel taken care of; consequently, parental caring increases the bond between parent and child (Longmore *et al.*, 2009).

It is argued that poor parental bonding leads to higher likelihood of participation in criminal influences which has direct effects on criminal behavior (Le Blanc, 1995). Parental monitoring reflects that the behaviors of adolescents are restrained by parental control (Longmore et al., 2009). This perspective suggests that poor parental monitoring leads to a higher likelihood of involvement in delinquent behavior (Sampson & Laub, 1993). A lack of parental monitoring after school increases the likelihood of developing deviant behavior as a result of associating with deviant peers. Accordingly, they are more likely to use drugs (Richardson et al., 1989). To examine the possible effects of peer association with friends who use alcohol, marijuana, and cigarettes on adolescents, differential association theory will be utilized. According to Akers (1979), differential association can be defined as the amount of exposure to deviant attitudes and behavior that one gains by associating with others who regularly participate in said behavior. The basic model, as described by Akers, asserts that behavioral changes occur because of "the influence of those groups which control individuals' major sources of reinforcement and punishment and expose them to behavioral models and normative definitions. The most important of these groups with which one is in the differential association are the peer friendship groups and the family" (Akers et al., 1979, p. 638). The basic principle of differential association theory is that "people are likely to become deviant if they associate with people holding deviant ideas rather than with people holding anti-deviant ideas" (Theo, 2004: 32). The lack of parental attachment, grounded on weak parental caring, leads adolescents to be more likely to

associate with peers who have substance use problems. That is, as peer influence increases, parental ties decrease (Steinberg & Silverberg, 1986). Parental caring, which is based on parental warmth, praising children, and closeness to family, is insufficient to prevent children from engaging in deviant behavior. Additionally, to discourage them from deviant behavior, parental monitoring should be employed by parents as a method of control (Hoeve *et al.*, 2009).

The warmth, openness, and caring of parents needs to be felt by children, as their feelings are a significant factor in their ability to adopt the practices of their parents. Furthermore, the author emphasizes that children need "structure-including clear rules for appropriate behavior as well as ritual and routine and they need exposure to positive models. Finally, they need to understand why certain demands are being made of them and the reasons for those demands" (Grusej, 2010, p. 21). Research reveals that adolescents who are in single parent families are more likely to engage in risky behavior than are adolescents in a two parent family (Adlaf & Ivis, 1996). Family members play a role in shaping the behaviors of other members in the family. In fact, parents can have both positive and negative effects on whether children participate in risky behavior (Friedman et al., 2000). Adolescents in single parent families are more likely to use substances such as alcohol and drugs because it is more difficult for a single parent to influence the behavior of their child (Gil et al., 1998). Lee et al. assert that "two parents are in a better position than a single parent to provide supervision and control of conformity in the family, counter associations with deviant peers, exposure to conforming models and attitudes" (2003, p. 21).

Akers et al. suggest that the negative or positive parental reaction determine the substance use behavior of adolescents. To illustrate, the lowest level of substance use was reported by adolescents receiving parental disapproval (Akers et al., 1979).

HYPOTHESIS

- *Hypothesis 1:* Higher levels of alcohol, cigarette and marijuana use are more likely to occur in single parent families.
- *Hypothesis 2:* A higher level of parental disapproval reduces the likelihood of adolescent use of alcohol, cigarettes, and marijuana.
- *Hypothesis 3:* A higher level of parental caring reduces the likelihood of associating with peers who use alcohol, cigarettes, and marijuana in adolescents.
- *Hypothesis 4:* A higher level of parental monitoring reduces the likelihood of associating with peers who use alcohol, cigarettes, and marijuana in adolescents.
- *Hypothesis 5:* A higher level of parental disapproval reduces the likelihood of associating with peers who use alcohol, cigarettes, and marijuana.

DATA AND METHODS

For this research, the data were drawn from the 2008 National Survey on Drug Use and Health (NSDUH), funded by the Office of Applied Studies within the Substance Abuse and Mental Health Services Administration (SAMHSA) and is performed by RTI International, Research Triangle Park, North Carolina. NSDUH provides accurate data on the levels of drug, alcohol, and tobacco use. In this survey, accurate data on the level of legal and illegal drug use were provided. Moreover, the trend of substance use (alcohol, tobacco, other kinds of drugs) was periodically tracked. Additionally, the outcomes of drug use and abuse were evaluated. Finally, groups with a high risk for substance abuse were discovered. The method of data collection was gathered from a computer-assisted administration. This survey is conducted nationwide, with a sample size of 68,736 respondents. The sample persons used in this study only focused on 12-17 year old in the United States, which is 17842 adolescents. Binary logistic regression analysis will be used to determine the adolescent's substance use behavior in terms of possible effects of parental activity (i.e., parental monitoring, parental caring, and parental disapproval) and family structure (i.e., single parent family and two parent family in the household).

MEASUREMENT OF VARIABLES

Dependent Variables

Associating with Peers Who Use Alcohol, Cigarettes, and Marijuana

Association with peers who use alcohol, cigarettes, and marijuana is measured by following questions: (a) How many of the students in your grade at school would you say smoke cigarettes?; (b) How many of the students in your grade at school would you say use marijuana or hashish?; (c) How many of the students in your grade at school would you say drink alcoholic beverages? Answers for these questions can take a value from most/all to none/never. The value of none/never was counted as zero, while the value of most/all was counted as a one.

Adolescent Use

Individual adolescent use of alcohol, cigarettes, and marijuana is measured by following questions: (a) During the past 12 months, have you ever used cigarettes?; (b) During the past 12 months, have you ever used alcohol?; (c) During the past 12 months, have you ever used marijuana? Answers for these questions can be either yes or no. Therefore, a score of zero would indicate yes, and a score of one would indicate no.

Independent Variables

Parental Monitoring Index

The parental monitoring index is measured by following questions: (a) During the past 12 months, how often did your parents check on whether you had done your homework?; (b) During the past 12 months, how often did your parents make you do chores around the house?; (c) During the past 12 months, how often did your parents limit the amount of time you watched TV?; (d) During the past 12 months, how often did your parents limit the amount of time you went out with friends on school nights? Answers for the questions of parental monitoring index can vary between always/ sometimes to seldom/never. To create this index, these four variables were added

together to form a numeric scale. The value of seldom/never was counted as zero, while the value of always/sometimes was counted as a one. Therefore, a score of zero on this index would indicate poor parental monitoring, and a score of four would indicate strong parental monitoring.

Parental Disapproval Index

Parental disapproval to adolescent alcohol, cigarettes, and marijuana use is measured by following questions: (a) How do you think your parents would feel about you smoking one or more packs of cigarettes per day?; (b) How do you think your parents would feel about you using marijuana or hashish once a month or more?; (c) How do you think your parents would feel about you having one or two drinks of an alcoholic beverage nearly every day? Answers for the questions of parental disapproval is ranged between strongly disapprove to somewhat disapprove/neither. To create this parental disapproval index, these three variables were added together to form a numeric scale. The value of strongly disapprove was counted as zero, while the value of disapprove/ neither was counted as a one. Therefore, a score of zero on this index would indicate disapproval of adolescent's substance use, and a score of four would indicate approval of adolescent's substance use.

Parental Caring Index

Parental caring index is measured by following questions: (a) During the past 12 months, how often did your parents provide help with your homework when you needed it?; (b) During the past 12 months, how often did your parents let you know when you'd done a good job?; (c) During the past 12 months, how often did your parents tell you they were proud of you for something you had done?; (d) During the past 12 months, have your parent talked with you about danger of alcohol, cigarettes, and marijuana? Answers for the first three questions of parental caring index are ranged between always/sometimes to seldom never/never. Answers for the last question ranged yes/ no. To create this index, these four questions were added together to form a numeric scale. The value of seldom/never was counted as zero, while the value of always/ sometimes was counted as a one. Therefore, a score of zero on this index would indicate poor parental caring, and a score of four would indicate strong parental caring.

Family Structure

The variable for family structure is based on the presence of the mother or father in the household. If only one parent is in the household, it is considered to be a single parent family. Moreover, if both the mother and father are in the household, it is considered to be a two parent family. Therefore, a score of zero would indicate single parent, and a score of one would indicate two parent family.

RESULTS AND ANALYSIS

Hypothesis Testing

The first hypothesis tested if higher levels of alcohol use are more likely to occur in single parent families. To examine this possibility, a binary logistic regression analysis

Table 1						
The Association Between Parental Caring, Parental Monitoring, Parental Disapproval,						
Single Parent, Two Parent and Individual Use of Alcohol						

	В	S.E.	Wald	df	Sig.	Exp(B)
Parental caring	.017	.029	.361	1	.548	1.017
Parental monitoring	.026	.030	.775	1	.379	1.027
Parental disapproval	363	.053	46.446	1	.000	.696
Single parent	364	.063	33.575	1	.000	.695
Constant	.708	.167	18.008	1	.000	2.031

was constructed with adolescent use of alcohol as the dependent variable. In this model, the odds of individual adolescent using alcohol decreases by 30.5 per cent for the single parent in the household, controlling for the effects of parental monitoring, parental caring, parental disapproval, and the two parent family in the household. To test for the effects of two parent family in the household, the odds of individual adolescent using alcohol decreases by 69.5 per cent for the two parent family in the household, controlling for the effects of parental caring, parental disapproval, and the single parent families. There is an association between parental disapproval and the substance use. The model shows that the odds of individual adolescent using alcohol decreases by 30.4 per cent for each additional increase of parental disapproval, controlling for the effects of parental monitoring, parental caring, and the single and two parent families in the household. Finally, the effects of parental monitoring and parental caring are not statistically significant in this model.

 Table 2

 The Association Between Parental Caring, Parental Monitoring, Parental Disapproval, Single Parent, Two Parent and Individual Use of Marijuana

	В	S.E.	Wald	df	Sig.	Exp(B)
Parental caring	003	.037	.005	1	.942	.997
Parental monitoring	.020	.039	.278	1	.598	1.021
Parental disapproval	332	.063	27.484	1	.000	.717
Single parent	568	.078	52.444	1	.000	.566
Constant	367	.199	3.397	1	.065	.693

The first hypothesis also tested if higher levels of marijuana use is more likely to occur in single parent families. To test this assumption, a binary logistic regression analysis was constructed with adolescent use of cigarettes as the dependent variable. In this model, on one hand, the odds of the individual adolescent using marijuana decreases by 43.4 per cent for the single parent in the household, controlling for the effects of parental monitoring, parental caring, parental disapproval, and the two parent family in the household. On the other hand, the odds of individual adolescent use of marijuana decreases by 56.6 per cent for the two parent family in the household,

controlling for the effects of parental monitoring, parental caring, parental disapproval, and the single parent families. There is an association between parental disapproval and individual use of alcohol, cigarettes, and marijuana. The model shows that the odds of individual adolescent using alcohol decreases by 28.3 per cent for each additional increase of parental disapproval, controlling for the effects of parental monitoring, parental caring, and the single and two parent families in the household. Lastly, the effects of parental monitoring and parental caring are not statistically significant in this model.

Table 3
The Association Between Parental Caring, Parental Monitoring, Parental
Disapproval, Single Parent, Two Parent and Individual Use of Cigarettes

II,						
	В	S.E.	Wald	df	Sig.	Exp(B)
Parental caring	.046	.034	1.823	1	.177	1.047
Parental monitoring	.063	.034	3.369	1	.066	1.065
Parental disapproval	390	.057	46.100	1	.000	.677
Single parent	510	.070	52.436	1	.000	.601
Constant	092	.182	.259	1	.611	.912

The first hypothesis also examined if higher levels of cigarette use are more likely to occur in the single parent family. A binary logistic regression analysis was constructed with adolescent use of cigarettes as the dependent variable. In this model, the odds of individual adolescent using cigarettes decreases by 39.9 per cent for the single parent in the household, controlling for the effects of parental monitoring, parental caring, parental disapproval, and the two parent family in the household. The two parent family has significant effects on reducing adolescent use of cigarettes. Therefore, the odds of individual adolescent use of cigarettes decreases by 60.1 per cent for the two parent family in the household, controlling for the effects of parental monitoring, parental caring, parental disapproval, and the single parent families.

The second hypothesis tested whether the higher levels of parental disapproval reduce the likelihood of adolescent use of alcohol, cigarettes, and marijuana. The model also suggests that the odds of the individual adolescent using cigarettes decreases by 32.3 per cent for each additional increase of parental disapproval, controlling for the effects of parental monitoring, parental caring, and the single and two parent families in the household. Finally, the effects of parental monitoring and parental caring are not statistically significant in this model.

 Table 4

 The Association Between Parental Caring, Parental Monitoring, Parental Disapproval, Single Parent, Two Parent and Associating with Peers Who Use of Alcohol

	В	S.E.	Wald	df	Sig.	Exp(B)
Parental caring	195	.029	43.801	1	.000	.823
Parental monitoring	291	.030	91.676	1	.000	.748
Parental disapproval	302	.055	29.997	1	.000	.740
Single parent	.010	.065	.025	1	.875	1.010
Constant	1.986	.178	124.922	1	.000	7.286

This model shows that the odds of associating with peers who use alcohol decreases by 26 per cent for each additional increase of parental disapproval, controlling for the effects of parental monitoring, parental caring, and single and two parent families in the household. There is a connection between parental caring and adolescent use of alcohol. Our data show that the odds of associating with peers who use alcohol decreases by 17.7 per cent for each additional increase of parental caring for adolescence, controlling for the effects of parental monitoring, parental disapproval and single and two parent families in the household. Moreover, the odds of associating with peers who use alcohol decreases by 25.2 per cent for each additional increase of parental monitoring for adolescence, controlling for the effects of parental caring, parental disapproval, and single and two parent families in the household. Finally, the effects of single and two parent families are not statistically significant in this model.

Table 5
The Association Between Parental Caring, Parental Monitoring, Parental Disapproval,
Single Parent, Two Parent and Associating with Peers Who Use of Marijuana

-			-			
	В	S.E.	Wald	df	Sig.	Exp(B)
Parental caring	192	.033	34.710	1	.000	.825
Parental monitoring	191	.035	29.703	1	.000	.826
Parental disapproval	533	.058	84.267	1	.000	.587
Single parent	036	.077	.213	1	.645	.965
Constant	1.295	.183	50.043	1	.000	3.652

The third hypothesis was to determine if higher levels of parental caring reduce the likelihood of associating with peers who use alcohol, cigarettes, and marijuana in adolescents. To test this assumption, a binary logistic regression analysis was constructed with associating with peers who use marijuana as a dependent variable, dependent upon parental caring. The model shows that the odds of associating with peers who use marijuana decrease by 17.5 per cent for each additional increase of parental caring for adolescence, controlling for the effects of parental monitoring, parental caring, and the single and two parent families in the household. Furthermore, the odds of associating with peers who use marijuana increase by 17.4 per cent for each additional increase of parental monitoring for adolescence, controlling for the effects of parental caring, parental disapproval, and the single and two parent families in the household; followed by, the odds of associating with peers who use marijuana for adolescence decrease by 42.3 per cent for each additional increase of parental disapproval, controlling for the effects of parental monitoring and parental caring and the presence of mother and father. As a final point, the effects of presence of mother and father are not statistically significant in this model.

The fourth hypothesis tested whether the higher levels of parental monitoring reduce the likelihood of associating with peers who use alcohol, cigarettes, and marijuana in adolescences. Parental monitoring is significant to control adolescent's substance use. This model includes that the odds of associating with peers who use cigarettes increase by 20.7 per cent for each additional increase of parental monitoring

Single Parent, Two Parent and Associating with Peers Who Use of Marijuana							
	В	S.E.	Wald	df	Sig.	Exp(B)	
parental caring	203	.031	41.826	1	.000	.817	
parental monitoring	232	.033	48.243	1	.000	.793	
parental disapproval	484	.057	72.401	1	.000	.616	

2.256

71.785

1

1

.133

.000

.073

.180

Table 6 The Association Between Parental Caring, Parental Monitoring, Parental Disapproval, Single Parent, Two Parent and Associating with Peers Who Use of Marijuana

for adolescence, controlling for the effects of parental caring, parental disapproval, and the single and two parent families in the household. Besides, this model also explains the odds of associating with peers who use cigarettes decrease by 18.3 per cent for each additional increase of parental caring for adolescence, controlling for the effects of parental monitoring, parental caring, and the single and two parent families in the household.

The final hypothesis was to determine if a higher level of parental disapproval reduces the likelihood of adolescents associating with peers who use of alcohol, cigarettes, and marijuana. This model reveals that the odds of associating with peers who use cigarettes for adolescents decrease by 38.2 per cent for each additional increase of parental disapproval, controlling for the effects of parental monitoring and parental caring and family structure. And finally, the effects of family structure are not statistically significant in this model.

LIMITATIONS

single parent

Constant

-.110

1.528

As with many studies, this research was cross-sectional and only examined the respondents of a single year. A possible element of future research would be a longitudinal study which examined adolescent substance use at various points in time involving the same sample. Another improvement for this research would be the construction of more robust scales with a greater amount of variability.

CONCLUSION

Despite the limitations of this study, this research makes a significant contribution to the existing literature of adolescent substance use behavior in terms of possible effects of parental monitoring, parental caring, and parental disapproval and family structure (i.e., single parent family and two parent family in the household). The resultant findings present evidence that higher levels of parental monitoring, active parental caring, and parental disapproval reduce the likelihood of associating with peers who use alcohol, cigarettes, and marijuana in adolescents. The finding for the association between parental monitoring and the likelihood of association with peers who use alcohol, cigarettes, and marijuana reaffirms the previous finding presenting lack of parental monitoring after school increases the likelihood of developing deviant behavior as a result of associating with deviant peers. Consequently, they

.896

4.611

are more likely to use substances (Richardson *et al.*, 1989). Moreover, the finding for the association between parental caring and the likelihood of association with deviant peers reaffirms the previous finding presenting the lack of parental attachment grounded on weak parental caring leads adolescents to highly associate with peers who has substance use problems. That is, as peer influence increases, parental ties decrease (Steinberg & Silverberg, 1986). Furthermore, the finding for the association between parental disapproval and the likelihood of adolescent's use of alcohol, cigarettes, and marijuana reaffirms the previous finding presenting the parental reaction determines the substance use behavior of adolescents. To exemplify, the lowest level of substance use was reported by adolescents receiving parental disapproval (Akers *et al.*, 1979).

The other resultant findings present evidence that the higher levels of alcohol, cigarettes and marijuana use are more likely to occur in single parent families. Findings suggest that it is easier for two parent families to influence the behavior of their children than single parent does.

The finding for the association between parental caring and the likelihood of association with deviant peers reaffirms the previous finding presenting adolescents who are in single parent families are more likely to engage in risk behavior than are adolescents in a two parent family (Adlaf & Ivis, 1996). Furthermore, adolescents in single parent families are more likely to use substances such as alcohol and drugs because it is more difficult for a single parent to influence the behavior of their child (Gil *et al.*, 1998).

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