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# Christina Nelson - Applying John Hagan's Power-Control Theory to Gender Differences with Drug Abuse

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Gender Differences in Adolescent Drug Use: Testing Power-Control Theory

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Previous work has indicated that young men and women engage in drug use in different ways and for different reasons. This research tests Hagan's Power-Control Theory to examine gender differences in adolescent drug use. This study analyzes randomly selected subsample of data from the *National Survey on Drug Use and Health* (NSDUH). Questions that led this study were: Do patterns of drug abuse differ by gender? To what extent can Hagan's Power-Control Theory explain this? Control variables looked at gender, age and race. All adolescents were from the ages of 12-17. Dependent variables looked at drug use (ever, yearly, monthly). Drugs examined were: marijuana, cocaine, crack, heroin, methamphetamines, pain relievers (not medically obtained), and any illicit drug. Instrumental variables looked at parental monitoring in order to apply Power-Control Theory. Employing bivariate tests of association, this study finds that there is inconsistent support between certain types of adolescent drug use and Power-Control Theory. There were no gender differences in drug use. Variables that proved to be statistically significant were: Parents Check if Homework is Done, Parents Limit Time with Friends, and Amount Adolescents Argue with Parents.

Keywords: Gender, Drug Use, Power-Control Theory

## Gender Differences in Drug Use: Testing Power-Control Theory

### 1. BACKGROUND

Adolescent drug use continues to be a problem. Drug use can be defined by use of any kind of mind-altering substance illegally or legally obtained to the point of misuse/illicit use or addiction (Robins 1980). Drug use has remained static over the past ten years (SAMHSA 2013) and there are no specific causes or reasons why adolescents begin to abuse drugs. Svensson argued that peer deviance or parental monitoring could be a cause of drug use (2003). In the home environment, parental monitoring or parenting style is a factor that impacts the way a child is raised in addition to neighborhood/peers, and demographics. The home environment in which a child is raised varies among adolescents. As society changes and develops, the once ideal two-parent household occurs less and less. As a result, parental involvement in an adolescent's development seems to lessen.

Previous notions of a family consisted of a husband, wife and two children. In a family household in 1940, approximately 76% were lead by married couples, 4.3% were lead by a single male householder, and 9.8% were lead by a single female householder (USCB 2003). In the present day, fewer and fewer families are structured in the nuclear family arrangement and more mother-only and father-only family arrangements occur more often (USCB 2013). The United States Census Bureau recently reported in 2013, "Living alone has become more widespread as the rising number of one-person

households offset the shrinking number of married households with children” (USCB 2013). Currently, more families have a spouse that is unemployed (BLS 2014). Eventually as adolescents grow older, mothers are more inclined to enter into the labor force (BLS 2014). The Bureau of Labor Statistics stated, “In 2013, the labor force participation rate of mothers with children under 6 years old (63.9 percent) was lower than the rate of those whose youngest child was 6 to 17 years old (74.7 percent)” (BLS 2014), which results with less parental involvement to monitor adolescents. As household environments change, the way adolescents are raised and how families function essentially change. Since the family environment has changed, childhood development changes as well. John Hagan’s Power-Control theory states that girls are subject to greater levels of social control in the family than boys, resulting in boys with higher levels of deviance. A study done by the Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration did a 10-year study on adolescent drug use and showed that drug use has been static over time with little increase or decrease (SAMHSA 2013). The rate of drug use is increasing and changing, specifically with females (Peters, Strozier, Murrin, Kearns 1997). Two questions will be used in this study: (1) Do patterns of adolescent drug use differ by gender? (2) To what extent can Hagan’s Power-Control Theory explain this? The significance of this study is to examine gender differences in drug use and apply power-control theory to it.

## 2. REVIEW OF LITERATURE

### *2.1 Familial Socialization and Development*

The historical notion of the family and child rearing occurs less in society today than it has in previous years (USCB 2013). Broidy and Agnew point out that many women find the role of the housewife “monotonous, demeaning, highly demanding, and restrictive” (1997). As women break away from previously considered norms, a new kind of socialization takes place.<sup>1</sup> More women are becoming more involved in the work force. For example, in 1948, women’s unemployment rate was 67% but decreased to 27% by 2008. In comparison, in 1948, men’s unemployment increased from 5.6% to 13.4% in 2008 (FRBC 2008). However, in 2013, 47% of the time both parents were employed (BLS 2014). Contrary to two parent households, single parent households tend to differ with employment. Single mothers were employed about 73% of the time, whereas single fathers were employed slightly under 82% of the time (BLS 2014).

Adolescents are socialized in different ways in the home environment and with their social groups. Evidence indicates that boys and girls are exposed to first-time drug use by their friends, peers and family members. For example, Hecht, Trost, Bator and MacKinnon note, “everyone was most likely to be offered [drugs] by a friend or family member, followed by acquaintances, and then strangers” (1997). The amount of control that is exerted on a child can indirectly affect the way the child is raised and their

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<sup>1</sup> However, when entering into the job market, they face discrimination as well. Jobs available to many women “often involve tedious and repetitive tasks, low authority and autonomy, limited upward mobility, and the underutilization of their skills and talents” (Broidy & Agnew 1997).

involvement with drug use (Svensson 2003). His or her peer groups often continue to encourage the deviant behavior (Svensson 2003). Lack of monitoring in the home and deviant social groups are examples that encourage adolescents to develop deviant characteristics, such as drug use (Svensson 2003). Interestingly enough, Grella, Scott, Foss, Joshi, and Hser note, “peer relationships were more central to the initiation of drug use among males, whereas male sexual partners had a stronger influence on the initiation of drug use among females” (2003). It also showed “that males present significantly higher levels of exposure to peer deviance than females” (Svensson 2003). Females tend to be more significantly monitored by their parents than males (2003). With a lack of parental monitoring and control, this could expose adolescents to conform to a social group that tends to be more deviant than if parental control was higher; this is more substantial for young women relative to young men (Svensson 2003).

## *2.2 Adult Drug Use*

Interestingly enough, women who abused drugs were more likely to be unemployed than male abusers (Peters, Strozer, Murrin, Kearns 1997). The unemployment rate could be a causal factor for individuals to use drugs or alcohol. A woman’s negative emotions and interpersonal conflicts are usually complemented by a number of aspects, such as bad communication with authority, unavailability of resources, and a man’s involvement with mental and physical abuse. Their known or unknown mental health illness and approach to tackle it and the “loss” of a loved one or “abandonment” by men can also greatly affect a woman’s negative emotions (Sun 2007). Sun states, “The feeling of loss usually was additionally accompanied by betrayal, anger,

and self-blame” (2007). Women are hesitant in creating new social groups; however, in doing so, some women have feelings of discomfort and shame, which becomes a barrier (Sun 2007). A possible cause of a woman’s dependency on drugs could be because many have a history of abuse whether it is “childhood and/or adult, physical, sexual or both,” (Carlson, Shafer, Duffee 2010) in contrast to men. Sun also mentions that “women often self-medicate their psychological or psychiatric disorders when proper medication are not prescribed” for mental health disorders (2007). Young men are not monitored as much as young women; however, young women’s exposure to sexual abuse is higher than male abuse, which is a contributing factor to female drug use (Botzet, Winters, Stinchfield 2006).

### *2.3 Adolescent Drug Use by Gender*

Adolescents are surrounded by peer influences and are more impressionable than older adults. A study done by Gangi and Darling shows that “family influences become less important than peer influences on adolescents’ substance-use behavior” (2012). With this new knowledge, the possibility arises that adolescents may begin to fall susceptible to deviant behaviors. The contrast between men and women are the way that they socialized. For example, young men tend to be more “status-seeking” whereas young women are “more responsive to the needs of others but also to women fear the threat of separation from others” (Steffensmeier, Allan 1996). Reasoning behind drug use varies between low-risk and high-risk students: “low-risk students who do not use drugs view use as a way of losing control of one’s life, while higher risk students or those who already use drugs view use as a way to take control of one’s life” (Hecht, Trost, Bator,



MacKinnon 1997). A study done by Horney and Chodorow describes the development of individuality by boys and girls: “boys need to separate and individuate in order to form a masculine identity, girls form their identity through attachment” (Sun 2007). A girl’s value of attachment in relationships is essential to her identity; however, this attachment with drug-using peers can sway them to use drugs. As adolescents develop in friend groups, they are exposed to delinquent characteristics, such as drug use (Svensson 2003). A study done by McCarthy, Hagan, and Woodward on the revision of the power-control theory noted, “on average, mothers were more involved in supervising their children than fathers and had better relationships with them: Compared to fathers, mothers assumed greater agency in the control of their children” (1999).

#### *2.4 Power-Control Theory*

John Hagan’s power-control theory examines the connection between criminality and familial control. Bates, Bader and Mencken note, “power control theory combines class and control theories of deviance to explain the effects of familial control on gender differences in crime” (2003). In the past, mothers were more involved in their children’s lives than fathers. With women becoming more established in the work place, Hagan claims that this may diminish women’s influence and alter their social effect on girls. Since women are working more, their role is strengthened in the household and subsequently offsets the power of the man in household. As mothers in the home gain more occupational freedom, daughters become more liberated in comparison to sons (McCarthy, Hagan, Woodward 1999). Power-control theorizes that the key to familial socialization is the mother’s role (Bates, Bader, Mencken 2003). Between gender and

control, maternal control tends to be increased to daughters, as paternal control tends to be increased to sons. In patriarchal homes, women would have more influence over daughters than sons; therefore, daughters in the home are more monitored than sons. McCarthy, Hagan, and Woodward said, “males in more patriarchal homes are more likely than females to interpret risk taking as pleasurable and believe that they can avoid the negative consequences associated with risky pursuits” (1999). With the ability to have less control over them, sons are allowed more freedom to partake in deviant behavior and as women gain more freedom, they will begin to commit more crime (Steffensmeier, Allan 1996). Steffensmeier and Allan state, “Patriarchal power relations shape gender differences in crime, pushing women into crime through victimization, role entrapment, economic marginality, and survival needs” (1997).

### 3. DATA AND METHODS

#### *3.1 Study Design*

All data collected for this study comes from the 2004 wave of the *National Survey on Drug Use and Health* (NSDUH 2004). These surveys were administered as early as 1971 up until 2004. Since the NSDUH monitors data over a span of many years, longitudinal data analysis will be used. Since longitudinal data sets are expensive and detailed, they are difficult to come by, especially in the sociology field. Prior to 1999, the NSDUH was conducted in paper form but was then switched to a computer-based program. All information gathered from the respondents was strictly confidential. As of 2002, an incentive of \$30 was given to each respondent that completed the survey, which

resulted with an increase in response rate. The sample size in the original data set was 67,760 respondents; however, my mentor and I condensed it down to three age groups: 12-13, 14-15, and 16-17 years of age. The adolescent sample size was then condensed again to not inflate test statistics associated with many tests of significance that are reliant on sample sizes to reach a final sample size of 913 respondents.

### *3.2 Participants*

The target population of this study was any adolescent ages 12 to 17 at the time the survey was given. The sample resulted in 445 young women (48.7%) and 468 young men (51.3%). The race population was 591 White adolescents (64.7%), 114 African American adolescents (12.5%), 16 Native American adolescents (1.8%), 2 Pacific Islander adolescents (.2%), 21 Asian American adolescents (2.3%), 32 multiracial adolescents (3.5%), and 137 Hispanic American adolescents (15%). There were 286 adolescents (31.3%) in the 12-13 years old age category, 327 adolescents (35.8%) in the 14-15 years old age category, and 300 adolescents (32.9%) in the 16-17 years old age category.

### *3.3 Measures*

The dependent variables will be taken from incident and prevalence rates of drug use. The questions were asked on specific types of drug use: marijuana, cocaine, crack, heroin, hallucinogens, pain relievers, methamphetamines, and any illicit drug. For each specific drug, respondents answered dichotomous questions (yes or no) if they used the drug ever, in the past year, and in the past month. The instrumental variables will be my

indicators of Hagan's Power-Control theory. Levels of measurement questions were asked using the Likert Scale ("Always" "Sometimes" "Seldom" "Never"), and give an indication of how involved parents were in their children's lives. Power-control theory states that parents who were more involved in their children's lives were less likely to commit crimes. Keeping that in mind, the control that parents have over their children may determine their involvement or lack of involvement with drugs. Five questions were taken from the NSDUH dataset; they are: In the past 12 months, how often did your parents check if you did your homework? In the past 12 months, how often did your parents make you do work or chores? In the past 12 months, how often did your parents limit your time spent with friends? In the past 12 months, how often did your parents limit your amount of time you spent watching TV? In the past 12 months, how often did you get into arguments with your parents? These questions support the power-control theory by reflecting parental monitoring and involvement parents are in their children's lives. How often parents checked homework was a variable chosen to reflect parental involvement in an adolescent's schoolwork. How often parents assigned chores to adolescents was a variable chosen to exemplify an adolescent's involvement with household responsibilities. How often parents limited the time spent with friends was one of the most important variables because it could test if monitoring friend groups could impact the adolescent in engaging with peer deviance. The amount of time watching TV was a variable designed to see if parents even monitored television and if it could impact drug use in adolescents. How frequently an adolescent argued with parents was tested to

see if deviance varied between genders. Gender, race and age were taken as control variables.

### *3.4 Methods*

I analyzed the data with the SPSS (Statistical Package for the Social Sciences) computer software. Statistical procedures such as Frequencies, T-Tests, Binary Regressions, and Crosstabs were applied. Frequencies were run in order to retrieve the descriptive statistics, which included measuring the mean, standard deviation and range of each variable. T-Tests were run to find the statistical significance, in order to determine if the probability of the dependent (drug use) and instrumental (power-control theory) variables is related to gender.

## **4. RESULTS**

Drug use in the past decade has remained static with little variation between genders. Adolescent drug use has continued to be nominal. In applying John Hagan's Power-Control Theory, findings were not significant with drug use among adolescents. Those that were reported as significant were: Parents Check if Homework is Done, Parents Limit Time with Friends, and Amount Adolescents Argue with Parents.

### *4.1 Drug Use*

There were no significant differences between gender and drug use. Adolescents report having ever used marijuana 20.6%, cocaine 2.6%, crack 0.7%, heroin 0.2%, methamphetamines 1.6%, pain relievers 12.6%, and any illicit drug 31.7% of the time (Table 1).

**Table 1. Frequencies**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
	Yes (no)	Yes (no)
<b>Drug Use</b>		
Marijuana- Ever Used	188 (725)	20.6% (79.4%)
Cocaine- Ever Used	24 (889)	2.6% (97.4%)
Crack- Ever Used	6 (907)	.7% (99.4%)
Heroin- Ever Used	2 (910)	.2% (99.7%)
Methamphetamines- Ever Used	15 (898)	1.6% (98.4%)
Pain Relievers- Ever Used	115 (798)	12.6% (87.4%)
Any Illicit Drug- Ever Used	289 (624)	31.7% (68.3%)
<b>Parental Involvement in the Past 12 Months</b>		
Parents Made You Do		
Chores		
Always	455	50%
Sometimes	357	39.2%
Seldom	74	8.1%
Never	24	2.6%
Parents Check if You Did		

**Your Homework**

Always	403	48%
Sometimes	269	32%
Seldom	105	12.5%
Never	63	7.5%

**Parents Limit TV Watching**

Always	102	11.2%
Sometimes	211	23.1%
Seldom	212	23.2%
Never	388	42.5%

**Parents Let You Spend Time  
with Friends**

Always	325	38.9%
Sometimes	225	26.9%
Seldom	142	17%
Never	144	17.2%

**Argued with Parents**

0 times	135	15%
1-2 times	255	28.3%
3-5 times	197	21.8%
6-9 times	94	10.4%
10 or more times	221	24.5%

**Gender**

Male	468	51.3%
Female	445	48.7%

**Race**

White	591	64.7%
Hispanic	137	15%

Black	114	12.5%
Multiracial	32	3.5%
Asian-American	21	2.3%
Native-American	16	1.8%
Pacific Islander	2	0.2%
<b>Age Category</b>		
12-13 years old	286	31.3%
14-15 years old	327	35.8%
16-17 years old	300	32.9%

**Table 2. T-Tests**

Variables	Mean		Standard Error	
	Range	Female (Male)	Female (Male)	
<b>Drug Use-Ever</b>				
Marijuana	0-1	.20 (.21)	.019 (.019)	
Cocaine	0-1	.03 (.02)	.008 (.007)	
Crack	0-1	.01 (.01)	.004 (.004)	
Heroin	0-1	.00 (.00)	.000 (.003)	
Methamphetamines	0-1	.02 (.01)	.006 (.006)	
Pain Relievers	0-1	.12 (.13)	.016 (.015)	
Any Illicit Drug	0-1	.29 (.34)	.022 (.022)	
<b>Parental Involvement</b>				
Parents Made You Do Chores	0-3	2.4027 (2.3312)	.03497 (.03473)	
Parents Check if You Did Homework	0-3	2.1348 (2.2708)*	.04794 (.04269)	
Parents Limit TV Watching	0-3	1.0494 (1.0107)	.05075 (.04768)	
Parents Let You Spend Time with Friends	0-3	1.9606 (1.7930)*	.05444 (.05393)	
Argued with Parents	0-4	2.2750 (1.7619)***	.06625 (.06376)	
*p<0.05		**p<0.01		***p<0.001



#### *4.2 Parental Involvement*

Over the past year, young men and women were asked, did parents check if they had done their homework. Adolescents reported parents “always” (48%), “sometimes” (32%), “seldom” (12.5%) or “never” (7.5%) check their homework (Table 2). Young men reported to be have their homework checked more often than young women (S.D.= 0.88728). Over the past year, young men and women were asked if parents limit the time spent with friends. Adolescents reported that parents limited their time with friends “always” (38.9%), “sometimes” (26.9%), “seldom” (17.2%) or “never” (17.2%) of the time (Table 1). Young women reported that parents limited their time with friends (S.D.= 0.1.09699) than men. Over the past year, young men and women were asked about the amount of times they argue with their parents. Adolescents reported they fought with their parents in a given year “10 or more times” (24.5%), “6 to 9 times” (10.4%), “3 to 5 times” (21.8%), “1 to 2 times” (28.3%), “0 times” (15%). Young women reported to get into fights with their parents (S.D.= 1.38962) than young men (Table 2).

#### Multivariate Binary Logistic Regression Models

I ran two models that included each of the parental control and parental relationship variables. Both of these models also included a dummy variable where 1=White respondents and 0= respondents from all other races. In these models, I also specified having ever used any illicit substance as the dependent variable. Due to the two-category response options, I employed a binary logistic regression technique to avoid biased regression estimates or results that are uninterruptable. Finally, I ran the model for

each gender to determine if the same parental control/parental relationship covariates had a differential impact on why adolescent girls and boys use drugs. The data indicated some differences. Adolescent boys were 26.5% more likely to report using an illicit substance if they fought with their parents and 40% less likely if their parents monitored their television viewing. Conversely, adolescent girls were significantly less likely to report ever using an illicit substance if their parents monitored their television watching by 24% and checked if they did their homework by 29%. In sum, the results indicate that parental control is important for both girls and boys but there are important differences as well.

## 5. DISCUSSION AND CONCLUSION

### *5.1 Discussion*

This study was aimed toward applying John Hagan's Power-Control Theory against gender differences in drug use. Unfortunately, most of the results were not significant with gender differences. Those that were reported as significant were: Parents Check if Homework is Done, Parents Limit Time with Friends, and Amount Adolescents Argue with Parents. Gender differences in drug use does not support the aspect of power-control theory, that young men engage more in deviance (drug use) than young women.

Another aspect that conflicts with power-control theory is the aspect that young men experience more monitoring than young women in regards to having their homework checked. Young men report that their parents check their homework more regularly than young women. According to power-control theory, young women are more likely to experience social control than young men are; however, this result does not

support this. An aspect that is consistent with power-control theory is the aspect that young women experience more monitoring than young men in regards to having their time limited with friends. Amount of television watching was a variable that was tested to see if that could even impact adolescent drug use. Surprisingly, when parents monitor the amount of television watched, adolescents are less likely to use illicit drugs. This does not necessarily support power-control theory, but was a variable tested to see if it could impact drug use. Parental monitoring did not directly impact most other variables, but limiting TV watching itself could be what positively impacts a child from using illicit drugs. Young women report that their parents limit their time with friends more regularly than young men. According to power-control theory, young women are more likely to experience social control than young men. Having parents monitor the amount of time spent with friends can prevent peer deviance. An aspect that conflicts with power-control theory is the aspect that young women get into more arguments with their parents than young men. According to power-control theory, young men are more likely to deviate than young women do; however, this result does not support this.

### *5.2 Further Research*

Travis Hirschi's Social Control theory may support gender differences with drug use. "Hirschi argued that delinquency can be explained by the absence of social bonds" which may be able to support gender differences in drug use (Bernard 2014).

### *5.3 Limitations*

The main issue of this study was the lack in amount of adolescents abusing drugs. Most adolescents do not use drugs or do not report drug use. The lack of a large subject pool to test power-control theory was definitely a limitation that could have impacted this study. Another limitation of this study is the lack of literature available on adolescent drug use and power-control theory in regards to drug abuse. Most of the previous studies done on drug use and gender differences were predominantly done on adults versus adolescents. There has been a lack of longitudinal research done that concentrates on adolescents and drug use. Another limitation is all of the data collected was based on a self-report method. Self-reported data can vary based off of the participant's memory. Self-report data can also be recounted as biased which may skew data. Another limitation is the lack of supportive questions to be applied to power-control theory. There were minimal questions that could be applied to test this theory; therefore, applying the questions that were asked, in conjunction with power-control theory; had room for varied results. Also, for the questions asked, there is room for interpretation which could have varied results.

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