DISSERTATION

MENTAL HEALTH DIAGNOSIS AND PERCEPTIONS OF JUVENILE DELINQUENT BEHAVIORS: THE IMPACT OF ETHNICITY

Submitted by

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In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Summer 2010

COLORADO STATE UNIVERSITY

April 1, 2010

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY STEFFANY L. MALACH ENTITLED "MENTAL HEALTH DIAGNOSIS AND PERCEPTIONS OF JUVENILE DELINQUENT BEHAVIORS: THE IMPACT OF ETHNICITY" BE ACCEPTED AS FULFILLNG IN PART THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

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ABSTRACT OF DISSERTATION

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Recent reports indicate that as much as 60 to 75 percent of youth in the juvenile justice system have been diagnosed with a mental health disorder. Reports further indicate a wide disparity of disposition at all stages of juvenile judicial decision-making according to a juvenile's ethnicity. Delinquent behavior is often a symptom of commonly occurring childhood mental health disorders, and differences based on ethnicity in both entrance into the juvenile justice system, outcomes of adjudication, and referral to mental health resources has yet to be widely explored. The present study sought to examine how the presence of a mental health diagnosis affects perceptions of juveniles of different ethnicities who engage in delinquent behaviors. Eight hundred forty six female and male university undergraduates read one of six vignettes depicting a juvenile, who was presented as Hispanic, African American, or Non-Hispanic White, engaged in a delinquent behavior. The juvenile was identified as having either ADHD, Conduct Disorder, Bipolar Disorder, Major Depression, Abuse/Neglect, or No Mental Illness. Participants expressed their perception of the juvenile's culpability for the given behavior, their conceptualization of the juvenile's character, and rated the amount of punishment and treatment they recommended.

Results indicated that knowledge about a juvenile's ethnicity did not affect the amount of psychiatric treatment or severity of punishment recommended for the juvenile, nor did it significantly impact overall conceptualization or willingness to forgive the juvenile. Having received information about the juvenile's mental health status, however, was shown to affect how positively or negatively the juvenile was viewed in general, the amount of psychiatric treatment recommended, and the severity of recommended punishment. Results further indicated that female participants were more likely to forgive the juvenile for his behavior than were males. Implications of these findings for the juvenile justice system are discussed.

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ACKNOWLEDGEMENTS

Without the guidance and efforts of many people, this project would not have been possible. Specifically, I am greatly indebted to by academic advisor, Dr. Lee A. Rosén, whose consistent guidance, sound advice, and unfailing support and enthusiasm bolstered me throughout this project. It would have been next to impossible to complete this project without his assistance, and not nearly as rewarding to move through graduate school without his wonderful and enspiring spirit. Also, I would like to express my gratitude to the members of my dissertation committee, Dr. Larry J. Bloom, Dr. Randall Swaim, and Dr. Kimberly Bundy-Fazioli, whose judgments and perspectives were instrumental in the production of a well-formed and comprehensive final project.

Finally, I owe the biggest debt to my incredibly loving and uplifting friends and family. To my aunt and uncle, Dave and Shelly Malach, whose warmness surrounded me even when I was stressed and frustrated. To my sister and my brother-in-law, Stacey Jacks and Jason Caudill, who lifted my spirits when I was grumpy and iritable. To my grandparents, Wesley and Ione Kizer, who provided me with unfailing encouragement and support. Especially I would like to thank my wonderful parents, James and Robyn Malach, whose unshakable faith and absolute confidence have been the support that has allowed me to take the risks necessary to reach my dreams. They are my greatest blessing, and it is only through the knowledge that they will always be there to catch me should I fall that I was able to reach for greatness. To them I dedicate this work.

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Introduction

The course of child and adolescent mental illness often results in the exhibition of delinquent behaviors as a manifestation of the illness, and subsequent early entry into the legal system. Research suggests that there is often little consideration in judicial decision-making regarding the impact the juvenile's mental illness may have had on the enactment of non-socially sanctioned behaviors (Bernburg, Krohn, & Rivera, 2006; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Ditton, 1988; Lexcen & Redding, 2000). The stigma of having a mental illness is thus compounded by the stigma of having a formal offender status, and the resultant fear, devaluation, and discrimination can have a lasting detrimental impact on the juvenile and his or her subsequent quality of life. (Borinstein, 1992; Corrigan et al.; Gaebel, Zäske & Baumann, 2006). Furthermore, juvenile offenders who have a formal mental health diagnosis or even a diagnosed mental health impairment are at greater risk for reoffending upon reentry into the community, thus suggesting that detainment is not the most appropriate response in a legal system that aims to reduce recidivism and promote rehabilitation (Hussey Drinkard, & Flannery, 2007).

Research suggests that both legal involvement and mental illness negatively affect psychosocial functioning and decrease quality of life (Bernburg, Krohn, & Rivera, 2006; Corrigan et al., 2001; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Martin, Pescosolido, & Tuch, 2000). The negative conceptualization of both criminality and mental illness by the lay public has the potential to worsen the course of the illness and intensify the stigma placed on juvenile offenders with co-occurring mental health needs (Borinstein, 1992; Crisp, et al.; Gaebel, Zäske, & Baumann, 2006; Watson et al., 2001; Warr, 1995). In addition, the issue of mental illness, and the effect it has on legal

prosecution, is important insomuch as the interaction of these two factors may shape the future of individuals who are affected by both.

Research shows that the rate of individuals with one or more mental health diagnosis in the juvenile justice system continues to grow at a staggering rate. This "warehousing" of youth with mental health problems for treatment within the juvenile justice system has led juvenile detention centers to be called by some professionals a "depository of last resort" (Maschi, Hatcher, Schwalbe, & Rosato, 2008, p. 1377). Statistics indicate that the incidence of mental illness among youth involved in the legal system is disproportionately higher than among non-offending youth (Graves, Frabutt, & Shelton, 2007). While approximately 18% to 22% of youth in the general population have a diagnosable mental illness, studies show that between 40% to 90% of juveniles within the justice system meet diagnostic criteria for one or more mental health disorders (Graves, Frabutt, & Shelton, 2007; Rozalski, Deignan, & Engel, 2008). Studies exploring the suicidal and self-harmful behavior patterns in adolescents have also demonstrated the severity and chronicity of mental health symptoms experienced by youth within the juvenile justice system. For example, a systematic random sample of 289 adolescent inmates at a juvenile correctional facility assessed the prevalence of suicidal and self-harmful behaviors (using the Spectrum of Suicidal Behavior Scale and the Functional Assessment of Self-Mutilation) of these youth during their incarceration (Penn, Esposito, Schaeffer, Fristz, & Spirito, 2003). Of this sample, seventy-eight of the adolescents had been referred for psychiatric assessment, and 12.4% reported prior, non-fatal suicidal gestures, of which 60% of the attempts were violent in nature. Overall, the authors concluded from their findings that incarcerated youth have higher rates of suicide

attempts, use more violent methods in suicidal gestures, and demonstrate more severe affective symptoms than adolescents in the general population (Penn et al., 2003). Further support for these findings comes from the Department of Justice which showed that as early as 1989, the suicide rate for juveniles within corrections was 4.6 times higher than that of youths in the general population (Penn et al., 2003).

Past research has shown that having knowledge of a juvenile's mental health history can impact both conceptualizations of that juvenile and desire to provide treatment for the juvenile (Malach, 2008). The question of how the ethnicity of the juvenile interacts with knowledge of mental health diagnosis in impacting conceptualizations of the juvenile and informing judicial decision-making remains. This question is far-reaching in its importance as it affects practice in the juvenile justice system as a whole as well as the lives and futures of the individual juveniles therein.

Public Perceptions

Individuals with mental illness have historically been viewed by the general public with fear and aversion (Martin, Pescosolido, & Tuch, 2000). Although there has in recent decades been an overall increase in understanding of mental health disorders by the lay public, in general individuals continue to report greater desire for social distance from individuals who have a mental health diagnosis than from individuals without a formal diagnosis (Crisp et al., 2000). In fact, Link, Cullen, Struening, Shrout, and Dohrenwend (1989) suggest that public perception of mental illness is one of "devaluation and discrimination" (p. 402). Research has also indicated that, while a great majority of the lay public expressed pity for and a desire to help individuals with mental

health disorders, feelings of uneasiness, anxiety, and uncertainty towards persons with mental illness are reported in equally high numbers (Angermeyer, & Dietrich, 2006).

Public attitudes towards crime also continue to be one of trepidation, with the majority of individuals from the United States expressing concern that the justice system is too lenient on offenders (Warr, 1995). There is also a public preference for severe penalties for juvenile offenders (Kalbeitzer & Goldstein, 2006; Warr). For example, Kalbeitzer and Goldstein (2006) recently studied public opinion of capital punishment sentences for juvenile offenders, and found that the general public would more often recommend death sentences for juveniles who have committed a homicide than to recommend a sentence of life imprisonment. In addition, perceived level of the juvenile's responsibility for her or his behavior was found to be significantly predictive of suggested sentence type (Kalbeitzer & Goldstein, 2006). For example, perceptions of greater juvenile responsibility for the crime were associated with a greater likelihood of a death sentence recommendation.

This desire for harsher penalties may show the general public's naivety of the fundamental biological and social differences that have been found between juveniles and adults. Responding to the 2005 *Roper v. Simmons* U.S. Supreme Court case, which made illegal death penalties for individuals under age 18, the American Psychological Association filed an amicus brief which documented the "unformed nature of adolescent character" and cited a "biological dimension" to juvenile behavioral immaturity (Kalbeitzer & Goldstein, 2006). Research has also shown other differences between offending and non-offending youth. For example, youth in the juvenile justice system have significantly higher incidence of mental illness, and also tend to have lower IQ

scores than nonoffending youth (Kalbeitzer & Goldstein, 2006). Furthermore, youth in the juvenile justice system are ruled "delinquent" rather than "guilty" (Bernburg, Krohn, & Rivera, 2006). This official labeling has been shown to raise the juvenile's risk of being rejected from conventional social networks, increase her or his likelihood of moving into deviant social groups, and increase the youth's risk of successive involvement with the juvenile justice system (Bernburg, Krohn, & Rivera, 2006).

Neurobiological Correlates of Delinquent Behaviors

Emerging research is also suggesting neurobiological differences in children and adolescents who engage in criminal offending. In one such study, Bergeron and Valliant (2001) examined the executive functioning, personality, and cognition of young offenders. The authors administered a battery of psychometric tests, including the Porteus Maze, the Wisconsin Card Sorting Test, the Minnesota Multiphasial Personality Inventory, and Wechsler Adult Intelligence Survey-Revised subtests to both non-offending and offending populations. Results suggested significant between-group differences, specifically in executive (frontal lobe) functioning and personality. Offender groups demonstrated lower executive capacity and maladaptive personality characteristics, and were found to be specifically impaired in the domain of social competency, judgment, perspective taking and foresight while demonstrating higher levels of impulsivity, immaturity, and aggression (Bergeron & Valliant, 2001).

Also adding to the increasing evidence of dissimilar frontal lobe functioning for delinquent youth are data which suggest that adolescents who engage in violent offenses have a lower resting heart rate, perform lower on tasks which require the activation of cognitive function mediated by the prefrontal cortex, exhibit poorer performance on

measures of self-control, and have a poorer overall frontal lobe functioning (Cauffman, Steinberg, & Piquero, 2005; Chang, 1999). Further studies have found that delinquent youth commonly have a history of mild traumatic brain injury caused by minor incidents such as bike accidents, falls, and sports injuries (Yeager & Lewis, 2000). Research suggests that such traumas can cause the frontal lobes to scrape over the skull's cribriform plate, resulting in a multitude of tiny lacerations, abrasions, and contusions on the cerebral cortex. As the primary purpose of orbitofrontal region is to exert inhibitory control over instincts, drives, emotions, and behaviors, the authors assert that these findings are crucial to the study of child and adolescent delinquent behavior (Yeager & Lewis, 2000). Such findings, combined with well-accepted research on the dramatic changes taking place in the frontal lobe during adolescence, suggests that youth with a mental health diagnosis may possess fewer cognitive resources with which to manage the behavioral impulses that are often manifestations of their mental illness, thus potentially leading to early entry into the criminal justice system (Ortiz, 2004).

Community Response

In acknowledgment of the relationship that exists between mental illness and delinquent behaviors, many communities have adopted ways in which to take mental health diagnoses into consideration in discretionary decision-making about delinquent behaviors. One such example in the adult criminal justice system is the establishment of mental health courts in some states to prevent the criminalization, as well as reduce recidivism rates, of individuals with mental illness who become involved in the legal system (Watson, et al., 2001). Mental health courts are modeled after the drug court system and founded on the concept of therapeutic jurisprudence. They provide services

such as pre- and post-booking programs, mental health services within the jail system, and connecting individuals to community mental health services upon release. Within this system, if an offender who has been diagnosed with a mental illness agrees to take part in mental health services, she or he may have charges reduced or dropped. This system often requires the specialized training of court staff, including judges and prosecutors, and has yet to be widely implemented for youth within the juvenile justice system (Watson et al., 2001).

Another method of addressing the interaction of mental illness and delinquent behaviors within communities is through manifestation determination hearings in public schools. It is a legal requirement of schools to hold an evaluation to establish if the delinquent behavior of a disabled child was a manifestation of her or his disability. By law, this review must be concluded prior to disciplining students with "change in placement," which is legally defined as suspension of greater than 10 days or expulsion (Katsiyannis & Maag, 2001). Manifestation determination hearings are conducted by the school's Individualized Education Plan (IEP) team members and other qualified personnel, such as counselors, principals, and teachers. Within this process, the burden of proof is on the school to establish that the behavior in question was not a manifestation of the child's disability. The school must prove that the child's disability, (a) did not impair her or his capacity to understand the consequences of her or his behavior prior to disciplinary process, and that (b) the disability did not weaken the child's ability to focus her or his behavior, in order for such a ruling to be made (Katsiyannis & Maag, 2001).

Manifestation determination hearings can thus be conceptualized as a ruling on the child's judgment. There is some argument, however, as to whether commonly used

measures of determining manifestation, such as psychiatric diagnostic instruments and behavior rating scales, can accurately measure one's judgment. For example, Katsiyannis and Maag (2001) suggest that manifestation hearings serve the purpose of allowing schools to discipline children with disabilities in the same way that children without disabilities are being disciplined, thus serving the reverse purpose of its original goal to protect children with mental illness from unaccommodating or inappropriate legal consequences. Katsiyannis and Maag (2001) further propose that manifestation determination, as it is currently employed, defends schools from social and legal judgment rather than protecting students from unbefitting punishment. They suggest students would be better served by an approach that assesses social skills and understanding.

The Juvenile Justice System and Incarcerated Youth

The mental health needs of incarcerated youth are growing, yet only recently have the large number of youth with mental illness in corrections and the level of unmet need been recognized (Burns, 1999). Currently informing juvenile jurisprudence is the "get tough" on crime movement of the last two decades (Winokur, Smith, Bontrager, & Blankenship, 2008). Underlying this movement is the rational choice perspective, which considers that offenders "choose" crime following a calculation of the benefits and costs of committing crime. This thinking resulted in a belief that harsher punishments would increase the costs of offending and thus decrease future offending. As a result, in the 1990's an increased number of youth were transferred to criminal court, received longer sentences, and the minimum age at which juveniles could be processed through the criminal justice system as adults was lowered (Cocozza & Showyra, 2000). Although

juvenile crime rates have declined in recent years, for example dropping 1.7% between 2003 and 2004, every state in the country has increased the number of juveniles sent to criminal court during the same time period and now over two million juveniles are arrested annually (Cruise, Fernandez, McCoy, Guy, Colwell, & Douglas, 2008; Onifade et al., 2008). These trends, which have been referred to as the "adultification" of juvenile justice, forced juvenile courts to examine the mental health needs of juveniles therein and provide their constitutional right to mental health treatment, a right which had previously been reserved for adults in corrections (Cocozza & Showyra, 2000).

Concerns about the efficacy of the juvenile justice system to effectively treat the rising numbers of youth therein with a diagnosable mental illness have been paramount in some researchers' minds, as evidenced by the considerable numbers of research studies being conducted, scholarly articles being published, and journals devoted to the topic (Cocozza & Showyra, 2000). Of particular concern is the implementation of evidence-based practice in correctional facilities, and research has attempted to show the need for such practice as well as the cost and benefits of incorporating well-validated interventions into the juvenile justice system (Chamberlain et al., 2008). Currently, research suggests that empirically-validated treatments are not being implemented in 90% of public systems, such as the juvenile justice system, a trend which was challenged by the 2003 President's New Freedom Commission on Mental Health (Cocozza & Showyra, 2000).

Data consistently show that an excessive proportion of serious crime is attributable to juvenile offenders, and that a small minority of offenders commit the majority of these crimes (Onifade et al., 2008). Longitudinal data have also shown that a large proportion of juvenile offenders do not reoffend (Onifade et al., 2008). For

example, one study of 70,000 juvenile offenders found that only 8 percent commit greater than half of the offenses, and the majority did not commit another crime (Onifade et al., 2008). It has therefore become a primary concern of researchers and policy makers to effectively identify juveniles who do commit the majority of crimes and who are likely to recommit, and to provide treatment for these high-risk youth that is responsive to their established patterns of need and risk (Onifade et al., 2008). One proposed method of identification is the Youth Level of Service/Case Management Inventory (YLS/CMI), an assessment tool which has been found to provide valid information on the probability of prospective crime and the level and pattern of need (Onifade et al., 2008). The outcome of this measure is statistically dependable profiles of risk and need (Onifade et al., 2008). Researchers have suggested that the utilization of this and other like measures could provide the courts and correctional facilities with a meaningful and useful method of categorizing juvenile offenders and their needs (Onifade et al., 2008).

In acknowledgment of the growing rate of persons with mental health disorders and comorbid learning disabilities entering youth corrections, the U.S. Supreme Court ruled in 1990 that, under the Americans with Disabilities Act, inmates have a right to accommodations in educational programs within correctional facilities (Rozalski, Deignan, & Engel, 2008). Since that time, researchers have been exploring the impact this consideration has had on the recidivism rate of participants of such programs. Recent data show that 21% of participants in educational initiatives were reincarcerated, compared to 31% of those who either did not have access to or did not take advantage of appropriate educational accommodations (Rozalski, Deignan, & Engel, 2008).

Emerging data collectively suggest that, by appropriately identifying the mental health needs of juveniles upon entry into the juvenile justice system and providing them appropriate and empirically-validated treatment in response to these needs, there can be prevention of entry into more restrictive environments, provision of life skills and educational initiatives that improve quality of life, and a decrease in recidivism rates of vulnerable youth (Abrams, Shannon, & Sangalang, 2008; Boyd, Huss, & Myers; Chaffin, 2008; Chamberlain et al., 2008; Cruise et al., 2008; Onifade et al., 2008; Winokur, Smith, & Blankenship, 2008).

Ethnicity and the Juvenile Justice System

Research has repeatedly shown "disproportionate minority confinement...and contact" within the juvenile justice system and has labeled this a major public health problem (Garland et al., 2005; Leiber, Johnson, Fox, & Lacks, 2007). The federal Office of Juvenile Justice and Delinquency Prevention (OJJDP) raises concerns about parity of justice in the juvenile system and has repeatedly cited this disproportionate representation as particularly concerning (OJJDP, 2004). Specifically, recent census data report that minority youth represent 34% of the United States' juvenile population, but 62% of the nation's youth in juvenile corrections (Graves, Frabutt, & Shelton, 2007). Also telling is data showing that Hispanic and African American youth, when compared to their Caucasian counterparts, receive more severe dispositions at every stage of the juvenile justice system, even when controlling for class and severity of crime (Youth Law Center, 2000).

Research has suggested that this disparity is greatly impacted by the public perception that youth violence is an urban minority male problem (Peterson, Esbensen,

Taylor, & Feng, 2007). Peterson and colleagues (2007), however, found after surveying a large sample of middle school students that the perceived "racial gap" seems to exist in terms of self-reported violence, but that in the actual frequency of violent offending no such gap by ethnicity exists. There has been an assertion that this disproportional representation of ethnic minorities in the legal system may be a result of inequitable predictive validity of current measures of recidivism risk used in juvenile corrections such that ethnic minority youth are predicted to be at a higher risk of reoffending, thus leading to more severe sentencing of ethnic minority youth (Schwalbe, Fraser, Day, & Cooley, 2006). There is also research supporting evidence for stereotyping within the juvenile justice system, such as findings that African American youth are viewed as more responsible for their delinquent behaviors than are Caucasian youth (Rawal, Romansky, Jenuwine, & Lyons, 2004).

Also potentially impacting the ethnic disparity seen in the juvenile justice system may be ethnic differences in utilization of mental health services among high-risk youth. Research has repeatedly shown an under-utilization of mental health services by ethnic minority youth, and has also shown a poor prognosis for youth with untreated mental health disorders (Garland et al., 2005). This also impacts youth after they are discharged from the justice system, as contact with the legal system has been shown to negatively impact future mental health service use (Garland et al., 2007). Rawal and colleagues (2004) noted that identifying the mental health needs of juveniles within the juvenile justice system is critical as there is evidence that ethnic minority youth, specifically African American youth, are at a greater risk for experiencing psychological distress due to higher rates of exposure to domestic/neighborhood violence, and for these youth

entrance into the juvenile justice system may provide their first contact with appropriate mental health services. This is only the case, however, if these individuals' services needs are appropriately identified and sufficiently addressed (Rawal et al., 2004). It is mandated by federal law that all youths within the juvenile justice system who are identified as having serious mental health disorders receive appropriate mental health services while incarcerated; however, statistics repeatedly show disparities in identification of needs and diversion of services by race/ethnicity (Abrantes, Hoffmann, & Anton, 2005; Gavazzi, Bostic, Kin, & Yarcheck, 2008; Herz & Lamberti, 1995; Rawal, Romansky, Jenuwine, & Lyons, 2004; Maschi, Hatcher, Schwalbe, and Rosato, 2008; Teplin, Abram, McClelland, Washburn, & Pikus, 2005).

Researchers in many fields, including behavioral health, social services, education, criminology, and public health, have recently been laboring to determine which factors impact a juvenile's referral for mental health evaluation/treatment within the justice system (Abrantes, Hoffmann, & Anton, 2005; Gavazzi, Bostic, Kin, & Yarcheck, 2008; Rawal, Romansky, Jenuwine, & Lyons, 2004; Herz & Lamberti, 1995; Maschi, Hatcher, Schwalbe, and Rosato, 2008; Teplin, Abram, McClelland, Washburn, & Pikus, 2005). Although many external factors (e.g., family factors, socioeconomic status, etc.) have been uncovered in impacting identification of service needs, research consistently demonstrates ethnicity and minority status to be significantly involved in influencing mental health placements. Statistics coming out of juvenile corrections repeatedly show that incarcerated Caucasian youth are more likely to be referred for services than are African American youth, with one study reporting that Caucasian females were 8 times more likely to receive mental health placements than were African

American males, and 2.5 times more likely than were African American females (Herz & Lamberti, 1995; Rogers, Pumariega, Atkins, & Cuffe, 2006).

Rawal and colleagues (2004) examined the mental health needs in a stratified sample of Caucasian, African American, and Hispanic youth in the juvenile justice system, and identified that mental illness may carry a greater stigma among ethnic minority youth and lower-income populations. The authors also found differences in type and severity of mental health needs by ethnic group, reporting that African American youth within the sample exhibited the highest level of mental health needs compared to both Caucasian and Hispanic youth (Rawal et al., 2004). They discovered, however, that African American youth were "especially underserved" in light of their symptoms and risk factors, while Caucasian juveniles had the highest rate of current and prior mental health utilization in spite having dramatically lower rates of need (Rawal et al., 2004, p. 250). The authors further found that both Hispanic and African American youth displayed significantly more severe symptoms of disruptive behavior disorders than did Caucasian youth, and that the externalizing traits symptomatic of these disorders (e.g., antisocial behaviors, oppositionality, impulsivity, etc.) are more likely to lead to entry into the juvenile justice system rather than into the mental health service system.

Given the aforementioned data which raises real concerns about parity of justice in the juvenile system for ethnic minority youth, the question therefore arises of how a juvenile who is both a member of an ethnic minority group and has a mental health diagnosis is perceived in light of her or his delinquent behavior, as well as what impact the interaction of these two factors has on the decision of how severely to punish and which, if any, mental health treatment is recommended for the juvenile.

Current Study

The purpose of the proposed study is to examine how mental health diagnoses affect thinking about juveniles who engage in delinquent behaviors, and how these judgments may be manifested in the juvenile justice system. Specifically, the current study aims to explore how the presence of a mental health diagnosis affects perceptions of juveniles of different ethnicities who engage in delinquent behaviors. A college population was sampled due to the fact that many college students may in the near future be in positions of power (e.g. teaching, law enforcement, judicial system), and their perceptions of the behaviors of individuals who have been diagnosed with a mental illness and engage in delinquent behaviors may affect the quality of life of those whom they perceive. Therefore, to examine how college students' (1) conceptualizations of juveniles who engage in delinquent behaviors, (2) propensity to punish said juveniles, and (3) openness to treatment for juveniles changes as a factor of a juvenile's ethnicity and mental health status may be critical to understanding the future directions of a growing juvenile justice system.

Based on current information on public perceptions of mental illness and the criminal justice system, and literature that suggests differences based on ethnicity in both entrance into the juvenile justice system and outcomes of adjudication (Baltodano, Harris, & Rutherford, 2005; Benekos & Merlo, 2008; Graves, Frabutt, & Shelton, 2007; Hart, O'Toole, Price-Sharps, & Shaffer, 2007), several research questions can be raised. First, based on findings which suggest that ethnicity may be a factor critically implicated in dual involvement in the mental health and juvenile justice system (Graves, Frabutt, & Shelton, 2007), the current study aims to explore whether recommendations of treatment

and punishment for the juvenile are differentially made based on mental health diagnosis and ethnicity of the juvenile. A second research question seeks to examine how the presence of a mental health diagnosis affects perceptions of and recommendations for punishment and treatment of White, African American, and Hispanic offenders. Lastly, given research which suggests that persons are likely to view an individual as less personally responsible for her or his violent behavior when they possess knowledge of another potential source of the behavior, the current study aims to explore whether participants will rate the presented juvenile as less culpable for his behavior when a mental health diagnosis is present.

Method

Participants

Participants recruited from introductory psychology classes at a large, Western United States university completed the study in exchange for partial fulfillment of course requirements. From this pool, 846 participants provided data for the present study. Participants ranged in age from 17 to 32 years (M = 18.7, SD = 1.40). The sample was largely female (63 percent, N = 533). Male participants comprised 26.6 percent (N = 225) of the sample, and the remaining participants (N = 88) chose to not disclose their sex. The sample was primarily composed of individuals who self-identified as White, Non-Hispanic (66.4%). The remaining proportion of participants' ethnic self-identity was as follows: Asian/Pacific Islander (2.6%), Black, Non-Hispanic (1.5%), Hispanic (4.8%), Native American/Alaskan Native (1.1%), and other ethnic identity (23.6%). Participants were treated according to ethical guidelines established by the APA (American Psychological Association, 1992), and the study was approved for human participation by Colorado State University's Human Research Committee.

Measures

Vignettes. Participants read one of eighteen vignettes, each of which depicts a youth exhibiting delinquent behaviors. Six vignettes presented the juvenile as an African American male, six presented the juvenile as a Hispanic male, and the remaining six identified the juvenile as a White male. Additionally, within each ethnicity group the juveniles were presented as being in one of six mental health categories, five of which presented the juvenile as having a mental health diagnosis, and a sixth which did not reveal a diagnosis and/or other factors relating to the target individual's mental health

(see Appendix A). Mental health factors presented in the vignettes reflected the diagnoses most commonly occurring in juvenile offenders (Lexcen & Redding, 2000). These factors include Conduct Disorder, Bipolar Disorder, Attention Deficit Hyperactivity Disorder, Major Depression, and history of parental physical abuse and neglect (Lexcen & Redding, 2000). The ethnicity and gender of the described youth was chosen by matching the vignette's delinquent behavior (vandalism) to the demographics for specific delinquent behaviors as presented in the most recently published report of juvenile offender statistics. The Juvenile Offender and Victims: 2006 National Report (National Center for Juvenile Justice, 2006) stated that 13-year-old White males were more likely to engage in vandalism than any other ethnic/gender/age group. This National Report further indicated that Black and Hispanic males were also more likely to engage in vandalism at age thirteen than were youth of any other ethnic group other than White males. Therefore, vignettes describe a White, Black, or Hispanic 13-year-old male vandalizing store property.

Perception of Culpability Survey. The Perception of Culpability Survey (PCS) is a 32-item, six-factor (i.e., Punishment, Treatment, Blame/Forgive, Controllability of Behavior, Stability of Behavior, and Locus of Causality) questionnaire study developed for Malach's (2008) study on judgments of juvenile delinquent behaviors (see Appendixes B and C). The PCS was used to gather information about participants' judgments, perceptions, and responses to the juvenile described in the vignette. Using a six-point Likert scale, the instrument assessed participants' perceptions of how culpable the juvenile should be for his behavior (e.g., how likely the participant is to blame the target juvenile for his behavior, how likely the juvenile is to be forgiven). It also included

questions on type and severity of punishment and of treatment the participant recommends for the juvenile.

To examine the construct validity of the PCS, a varimax rotated principal components exploratory factor analysis was conducted. An exploratory, rather than confirmatory, factor analysis was conducted because this is the first data collection which utilized the PCS. As shown in Table 1, three distinct factors emerged accounting for 67.97% of the systematic variance in responding. For interpretation, items with a factor loading of at least 0.50 were considered to load on that factor. In general, the factors that emerged corresponded conceptually to the subscales of the PCS. Three items making up the Treatment subscale loaded positively on Factor 1. Two items making up the Punishment subscale loaded positively on Factor 2. Seven items making up the Blame/Forgiveness subscale loaded positively on Factor 3. Factor 1 items collectively accounted for 43.09% of the variance, Factor 2 items collectively accounted for 16.58% of the variance, and Factor 3 items collectively accounted for 8.29% of the variance.

Adjective Checklist. In order to further assess participants' conceptualizations of the juvenile, an adjective checklist was used (see Appendix D). This 20-item measure appraises participants' attitudes towards the presented juvenile by allowing them to rate on a six-point Likert scale how fitting they felt various positive and negative characteristics were in describing the juvenile. Ten of the items were negative adjectives (e.g., cruel, mean, dishonest), and ten randomly-chosen items were positive adjectives (e.g., helpful, kind, happy), with a lower mean score on this scale indicating a more negative assessment of the juvenile's character. After reversing the score of the negative

items in the scale, the coefficient alpha for the total scale was .85 in a recent study (Malach, 2008). The coefficient alpha for the total scale in the current study was .78.

Level of Familiarity Survey. Participant familiarity with mental illness was measured using the Level of Contact Report designed by Holmes and his colleagues (1999; See Appendix E). The situations presented in the survey range from low intimacy (respondent observation of mentally ill individual) to high intimacy (respondent has been diagnosed with a mental illness), and participants are to indicate which of the presented situations apply to them. The coefficient alpha for the total scale was .77 (Malach, 2008). The coefficient alpha for the total scale in the current study was .82.

Demographic Questionnaire. Researchers also employed a demographic questionnaire to gather information about participants' age, gender, ethnicity, and academic major (see Appendix F).

Procedure

Participants were tested in groups of 20-25 individuals in order to provide each participant with adequate space and privacy to comfortably complete the questionnaire. Participants were informed that the 15-minute study would ask them to respond to a short story about mental illness and juvenile delinquency. Participants completed in paper-and-pencil format packets ordered as following: demographic questionnaire, vignette, perception survey, adjective checklist, Level of Contact Report. Vignettes were ordered randomly prior to distribution to participants, thus ensuring random assignment of participants into MHD and ethnicity groups. Informed consent was obtained from participants prior to their exposure to the stimulus and measures. Informed consent was obtained from participants prior to their exposure to the vignette and measures (Appendix

G). Researchers read from a script throughout the study, including instructions and a full debriefing (Appendices H and I). All procedures and methods were approved by Colorado State University's Human Research Committee.

Results

Due to the presence of multiple dependent variables, a multivariate analysis of covariance (MANCOVA) was conducted for examination of the data. A 2 x 3 x 6 MANCOVA was conducted for the Punishment, Treatment, Blame/Forgiveness, and Adjective subscales to evaluate the effects of rater gender (male vs. female) by juvenile ethnicity (Black vs. Hispanic vs. White) by the six different mental health diagnoses (MHD). When these analyses revealed significant differences, the univariate differences were analyzed for significance using analysis of covariance (ANCOVA) and Tukey post-hoc tests.

Level of Familiarity

To test the general research question of how participants' familiarity with mental illness will affect the results, a Multivariate Analysis of Covariance (MANCOVA) was conducted. The main criterion for a covariate is a high linear correlation with the outcome measure (Keppel, 1982). Previous research has suggested that familiarity with mental illness is highly correlated to reduced stigma of mental illness (Chung, Chen, & Lui, 2001; Crisp et al., 2000; Lauber, Nordt, Sartorius, Falcato, & Rössler, 2003; Martin, Pescosolido, & Tuch, 2000). In the present study, Level of Familiarity did significantly covary with MHD, Ethnicity, and Gender in influencing the recommended Punishment, Treatment, Blame/Forgiveness, and Adjective Checklist scales (F (5, 840) = 4.810, $p <$ .05).

Overall Model

To test the general research question concerning if participants recommendations for treatment/punishment, general conceptualization, and rating of culpability for the

juvenile's behavior would vary when a MHD was present, a 2 x 3 x 6 Multivariate Analysis of Covariance (MANCOVA) was conducted using the Adjective Checklist, Blame/Forgiveness, Punishment, and Treatment scales. No significant interactions were found in the current model. The three-way interaction between MHD, Ethnic Group, and Gender was not statistically significant in the current study (F (5,840) = 1.035, p =.410). The interaction between MHD and Ethnic Group was not statistically significant (F (2,840) = .691, p =.930), nor were the interactions between MHD and Gender (F (1,840) = .979, p =.485) or between Gender and Ethnic Group (F (2,840) = 1.631, p =.111).

Results of the 2 x 3 x 6 MANCOVA revealed a significant overall main effect of MHD (F (5,840) = 5.968, $p < .05$, Wilks's Λ = .844, partial η^2 = .026), indicating that 2.6% of the variance in the dependent variables was accounted for by MHD. Results further revealed a significant overall main effect of Gender (F (1,840) = 4.338, $p < .05$, Wilks's Λ = .976, partial η^2 = .024), indicating that 2.4% of the variance in the dependent variables was accounted for by gender of the rater. The main effect of Ethnic Group was not statistically significant (F (2,840) = 1.319, p = .229). Follow-up ANCOVAs were conducted to further explore the significant main effects of MHD and gender.

Mental Health Diagnosis

After establishing that there was a significant main effect of the presence/absence of a mental health disorder (MHD), further analysis was conducted to assess the presence of significant differences between the six MHD groups for each dependent variable (Adjective Checklist, Punishment, Treatment, and Blame/Forgiveness scales). An analysis of univariate differences for the Adjective Checklist scale for the main effect of MHD revealed group differences in the degree to which the juvenile was positively or

negatively rated based on MHD (F (5,840) = 2.843, $p < .05$, partial $\eta^2 = .019$), indicating that 1.9% of the variance in the Adjective Checklist scale scores was accounted for by MHD. Subsequent Tukey post hoc tests ($p = 0.05$ or lower for all significant contrasts) for pairwise comparisons between MHD (see Table 2) indicated that juveniles with a Bipolar Disorder diagnosis were rated least positively overall ($M = 3.070$) followed by juveniles diagnosed with ADHD ($M = 3.150$), No Diagnosis\Control ($M = 3.193$), Conduct Disorder ($M = 3.201$), Major Depression ($M = 3.230$), and Abuse\Neglect ($M = 3.404$) which was rated most positively (see Table 2). Juveniles who were presented as having Bipolar Disorder were attributed negative adjectives at a significantly higher rate than were those juveniles who were presented as having a history of abuse and/or neglect.

Univariate analyses for the Punishment subscale revealed statistically significant differences in type and severity of recommended punishment based on MHD (F (5,840) = 2.622, $p < .05$, partial $\eta^2 = .018$), indicating that 1.8% of the variance in the Punishment scale scores were accounted for by MHD. Subsequent Tukey post hoc tests ($p = 0.05$ or lower for all significant contrasts) for pairwise comparisons between MHD indicated that participants were significantly more likely to recommend punishment for individuals who were presented as having Bipolar Disorder ($M = 2.897$) than for juveniles in the No Diagnosis group ($M = 2.592$). In addition, recommendations of punishment for juveniles in the Bipolar Disorder group did not significantly differ from recommendations for any of the other mental health diagnosis groups (see Table 3).

An analysis of univariate differences for the Treatment subscale for the main effect of MHD showed that participants recommended treatment differently based on MHD (F (5,840) = 20.960, $p < .05$, partial $\eta^2 = .128$), indicating that 12.8% of the

variance in the Treatment subscale scores were accounted for by MHD. Subsequent Tukey post hoc tests ($p = 0.05$ or lower for all significant contrasts) for pairwise comparisons between MHD (See Table 4) indicated that participants were significantly more likely to recommend treatment for individuals who were presented as having a mental health diagnosis than for juveniles in the No Diagnosis group ($M = 2.277$). In addition, recommendations for Bipolar Disorder ($M = 3.751$) did not significantly differ from recommendations for Major Depression ($M = 3.423$), although juveniles with Bipolar disorder were significantly more likely to be recommended for treatment than were juveniles in the ADHD ($M = 3.130$), Conduct Disorder ($M = 3.110$), and Abuse/Neglect ($M = 2.796$) groups (see Table 4).

Post-hoc analysis on Treatment subscale items was conducted using Tukey post-hoc tests ($p = 0.05$ or lower for all significant contrasts) for pairwise comparisons. Results revealed that participants recommended *counseling* for the juvenile most frequently (see Tables 5-8) across MHD group. An analysis of the mean treatment scores for each MHD indicate that the juvenile who was presented as having Bipolar disorder was most often recommended for all types of treatment compared to all other MHD groups (see Tables 6-8), although the recommendation for counseling for the juvenile who was presented with Major Depression was not significantly different than from that of Bipolar Disorder. Across all types of treatment, the juvenile who was presented with no diagnosis was least recommended for treatment compared to all other MHD groups (see Tables 6-8). Furthermore, participants were significantly more likely to recommend *counseling* for the juvenile when he was presented as having any of the five mental health diagnoses compared with the No Diagnosis group (see Table 6). Participants were also

significantly more likely to recommend *medication* for the juvenile in all Diagnoses groups, with the exception of the Abuse/Neglect group, compared to the No Diagnosis group (see Table 7). Analysis of the mean treatment scores (see Table 8) for each MHD also indicated that participants were significantly more likely to recommend *hospitalization* for both the juvenile who was presented as having Bipolar Disorder (M = 2.30) and as having Major Depression (M = 2.12) compared to the Abuse/Neglect (M = 1.77), ADHD (M = 1.87), Conduct Disorder (M = 1.82) and No Diagnosis (M = 1.54) groups.

Univariate analyses for the Blame/Forgiveness subscale revealed that there were not statistically significant differences in the extent to which raters blamed the juvenile for his behaviors based on MHD (F (5,840) = 1.052, $p > .05$).

Gender of the Rater

After establishing that there was a significant main effect of the Gender of the rater, further analysis was conducted to assess the presence of significant differences by Gender for each dependent variable (Blame/Forgiveness, Adjective Checklist, Punishment, and Treatment scales). Univariate analysis indicated a significant difference in willingness to forgive the presented juvenile by rater Gender (F (1,840) = 12.158, $p <$ .05, partial $\eta^2 = .017$), indicating that 1.7% of the variance in the Blame/Forgiveness scale scores were accounted for by rater gender. Subsequent post-hoc testing revealed that women were more willing to forgive the juvenile for the delinquent behaviors (M = 4.276, SD = .493) than were men (M = 4.229, SD = .489) in the current study.

Univariate analyses for the Adjective subscale revealed that there were not statistically significant differences in conceptualization of the juvenile by rater Gender (F

(1,840) = 2.177, $p > .05$). Univariate analyses further revealed that there were not statistically significant differences in type of recommended punishment based on rater gender (F (1,840) = .507, $p > .05$), nor in the type of recommended treatment based on rater Gender (F (1,840) = 2.373, $p > .05$).

Discussion

Results of the present study did not suggest that knowledge of a juvenile's mental health status produces a subsequent tendency to blame the juvenile more or less for a delinquent behavior. The presence of a mental health diagnosis, however, was shown to affect both how positively or negatively the juvenile was perceived as measured by the Adjective Checklist, the recommendation to punish, and the type of treatment that was recommended for the juvenile. These results have important implications for the incorporation of mental health services into juvenile judicial decision-making processes and for the development of integrated treatment models that can successfully address these co-occurring service needs.

Recommendations of Treatment and Punishment

Results indicate that college student raters differentiate severity of punishment recommended for a juvenile based on his mental health status. It thus appears that informing college student raters about a juvenile's mental health history significantly impacts the judgments made concerning punishment for minor delinquent behaviors. Specifically, juveniles who were presented as having Bipolar disorder were more commonly recommended punishment than those juveniles who were not presented as having a mental health disorder. These results, combined with results on the Adjective Checklist Scale which showed that participants conceptualized juveniles with Bipolar disorder most negatively, may suggest that the negative stimulus value of such a diagnosis may considerably impact college student raters' judicial decision-making process.

Results also indicated that knowledge of a juvenile's mental health diagnoses significantly impacted college student raters' recommendation of mental health treatment. Specifically, juveniles who were presented as having a mental health diagnosis were more likely to be asked to engage in counseling, be prescribed medication, or be hospitalized than were juveniles who were presented as having no mental health diagnosis. Results also suggested that raters differentiated between specific mental health diagnoses in their recommendations for treatment. For example, juveniles with Bipolar disorder and Major Depression were more likely to receive recommendations for treatment than were juveniles with ADHD, Conduct Disorder, and history of Abuse/Neglect.

Conceptualization of the Juvenile

Previous research has frequently shown that the existence of mental health factors impacts positive and negative conceptualizations of a given person (e.g., Couture & Penn, 2003; Levins, Bornholt, and Lennon, 2005; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999). The current study's findings contribute to this research base by suggesting that conceptualizations differ as a result of the particular mental health diagnosis. The current findings showed that participants rated the juvenile variably according to MHD group membership (e.g., Abuse/Neglect, ADHD, Bipolar Disorder, Conduct Disorder, Major Depressive Disorder, and No Diagnosis). Participants rated the juvenile in the Bipolar disorder, ADHD, Conduct disorder, Major Depressive Disorder, and No Diagnosis conditions significantly more negatively than the juvenile in the Abuse/Neglect group. The juvenile who was presented as having Bipolar disorder was rated least positively by participants, and was rated significantly more negatively than the

Abuse/Neglect group, suggesting differential internal characterization of juveniles with diverse types of mental health background.

Overall, these findings coincide with Malach's (2008) findings that some characteristics of a given mental health disorder may be more interpersonally attractive than are others. For example, some symptoms of depression, impulsivity, and social deficits may lead to individuals with Major Depressive Disorder and ADHD being seen as more socially negative, whereas being the victim of abuse and neglect may inspire more socially positive feelings, such as pity and a desire to help. These findings thus suggest a conceptualization based more on the symptom set associated with a disorder than the label of the disorder per se, and give further evidence to the impact of the stimulus value of a mental health diagnosis and personal history in judicial decision-making.

As with Malach's 2008 research, the current study's findings make sense in the context of current literature on the general publics' understanding of the cause and symptoms of Bipolar disorder. For example, Furnham's and Anthony's (2009) study of lay theories on the cause and treatment of Bipolar disorder found that, while their participants demonstrated some science-based beliefs about the causes of the disorder, their accurate recognition and identification of Bipolar disorder symptomology was poor. Furthermore, Angermeyer's and Matschinger's (2005) randomized telephone survey on appropriate identification of what is meant by the term 'Bipolar disorder' demonstrated that the lay public is overwhelming misinformed about the diagnosis, with the large majority (61%) of participants identifying that the term 'Bipolar disorder' refers to the

melting of the polar ice caps, and only 4.6% of participant accurately associating it with mental illness.

That the current study's sample demonstrated low levels of knowledge about mental health disorders (e.g., more frequently recommending punishment for juveniles with Bipolar Disorder than those without any mental health diagnosis) is helpful in answering the immediate research questions. This study's authors were interested in having participants react to the *label* of the mental health diagnosis knowing that the participants were unlikely to have a full understanding of the *DSM-IV-TR* diagnostic criteria or symptom presentation of a given diagnosis, as such a condition more closely approximates the environment surrounding sentencing within the juvenile justice system. Previous findings on lay public misunderstanding of mental illness, when combined with the present findings, would therefore point toward the necessity of thorough psychoeducation for individuals involved in judicial decision-making about symptoms, causes, behavioral manifestations, and prognosis of mental health diagnoses.

The Impact of Gender

While the hypothesis that there would not be a significant gender difference in type or severity of punishment/treatment was supported by this sample, gender differences on tendency to forgive the juvenile were found, with females demonstrating a greater willingness forgive the juvenile for his behaviors than were males. This is somewhat inconsistent with earlier research that has suggested that there are not gender differences regarding tendency towards forgiveness (Toussaint & Webb, 2005), but consistent with findings from previous use of the Perception of Culpability Survey (Malach, 2008). As was hypothesized by Malach (2008) in explanation of these

somewhat aberrant findings, the current study's results may be related to research which has suggested that gender differences in empathy are more perceptible in studies in which participants are aware that their compassion and empathy is being measured (Eisenberg, Fabes, & Shea, 1989; Lips, 2005). It has further been found that females are more likely to produce empathy responses than are males when they believe that empathy is being measured, as in the case of self-report studies (Lips, 2005). It is also feasible that the chosen delinquent behavior (i.e., vandalism) of the vignette may have been an influencing factor in these results, and perhaps the inclusion of a different, more affectively-charged criminal behavior (such as murder or sexual assault) would have led to different results on the question of forgiveness. Thus, the methodology of the present study may have influenced the finding of gender differences in forgiveness, thus creating results which are not congruent with previous findings on gender and forgiveness.

The Impact of Ethnicity

The current study did not demonstrate a significant main effect of ethnicity for recommendations of treatment or punishment for the presented juvenile. These results are particularly notable when coupled with literature that overwhelmingly suggests differences in utilization of mental health services and disparity in judicial decision-making based on a defendant's ethnicity (Garland et al., 2005; Graves, Frabutt, & Shelton, 2007; OJJDP, 2004; Leiber, Johnson, Fox, & Lacks, 2007; Peterson, Esbensen, Taylor, & Feng, 2007). This unexpected findings may be interpreted in numerous ways. If these results are interpreted as aberrant and invalid, it may be possible that the current results reflects a kind of "Bradley Effect" (Altman, 2008). The Bradley Effect is a theory about political election outcomes which attempts to explain discrepancies between pre-

election voter opinion polls and final election outcomes in U.S. government elections races involving both a White and non-White candidate. The theory postulates that inaccurate or misleading pre-election polls are skewed by social desirability bias. Specifically, White voters may give misleading polling responses for fear that, by stating their true partiality, they will open themselves to censure of racial motivation (Altman, 2008). Furthermore, a study of racial bias in political perceptions found that minority status created doubts about a candidate's perceived competence (Sigelman, Sigelman, Walkosz, and Nitz, 1995).

Given the aforementioned theoretical data, it is therefore possible that the current study found no significant differences in judgments or recommendations for juveniles who engage in delinquent behaviors based on the juvenile's ethnicity due a desire to present socially desirable results on a somewhat face-valid measure. The current study may thus reflect understanding of socially appropriate reactions to ethnicity in judicial decision-making; however, it may not accurately reflect the impact minority status has, either consciously or unconsciously, on individuals who are actively involved in making decisions about treatment and adjudication for ethnic minority youths who engage become involved in the legal system.

However, it is also possible that the current data showing null results in terms of a main effect of ethnicity could also represent a shift in the stereotyping and prejudicial attitudes held within current college populations. While it is possible that the results could be accounted for by social desirability bias, it is also possible that that there is less prejudice in this age cohort than in the cohort which is currently involved in judicial decision-making. Therefore, the current data could suggest that this study's college

student raters truly did not factor the presented juvenile's ethnicity into their decision-making judgments regarding his delinquent behavior, and that these results are an indication of changing attitudes towards ethnic minority youth.

Knowledge of Mental Illness

In this study familiarity with mental illness was shown to affect participant recommendations for punishment and treatment. These results reflect findings of previous research which has repeatedly shown a relationship between familiarity with mental illness and stigmatized beliefs about mental health diagnoses (Angermeyer & Dietrich, 2006; Chung, Chen, & Lui, 2001; Crisp et al., 2000; Lauber, Nordt, Sartorius, Falcato, & Rössler, 2003; Martin, Pescosolido, & Tuch, 2000).

Limitations

While all attempts have been made to eliminate methodological errors which may bring into question the reliability and validity of the data gathered during this study, several characteristics of this research design may limit the generalizability of the study's outcome. Participants were composed of college students from an undergraduate psychology course. Investigating the opinions of this population is thought to be imperative insomuch as the future direction of this research is intended to focus on adults who have decision-making roles within the juvenile justice system, and this study's findings may therefore contribute to future research towards norming the instruments used in the current study on an adult population. Although an adolescent perspective to this research question would have been interesting, it would have created a confounding variable, especially in that participants were asked to recommend a severity of punishment for the presented juvenile. Furthermore, as the future direction of this

research is intended to focus on adults who have decision-making roles within the juvenile justice system, it will be most conducive to future research to norm instruments developed from this study on a mostly adult population.

Generalizing from this population has several limitations, however. Primarily, the use of students in a psychology course may have resulted in range restriction of the sample, as being in the midst of education in the field of psychology may lend to higher familiarity with mental health issues. It is also important to note that, in the current sample, socioeconomic status and ethnic identification of the participants was not found to be widely diverse. This may again result in restricted results in a study which asked a mostly White, college-educated population to make judgments based on the ethnicity of the presented juvenile.

Due to the fact that this study is targeting mental illness and the criminal justice system, two issues that are frequently presented in the media, it is highly likely that the current study may be subject to social desirability. However, it is important to note that current research on public attitudes about these issues was taken into consideration in interpreting the practical significance of the results.

A critical limitation of this study is the validity of the Perception of Culpability Survey. Specifically, while reliability was established, questions regarding the validity of the measure have not been addressed in the present study. Perhaps specifically limiting the interpretability of the current results is the absence of a manipulation check in the Survey itself, therefore not providing the researchers with evidence of what factors participants were basing their judgments of the juvenile upon. It is assumed that judgments were made based on the mental health diagnosis and ethnicity of the presented

youth, although it is also quite possible that participants based judgments on the counternormative behavior (e.g., vandalism) presented in the study's vignettes.

Future Directions

The present investigation sought to explore the impact of the presence of a mental health diagnosis in juveniles of different ethnic backgrounds who engage in delinquent behaviors. Specifically, this study endeavored to explore the consequences the presence of a mental health diagnosis in an ethnic minority youth has on perceptions of culpability for delinquent behaviors, choice of corrective action, and conceptualization of and attitude towards the juvenile. Further evaluation of these queries would serve to expand our understanding of the current climate of public attitudes towards minority youth involved in the justice system, perception of minority juveniles who have been diagnosed with a mental illness, and the impact these perceptions have on individual juveniles within society in general and the juvenile justice system in particular. Further study is also warranted on other factors which may interact with mental health diagnosis to influence public perceptions and attitudes towards delinquent youth. These include both individual-specific characteristics, such as gender, ethnicity, and age, as well as the severity of the exhibited delinquent behavior.

Implications for Practice

Conservative statistics emerging from the juvenile justice system suggests that as many of half of the youth therein have an identifiable mental health diagnosis (Rawal, Romansky, Jenuwine, and Lyons, 2004). There also exists a history of ethnic disparities in the juvenile justice system including differential treatment while incarcerated and earlier and greater likelihood of entry into the justice system spanning four decades

(Drakeford and Garfinkel, 2000). Thus, recognition and understanding of the intersection of mental health diagnosis and juvenile individual factors and its impact on eventual and actual offender status is critical to lives and opportunities of youth who are involved or at-risk to become involved in the juvenile justice system. It is also crucial to the construction of a clinical expertise of juvenile delinquency.

Information about a juvenile's mental health has been shown to significantly impact recommendations of juvenile judicial punishment and mental health treatment for that juvenile. Thus, it is essential that information about a juvenile's mental health status be shared with individuals involved in juvenile judicial decision-making. It is equally important that those involved in making the decisions which may ultimately shape juveniles' future quality of life be individuals who are adequately and accurately educated about mental health diagnoses, including symptoms, causes, and prognosis. These individuals should likewise be able to appropriately fit this information into a developmental understanding of adolescence and typical adolescent behavior. If this important step in judicial decision-making is ignored, there is the risk of further stigmatizing youth and alienating them from important service sectors based on misperceptions of mental illness and juvenile delinquency.

Conclusion

The current study explored how knowledge about a juvenile's mental health and ethnic minority status affect thinking about juveniles who engage in delinquent behaviors, and how these judgments may be manifested in the juvenile justice system. Specifically, the current study examined how the presence of a mental health diagnosis affects perceptions of juveniles of different ethnicities who engage in delinquent behaviors. Based on findings which suggest that ethnicity may be a factor critically implicated in dual involvement in the mental health and juvenile justice system (Graves, Frabutt, & Shelton, 2007), the current study aimed to explore whether recommendations of treatment and punishment for the juvenile are differentially made based on mental health diagnosis and ethnicity. What emerged from this study were findings that the lay public does not seem to blame a juvenile less or punish a juvenile more for engaging in delinquent behaviors as a result of having knowledge of a juvenile's mental health status. Findings also emerged which suggested that the assignment of mental health treatment and recommendations of punishment for a juvenile engaged in delinquent behavior may be influenced by the presence of a mental health diagnosis. These findings provide an significant step in exploring public perceptions of juvenile mental illness and juvenile delinquency, as well as have critical implications for the expression of judicious measures in circumstances in which these factors intersect with ethnic minority status.

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Table 1

Exploratory Factor Analysis for Perception of Culpability Survey

Subscale Item	Factor		
	1	2	3
How likely are you to forgive the juvenile in this situation?	.865		
How likely is it that the juvenile could have prevented this type of behavior?	.843		
How likely is it that the juvenile could have prevent this type of behavior in the future?	.822		
How likely is it that the juvenile's behavior could have caused physical harm to others?	.785		
How likely is it that the juvenile's behavior could have caused emotional harm to others?	.778		
How likely is it that the juvenile's behavior could have caused serious injury to others?	.763		
How likely is it that the juvenile was in control of his behavior?	.746		
He should be prescribed psychiatric medication.		.844	
He should be taken to a psychiatric hospital.		.743	
He should engage in counseling.		.700	
He should be let go without punishment.			.911
He should be placed on probation.			.550

Table 2

Adjective Checklist subscale scores as a function of MHD group.

Diagnosis Group	**Mean**	
Bipolar Disorder	3.070	
ADHD	3.150	3.150
No Diagnosis	3.193	3.193
Conduct Disorder	3.201	3.201
Major Depression	3.230	3.230
Abuse/Neglect		3.404

Note: Higher numbers indicate more positive conceptualization of the juvenile.

Table 3

Punishment subscale scores as a function of MHD group.

Diagnosis Group	Mean	
No Diagnosis	2.592	
Conduct Disorder	2.748	2.748
Abuse/Neglect	2.756	2.756
ADHD	2.786	2.786
Major Depression	2.788	2.788
Bipolar Disorder		2.897

Note: Higher scores indicate that participant is more likely to recommend punishment.

Table 4

Treatment subscale scores as a function of MHD group.

Diagnosis Group	**Mean**		
No Diagnosis	2.277		
Abuse/Neglect	2.796		
Conduct Disorder	3.110		
ADHD	3.130	3.130	
Major Depression		3.423	3.423
Bipolar Disorder			3.751

Note: Higher scores indicate that participant is more likely to recommend treatment.

Table 5

Treatment subscale items as a function of MHD group.

	Abuse/ Neglect	ADHD	Bipolar Disorder	Conduct Disorder	Major Depression	No Diagnosis	*F*	*p*
Counseling	4.25	3.95	4.69	4.44	4.74	3.48	9.932	.000
Medication	2.34	3.63	4.14	3.08	3.47	1.90	22.571	.000
Hospitalization	1.77	1.87	2.30	1.82	2.12	1.54	7.114	.000

Note: Higher scores indicate that participant is more likely to recommend treatment.

Table 6

"Counseling" item subscale scores as a function of MHD group.

Diagnosis Group	**Mean**			
No Diagnosis	3.48			
ADHD		3.95		
Abuse/Neglect		4.25	4.25	
Conduct Disorder			4.42	4.42
Bipolar Disorder			4.69	4.69
Major Depression				4.74

Note: Higher scores indicate that participant is more likely to recommend treatment.

Table 7

"Medication" item subscale scores as a function of MHD group.

Diagnosis Group	**Mean**			
No Diagnosis	1.90			
Abuse/Neglect	2.34			
Conduct Disorder		3.08		
Major Depression		3.47	3.47	
ADHD			3.63	
Bipolar Disorder				4.14

Note: Higher scores indicate that participant is more likely to recommend treatment.

Table 8

"Hospitalization" item scores as a function of MHD group.

Diagnosis Group	**Mean**		
No Diagnosis	1.54		
Abuse/Neglect	1.77	1.77	
Conduct Disorder	1.82	1.82	
ADHD	1.87	1.87	
Major Depression		2.12	2.12
Bipolar Disorder			2.30

Note: Higher scores indicate that participant is more likely to recommend treatment.

Appendix A

Sample Vignettes

1. A 13-year-old White male is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

2. A 13-year-old White male who has been diagnosed with Bipolar disorder is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

3. A 13-year-old White male who has been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

4. A 13-year-old White male who has a history of parental physical abuse and neglect is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

5. A 13-year-old White male who has been diagnosed with Major Depression is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

6. A 13-year-old White male who has been diagnosed with Conduct Disorder is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams

obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

1. A 13-year-old Hispanic male is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

2. A 13-year-old Hispanic male who has been diagnosed with Bipolar disorder is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

3. A 13-year-old Hispanic male who has been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

4. A 13-year-old Hispanic male who has a history of parental physical abuse and neglect is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

5. A 13-year-old Black male who has been diagnosed with Major Depression is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

6. A 13-year-old Hispanic male who has been diagnosed with Conduct Disorder is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

1. A 13-year-old Black male is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

2. A 13-year-old Black male who has been diagnosed with Bipolar disorder is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

3. A 13-year-old Black male who has been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

4. A 13-year-old Black male who has a history of parental physical abuse and neglect is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

5. A 13-year-old Black male who has been diagnosed with Major Depression is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

6. A 13-year-old Black male who has been diagnosed with Conduct Disorder is walking through the mall. He has gone into most of the stores, but does not have enough money to buy the things he wants. He is thinking about calling his mother to come and pick him up when he is approached by a security guard. The guard questions him about shoplifting clothes from a nearby department store. The boy becomes very angry and screams obscenities at the security guard. He then knocks over a nearby display, breaking the items on it, before running out of the mall.

Appendix B
Perception Survey (*History)*

Please answer the following questions about the juvenile in the previous story. Please answer all questions. Do not spend too much time on any one question, but respond with your first instinct. There are not right or wrong answers.

	Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
Given the little information that you have…						
How likely is it that the juvenile could have prevented his behavior?	1	2	3	4	5	6
How likely is it that the juvenile could prevent this type of behavior in the future?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused physical harm to himself?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused physical harm to others?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused emotional harm to others?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused emotional harm to himself?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused serious injury to himself?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused serious injury to others?	1	2	3	4	5	6
How likely is it that the juvenile was having a bad day before being approached by the security guard?	1	2	3	4	5	6
How likely is that the juvenile was having a good day before being approached by the security guard?	1	2	3	4	5	6
How likely is it that the juvenile exhibits these behaviors regardless of the type of day he had?	1	2	3	4	5	6

How likely is that the juvenile engages in similar behaviors…

Daily	1	2	3	4	5	6
Weekly	1	2	3	4	5	6
Monthly	1	2	3	4	5	6
Yearly	1	2	3	4	5	6
This is the first time.	1	2	3	4	5	6
How likely is it that the juvenile was in control of his behavior?	1	2	3	4	5	6
How likely is it that the juvenile thinks his mental illness/abuse history is an excuse for his behavior?	1	2	3	4	5	6
How likely are you to consider his mental illness/abuse history an excuse for his behavior.	1	2	3	4	5	6
How likely is it that the juvenile's mental illness/abuse history led to his behaviors?	1	2	3	4	5	6
How likely is it that the juvenile regularly tries to control his behavior?	1	2	3	4	5	6
How likely are you to blame the juvenile in this situation?	1	2	3	4	5	6
How likely are you to forgive the juvenile in this situation?	1	2	3	4	5	6

How likely are you to suggest the following responses to the juvenile's behavior:

He should be let go without punishment.	1	2	3	4	5	6
He should be let off with a warning.	1	2	3	4	5	6
He should engage in counseling.	1	2	3	4	5	6
He should not go to court.	1	2	3	4	5	6
He should be processed through the juvenile courts.	1	2	3	4	5	6
He should be judged as an adult.	1	2	3	4	5	6
He should be prescribed psychiatric medication.	1	2	3	4	5	6
He should be put of probation.	1	2	3	4	5	6
He should be taken to a psychiatric hospital.	1	2	3	4	5	6

Appendix C
Perception Survey (*No History)*

Please answer the following questions about the juvenile in the previous story. Please answer all questions. Do not spend too much time on any one question, but respond with your first instinct. There are not right or wrong answers.

	Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
Given the little information that you have…						
How likely is it that the juvenile could have prevented his behavior?	1	2	3	4	5	6
How likely is it that the juvenile could prevent this type of behavior in the future?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused physical harm to himself?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused physical harm to others?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused emotional harm to others?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused emotional harm to himself?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused serious injury to himself?	1	2	3	4	5	6
How likely is it that the juvenile's behavior could have caused serious injury to others?	1	2	3	4	5	6
How likely is it that the juvenile was having a bad day before being approached by the security guard?	1	2	3	4	5	6
How likely is that the juvenile was having a good day before being approached by the security guard?	1	2	3	4	5	6
How likely is it that the juvenile exhibits these behaviors regardless of the type of day he had?	1	2	3	4	5	6

How likely is that the juvenile engages in similar behaviors...						
Daily	1	2	3	4	5	6
Weekly	1	2	3	4	5	6
Monthly	1	2	3	4	5	6
Yearly	1	2	3	4	5	6
This is the first time.	1	2	3	4	5	6
How likely is it that the juvenile was in control of his behavior?	1	2	3	4	5	6
How likely is it that the juvenile regularly tries to control his behavior?	1	2	3	4	5	6
How likely are you to blame the juvenile in this situation?	1	2	3	4	5	6
How likely are you to forgive the juvenile in this situation?	1	2	3	4	5	6
How likely are you to suggest the following responses to the juvenile's behavior:						
He should be let go without punishment.	1	2	3	4	5	6
He should be let off with a warning.	1	2	3	4	5	6
He should engage in counseling.	1	2	3	4	5	6
He should not go to court.	1	2	3	4	5	6
He should be processed through the juvenile courts.	1	2	3	4	5	6
He should be judged as an adult.	1	2	3	4	5	6
He should be prescribed psychiatric medication.	1	2	3	4	5	6
He should be put of probation.	1	2	3	4	5	6
He should be taken to a psychiatric hospital.	1	2	3	4	5	6

Appendix D
Adjective Checklist

How accurate are the following descriptions of the juvenile in the story? Please indicate your response to all descriptive words. There are not right or wrong answers.

	Completely Inaccurate	Mostly Inaccurate	Somewhat Inaccurate	Somewhat Accurate	Mostly Accurate	Completely Accurate
Irresponsible	1	2	3	4	5	6
Healthy	1	2	3	4	5	6
Careful	1	2	3	4	5	6
Lonely	1	2	3	4	5	6
Sloppy	1	2	3	4	5	6
Clever	1	2	3	4	5	6
Cruel	1	2	3	4	5	6
Careless	1	2	3	4	5	6
Dishonest	1	2	3	4	5	6
Bright	1	2	3	4	5	6
Unhappy	1	2	3	4	5	6
Bored	1	2	3	4	5	6
Mean	1	2	3	4	5	6
Helpful	1	2	3	4	5	6
Responsible	1	2	3	4	5	6
Honest	1	2	3	4	5	6
Happy	1	2	3	4	5	6
Friendly	1	2	3	4	5	6
Kind	1	2	3	4	5	6
Sad	1	2	3	4	5	6

Appendix E

Level of Contact Report

Please indicate how familiar you are with the following situations and mental health diagnosis.

_____ Never observed a person with mental illness.

_____ Observed, in passing, a person with mental illness.

_____ Watched a movie about mental illness.

_____ Watched a television documentary about mental illness.

_____ Observed person with mental illness frequently.

_____ Worked with a person with mental illness.

_____ Job includes services for persons with mental illness.

_____ Provide services to persons with mental illness.

_____ Family friend has mental illness.

_____ Relative has mental illness.

_____ Live with a person with mental illness.

_____ Have a serious mental illness.

Please indicate your familiarity with the following mental health diagnoses/factors.

	Very Unfamiliar	**Unfamiliar**	**Somewhat Unfamiliar**	**Somewhat Familiar**	**Familiar**	**Very Familiar**
Attention Deficit Hyperactivity Disorder (ADHD)	1	2	3	4	5	6
Depression	1	2	3	4	5	6
Bipolar Disorder	1	2	3	4	5	6
Conduct Disorder	1	2	3	4	5	6
Child Abuse	1	2	3	4	5	6

Appendix F

Demographic Questionnaire

Please complete the following questionnaire. The information on this questionnaire will not be used for identification purposes.

1. Age: _____

2. Gender: _____

6. Academic Major: _____

7. Marital status: _____ (single, married, other)

8. Current Level in School: _____

Appendix G

Informed Consent Form

Consent to Participate in a Research Study
Colorado State University

TITLE OF STUDY: The Effect of Mental Health Factors on the Perceived Culpability of Juvenile Delinquent Behaviors

PRINCIPAL INVESTIGATOR: LEE A. ROSÉN, PH.D. 491-5925

CO-PRINCIPAL INVESTIGATOR: STEFFANY L. MALACH 491-2519

WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH? You have been selected to participate in this research because you are a student at this university. As the research aims to assess behaviors of college-age students, your enrollment in a PY100 class ensures that you fit this criterion.

WHO IS DOING THE STUDY? This study is being conducted by the investigators listed above for completion of the requirements for a Doctoral Dissertation. This study is not funded by any individual or organization.

WHAT IS THE PURPOSE OF THIS STUDY? The purpose of this study is to look at perceptions of mental health and juvenile delinquency. The study also hopes to identify possible differences in perceptions according to sex and previous exposure to the mental health field.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST? The study will take place in the Clark building on the campus of Colorado State University. The study will take place over the course of 4-12 months. Your time commitment will be approximately 30 minutes.

WHAT WILL I BE ASKED TO DO? You will be asked to read a short vignette for this study, and will then be asked to complete a survey responding to this vignette. This survey is 100 questions long. It will not take more than 30 minutes to complete. The survey asks questions about your personal reactions to the vignette and the behavior described in the vignette.

ARE THERE REASONS WHY I SHOULD NOT TAKE PART IN THIS STUDY? If you are under the age of 18, you should not take part in this study. Also, if you are made uncomfortable by recording your perceptions of mental illness or juvenile delinquency, you may choose not to participate. The risks associated with responding to the survey mentioned do not outweigh the benefits of your participation.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS? The potential risks associated with this study are minimal. No identifying information (such as student i.d. number or birth date) will be included on the survey. This means that no one will be able to link your answers on the survey to your name in any way. No one will see your answers except the investigators listed above. A main potential risk is disclosure of your familiarity with mental illness (a social risk), but as you are not providing ANY identifying information this risk is not significant. A psychological risk exists for those students who may have significant familiarity with mental illness, as well as exists for those participants who have a history with or are currently involved in the legal system.

If completing this survey distresses you to the point that you feel you need counseling-related services, please do not hesistenat to call the University Counseling Center at (970) 491-605

***It is not possible to identify all potential risks in research procedures, but the researchers have taken reasonable safeguards to minimize any known and potential, but unknown, risks.**

WILL I BENEFIT FROM TAKING PART IN THIS STUDY? There is no direct benefit of participation in this study, but we hope the research will foster more awareness of the interaction between mental illness and delinquency and lead to fitting incorporation of mental health treatment into the juvenile justice system.

DO I HAVE TO TAKE PART IN THE STUDY? You are NOT required to participate in this study in any way. Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

WHAT WILL IT COST ME TO PARTICIPATE? There are no known costs for participating in this study.

WHO WILL SEE THE INFORMATION THAT I GIVE?
We will keep private all research records that identify you, to the extent allowed by law.

Your information will be combined with information from other people taking part in the study. When we write about the study to share it with other researchers, we will write about the combined information we have gathered. You will not be identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

This study is anonymous. That means that no one, not even members of the research team, will know that the information you give comes from you.

CAN MY TAKING PART IN THE STUDY END EARLY? You will be removed from the study only if you create a disruption that makes it difficult for others around you to complete the survey.

WILL I RECEIVE ANY COMPENSATION FOR TAKING PART IN THIS STUDY? You will receive one (1) research credit in your PY100 class for participating in this study.

WHAT HAPPENS IF I AM INJURED BECAUSE OF THE RESEARCH? The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury.

WHAT IF I HAVE QUESTIONS?
Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Lee A. Rosén, at 491-5925, or Steffany Malach, at 491-2519. If you have any questions about your rights as a volunteer in this research, contact Janell Meldrem, Human Research Administrator, at (970) 491-1655. We will give you a copy of this consent form to take with you.

WHAT ELSE DO I NEED TO KNOW? No responses to this survey will be shared with anyone affiliated with the police or any other legal organization(s).

Your signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing 3 pages.

_____ _____

Signature of person agreeing to take part in the study Date

_____

Printed name of person agreeing to take part in the study

_____ _____

Name of person providing information to participant Date

_____

Signature of Research Staff

Appendix H

Study Script:

Hello. My name is _____.

Thank you for being here today to participate in this research which aims to explore perceptions of mental health and juvenile delinquency.

I will now be handing out an Informed Consent form. Please read it carefully. It will provide you with further information about today's study, and reminds you that you are free to quit the study at any time. Please raise your hand if you have any questions, and I will come help you.

Distribute Informed Consent. Collect when it is clear all have signed.

I will now be handing out the vignette and questionnaire. Please read the vignette carefully, and then respond to the questions which follow. Try to work quickly and answer all questions. Remember, there are no right or wrong answers. Please do not talk while the test is being administered, as it may distract others. When you are finished, turn your answer sheet over and sit quietly until all have finished. Again, if you have any questions, please raise your hand and I will come help you.

Distribute vignette, questionnaire, and answer sheet.

Collect tests when all have finished.

Read debriefing script.

Please remember to sign the attendance sheet on your way out to ensure that you receive credit for your participation today. Thank you again for your part in today's study.

Acceptable prompts and responses to questions:

Please remember to refrain from talking while others are completing the survey.

Although you are free to quit the study whenever you choose, you will need to complete the survey in order to receive full research credit for your class.

Please stay in your seat until everyone has finished the survey/consent form.

Your signature on the attendance sheet will not now or ever be connected to the answers you provided on the questionnaire in any way.

Appendix I

Debriefing Script:

The research you have just participated in is designed to assess what, if any, effect the presence of mental health factors (such as a mental health diagnosis or abuse or neglect history) has on judgments of responsibility for juvenile delinquent behavior. The answers that you provided on this questionnaire will be compiled and analyzed in order to determine the potential effects of bringing mental health considerations into the courtroom in juvenile proceedings. These results will possibly be used to foster more awareness of the interaction between mental illness and delinquency and may lead to understanding of the importance of bringing mental health treatment into the juvenile justice system. If completing this survey has distressed you to the point that you feel that you need counseling-related services, please do not hesitate to call the University Counseling Center at (970) 491-6053. You have also answered several questions pertaining to suggestions of punishment for the juvenile in the vignette. Again, if completing this survey has distressed you to the point that you feel that you need counseling-related services, please do not hesitate to call the University Counseling Center at (970) 491-6053.

If you would like to investigate this topic more thoroughly, researchers suggest a PsycInfo key word search using 'mental illness' and 'juvenile delinquency.' Additionally, you may contact the researchers with questions regarding this research or similar prior research. Their contact information is listed below:

Steffany Malach
(970)491-6877
slmalach@lamar.colostate.edu

Lee Rosén
(970)491-5925
leerosen@lamar.colostate.edu