DIFFERENTIAL ASSOCIATION AND MARIJUANA USE IN A JUVENILE DRUG COURT SAMPLE

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This paper examines the impact of one specific type of learning (differential association) on the marijuana use of juveniles who were participating in a drug court program. The subjects were youths from a rural community in Ohio. The data were taken from the Global Appraisal of Individual Needs (GAIN) (Dennis, 1999). The theoretical framework for this research was Sutherland's theory of differential association. The differential association model accounted for nearly 40% of the marijuana use of the youths in this sample. Two specific measures (the number of people a subject used drugs with and using drugs with a sexual partner) were significant predictors of marijuana use. Implications of this study for court programs and future research also are discussed.

Keywords: differential association, substance abuse, Global Appraisal of Individual Needs, Reclaiming Futures, juvenile drug court

INTRODUCTION

Hardin County Juvenile Court, a rural court serving a county population of about 31,000, has adopted a framework of the Reclaiming Futures Six Step Model (Reclaiming Futures, 2014), with a number of best practice tools and resources to recreate (reform) itself so it effectively can meet the significant needs of the kids and their families who make up the Hardin County Juvenile Court's caseload. The court, judicially, operates from the county courthouse. However, the probation, treatment, education, and pro-social activity services are located in another building called The Lifeworks Center. The staff members at the Lifeworks Center are probation officers, treatment providers, teachers, and program specialists. They are cross-trained so that everyone can communicate in the same language to understand and support each person's role in the treatment system. At Lifeworks, Hardin County Juvenile Court's probation includes two specialized treatment dockets: coordina-

tion and management through supervision, accountability, validated screens and assessments (Global Appraisal of Individual Needs family of tools); and random drug screening. Hardin Community School describes itself as a recovery school for at-risk 6th to 12th graders who are behind on earned credits or who are struggling with substance abuse or dependency. Teachers are on site to provide instruction.

Treatment is essential since 77% of students report their first use was at age 14 or before; 40% are diagnosed with an internalizing disorder, which are classified as disorders that are experienced internally to the individual such as anxiety, depression, somatic disorder, suicide, and traumatic distress (Dennis, Chan, & Funk, 2006); 61% have been diagnosed with an externalizing disorder, which are classified as behaviors that are externally expressed by individuals such as attention deficit disorder, conduct disorder, hyperactivity and other impulse control disorders (Dennis et al. 2006); and 32% qualify for both. There are multiple treatment providers and partner programs including 4-H, financial literacy, health education, independent living skills, and scrap booking. Evidence-based treatment programs include Active Parenting of Teens, Parenting Wisely, Seven Challenges, Adolescent Community Reinforcement Approach (Youth), Community Reinforcement Approach (CRA for adults), Assertive Continuing Care, Moral Reconation Therapy, Motivational Interviewing, Horse and Youth program (HAY), and Thinking for a Change.

Stakeholders include the Chamber and Business Alliance, the Sheriff's Department, the local bar association, Hardin Community Foundation, Quest Federal Credit Union, Ohio State Extension Office, local school districts, Ohio Northern University, various faith-based organizations, service-oriented organizations, and Habitat for Humanity. These partners provide job shadowing, internship opportunities, skill development, and service learning projects that equip and provide a forum for justice kids to engage with the community. Since there is a 97.2% poverty rate among the families that the court serves and no public transportation in Hardin County, the local schools provide busing services to Lifeworks daily so that students in need of intensive supervision, academic stability, and treatment services can receive them without interruption.

Students who attend Hardin Community School are at least one year behind their graduating class; come to Hardin Community School with significant academic deficiencies, usually graduate eighteen months past the traditional four years of high school; have a 4th grade or lower reading level; and have significant difficulties with state standardized testing. Students are also in legal trouble and experience chronic truancy, chronic behavioral issues, and/ or substance abuse/ dependency struggles. The benchmark for state standardized testing is minimally 75% of sophomores and 85% of juniors, and seniors are expected to pass. The remaining 15-25% of students are not expected to pass. The entire population of students at the Hardin Community School are among those "not expected to pass."

While sanctions are used, along with incentives, a least restrictive approach is applied with confinement being the last resort. The goal is always to try and keep justice kids in the community. With reforms applied including risk assessment, case planning, inten-

tional outcomes, and measurements that can be collected and evaluated, the implementation of evidence-based treatment programs and ongoing, consistent staff training, justice kids and their families' lives can experience much better outcomes (legal, academic, treatment) as the following data overwhelmingly demonstrates. With such a diverse, strength-based, multi-disciplined approach, academically Hardin Community School (founded in the fall of 2010) has had 59 students graduate out of a total of 62, a four year graduation rate of 95.2%.

Global Appraisal of Individual Needs

The major assessment instrument used in this project is the Global Appraisal of Individual Needs (GAIN) (see Dennis, 1999). The GAIN provides a progressive and integrated series of measures and computer applications designed to support initial screenings, brief interventions, and referrals; standardized biopsychosocial clinical assessments for diagnosis, placement, and treatment planning; monitoring of changes in clinical status, service utilization, and costs to society; and subgroup and program level needs assessment and evaluation (Dennis, Funk, Godley, Godley, & Waldron, 2004). As a comprehensive assessment tool, the GAIN also includes scales that screen for trauma and victimization that can alert the clinician to conduct further assessment or referral for treatment in this area.

The GAIN has eight core sections: background, substance use, mental and emotional health, environment and living situation, physical health, risk behaviors and disease prevention, legal, and vocational. These items are combined into more than 100 indexes, scales, and subscales that can be used for DSM-IV based diagnoses, JCAHO-based treatment planning, ASAM-based level-of-care placement, and DOMS-based outcome monitoring.

The Hardin County Juvenile Court administers the GAIN in a standardized process that has been set by the creators. Those certified to administer the GAIN meet with the juveniles one-on-one and go through the questionnaire systematically. The administrator asks the juveniles each question orally and writes those responses on the questionnaire. Each GAIN is composed of the eight core sections listed above and within each section a multitude of questions correspond to the section. After the interviewing process is over, the administrator then inputs the answers into the GAIN's online program, which then generates the output scales that give a guideline to how the juvenile should be handled within the justice system.

Theoretical Framework

Social learning theorists maintain that crime is the result of learning the behaviors, values, and norms that are associated with criminal behavior (Siegel, 2010). Criminal behavior is essentially the result of the socialization process. The pioneering social learning theory in criminology was Sutherland's (1947) theory of differential association. He made a number of observations about the process by which a person turns to criminal behavior. According to Sutherland, criminal behavior, like any other form of human behavior, is learned. The learning of criminal conduct involves the same type of learning mechanisms as any other behavior. This learning occurs through interaction with intimate personal

groups such as friends and family. This involves the direct association with individuals who engage in certain forms of conduct, as well as the exposure to different sets of values and norms as a consequence of such an association. This learning includes both the specific techniques for committing the criminal offense, as well as the "mind set" for engaging in crime (e.g., attitudes and values). The attitudes and meanings that a person attaches to behavior are called definitions. An individual learns two types of definitions, pro-social and pro-criminal. Sutherland's principle of differential association holds that deviant behavior should be expected when definitions conducive to law violation outweigh definitions conducive to obeying the law. Some definitions are pro-criminal because they neutralize guilt or conventional morality, while others rationalize the illegal behavior (Akers, Krohn, Lanza-Kaduce, & Radosevich, 1979). Exposure to delinquent peers also can alter the opportunity structure for criminal behavior (Pratt et al., 2010). Groups to which an individual differentially associates with provide models to imitate as well as reinforcement for either criminal or non-criminal behavior (Akers & Sellers, 2004).

Sutherland's (1947) theory was a groundbreaking moment in the field of criminology, since it brought both sociological analysis and learning to a primary place in the discipline. It was later refined by Akers to be part of a general social learning theory (Akers et al., 1979). However, research indicates that differential association has stronger predictive power than other components of social learning theory (Pratt et al., 2010). Sutherland's ideas have been subjected to a number of empirical tests and have received tremendous support. This framework has been successfully applied to a vast array of deviant behaviors including academic cheating by university students (Michaels & Miethe, 1989); adolescent substance abuse (Akers et al., 1979; Sellers & Winfree, 1990; White, Johnson, & Horwitz, 1986; Winfree & Griffiths, 1983; Winfree, Sellers, & Clason, 1993); anabolic steroid use by male bodybuilders (Durkin, 1992); the use of fraudulent identification by college students to obtain alcohol (Durkin, Wolfe, & Phillips, 1996); adolescent cigarette smoking (Akers & Lee, 1996) and binge drinking among college students (Durkin, Wolfe, & Clark, 2005).

Theoretical Predictions

Several hypotheses were derived from the theory of differential association regarding marijuana use. First, the greater the number of people a subject shared drugs with, the greater the frequency of their marijuana use. Second, using drugs in a "party" setting will be positively related to the frequency of marijuana use. Third, using drugs with a sexual partner will be positively related to the frequency of marijuana use. Finally, having social peers who use drugs will be positively related to the frequency of marijuana use.

METHODS

Secondary data analysis was used for this study. The substance that is most commonly abused is marijuana so we selected this as our dependent variable. There were multiple variables on the GAIN that related to the use of marijuana, however, this research called for us to focus on "P90: how many DAYS used marijuana, hashish, blunts, or THC?" (Measured by asking how many days out of 90). After choosing this as the dependent variable we went through the data set to find variables that were reflective of differential as-

sociation. The remaining variables that were chosen include "With how many people were you sharing?;" "P90: Used at a party/bar;" "P90: Used w/ spouse/sexual partner;" P90: Used w/ friends;" and "Social peers used drugs in past 90 days."

TABLE 1

Descriptive Statistics and Zero-Order Correlations

		Y1	X1	X2	X3	X4
Y1	Days Used Marijuana in the Last 90	1.00				
X1	Number of People Shared Drugs With	.50**	1.00			
X2	Used at Party	.34**	.37**	1.00		
X3	Used with Sexual Partner	.35**	.06	.11	1.00	
X4	Social Peers Used Last 90 Days	.27*	.20	.23*	.16	1.00
	Mean	8.99	1.34	.32	.08	.39
	SD	15.95	1.66	.47	.27	.49

*p<.05
** p<.01

RESULTS

The descriptive statistics and zero-order correlations between each of the variables is shown in Table 1. All of the bivariate relationships between the respective differential association variables and frequency of marijuana use during the last 90 days are statistically significant. However the correlation between the number of people the subject reporting sharing with in the number of days the used marijuana ($r = .50$) is particularly strong. The correlation between both using with a sexual partner ($r = .35$) and using at a party ($r = .34$) were moderately strong. Finally, although the correlation was not as strong as the other differential association measure and marijuana use, the positive relationship between social peers used and the frequency of this behavior is also significant ($r = .27$).

An OLS regression model was used to test the effectiveness of a differential association explanation of marijuana use. The result appear in Table 2. Overall, this model accounts for more than one-third (39%) of the variance in the frequency of marijuana use in this sample drawn from a juvenile drug court populations. Two of the variables derived from differential association, number of people shared with ($\beta = .42$) and its use with a sexual partner ($\beta = .29$), were significant predictors of marijuana use. However, given the results of this analysis, it is clear that the size of the drug using network is the most important GAIN variable in accounting for the frequency of marijuana use in this sample.

Table 2

Regression Results (Betas) for Marijuana Use

	Beta
Social Peers Use Drugs	.12
Used with Sexual Partner	.29**
Number of People Shared With	.42**
Used at Party	.12
R^2	.39**

*p<.05
** p<.01

Discussion

There are two variables that show the most significant values with regards to marijuana use in Hardin County juveniles. The first variable revealed, "With how many people were you sharing?" shows a significant relationship ($p < .01$) between juvenile marijuana use and differential association. First, differential association claims that behavior is learned from friends and family. This makes sense when looking at the number of people with which someone is sharing. People sharing shows that they commit this act in a group and have relations with the people with whom they are sharing. This leads to the belief that they have been taught this behavior from these other individuals, whether they are friends or family. Second, by being with others sharing the marijuana, an individual has their behavior reinforced. Intimate relationships allow for individuals to imitate those around them and justify their behavior based on their surroundings..

The second significant variable is "P90: Used w/ spouse/sexual partner," also is significantly associated ($p < .01$) with differential association and marijuana use. The juveniles in intimate relationships, as shown in the data, tend to participate in marijuana use together. Like sharing with others, these behaviors among juveniles and their partners express that they are being reinforced as users. The person that they are intimate with engages in the same behavior, which can be associated with them being involved in a relationship together. In fact, this similarity may very well be what brought them together in the first place.

The data for this research suggests that changes are needed in the treatment of the juveniles within the program. The number of people that the juveniles are sharing drugs with is statistically significant, thus indicating that changes need to occur in the conditions of probation. These changes would include factors such as limiting the time spent with peers who facilitate the use of drugs or the complete stoppage of association with these peers altogether. The simple fact is that there is a compelling need to stop juveniles from being around others who do the same drugs. Once juveniles become a part of the treatment program, the goal is to stop the usage of drugs, such as marijuana in this instance. If the juveniles are able to continue to spend time with other users, then the treatment program will not be able to be effective in the desired way. On top of that, certain states have no conditions that exist to prohibit the association with peers or sig-

nificant others while in the respective treatment program. It is important that we limit these associations because in doing so the usage with peers and partners will decrease significantly. In order to ensure treatment success, the social networks of youths in a treatment program must be carefully monitored.

As for the limitations or this study, there were two major concerns. First, secondary data analysis limits the results that we can obtain and the generalizations that we can make to other populations. For instance we are looking at the Hardin County GAIN data for juvenile delinquency and with that comes the lack of real diversity within the group of subjects. Hardin County is a fairly small county in terms of population size and variance, and there was also a lack of data regarding urban areas, as the county is a very rural area. With this lack of diversity and other unique factors within Hardin County, external generalizability becomes very difficult after we have exhausted the data set. Another setback is that the data set we are looking at is based from the GAIN (Global Appraisal of Individual Needs) questionnaire. Why this is important to note is because we cannot ask the types of questions that we want to ask, we are forced to rely on the questionnaire creators' ideas. This increases the difficulty in obtaining the answers that we want to get and how we can interpret the results we can obtain from the dataset.

The other major limitation associated with the current undertaking is that the measurements were limited to only one aspect of social learning, differential association, because we were relying on secondary analysis of the GAIN data. Other aspects of social learning, specifically differential reinforcement and definitions (see Akers & Sellers, 2004), may be useful in achieving a more complete understanding of the dynamics of marijuana use in this juvenile drug court population. Since there are no measures in the GAIN that represent the other aspects of social learning theory, the data collection could be supplemented with a questionnaire developed to measure the other aspects of social learning. Future plans for the current project involve utilizing this strategy to achieve a more detailed understanding of this problem.

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